22501396398

WELLCOME
LIBRARY
MO ser
W1
10421

THE

Medical Times and Gazette.

A

JOURNAL OF MEDICAL SCIENCE.

LITERATURE, CRITICISM, AND NEWS.

VOLUME II. FOR 1872.

LONDON:
PUBLISHED BY J. & A. CHURCHILL, 11, NEW BURLINGTON-STREET.
AND SOLD BY ALL BOOKSELLERS.

MDCCCLXXII.

LONDON:
PARDON AND SON, PRINTERS,
PATERNOSTER-ROW.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture VII.

The term "Insectivora," applied to an order of mammals, is, as in the similar case of *Carnivora*, merely intended to indicate the habit of the greater number of the animals constituting the group, and not to express their exclusive source of nourishment. Eggs, young birds, other small mammals, worms, roots, fruits, as well as insects proper, constitute the food of many of the species, while one of aquatic habits (*Potamogale velox*) is said to live chiefly on small fish. Their molar teeth usually bristle with numerous sharp-pointed cusps, and though in some, especially the larger members of the group, the relations of canines to incisors resemble those noticed in the carnivora, which ordinarily have to deal with prey of considerable size, in most of them there is a tendency to the development of the median incisors at the expense of the antero-lateral teeth. The narrow forceps-like points thus obtained are obviously best adapted for picking up minute agile objects, like living beetles. A comparison of the teeth of a weasel with those of a shrew or a hedgehog will well illustrate this distinction.

The order is usually divided into eight families. The *Erinaceidæ* are well represented in this country by the common hedgehog (*Erinaceus europæus*), the anatomy of the digestive organs of which may be taken first as a good example of those of the order.

This very omnivorous little animal has the mouth pointed and narrow in front, the lips soft, thin, and flexible, united to the gums by a strong median frænum, which in the upper lip is double, and continued forwards to the naked snout as a narrow band with a median groove; the lining membrane of the cheeks is smooth and soft, and the palate strongly ridged transversely. The tongue is long and rather narrow, soft, and flexible; the frænum is placed far back, and is long and lax; there is no under tongue, but close to the attachment of the frænum to the symphysis of the jaw are two pointed salivary papillæ. There is no lytta; the dorsal surface is covered all over with fine, soft, conical papillæ, very uniform in size and character; among these, the round fungiform papillæ are very conspicuous, being considerably larger and more prominent; they are rather sparingly scattered all over the surface. There are three large circumvallate papillæ, placed rather near together.

The salivary apparatus is largely developed. The parotid gland is triangular, yellow, soft, and more uniform in consistence or less lobed than usual. It is mostly placed behind the ear, covering the greater part of the side of the neck; its duct has the usual course, and opens on a papilla opposite the first true molar tooth. The submaxillary gland is almost, though not quite, as large as the parotid. It does not present that contrast of structure to the latter usually seen, but is soft, yellow, and little lobulated. It is partially divided into three lobes; the duct leaves the front part of the gland where these are united, and, running forwards under cover of the ramus of the mandible, opens at the outer and upper side of the base of one of the long papillæ placed at the root of the frænum linguæ. There is no accessory submaxillary gland, as in the dog, but a true sublingual, represented by a row of glandular lobes, placed close to the mucous membrane of the floor of the mouth, along the course of the anterior part of the submaxillary duct. The buccal glands are greatly developed, especially a distinct lobulated row running parallel to the ramus of the mandible, below the edge of the lower lip. The zygomatic gland is distinct, about the size of a large hempseed.

The stomach is simple and oval, not very unlike the human stomach in general form; but the cardiac cul-de-sac is more pointed, and the œsophagus is continued for a considerably longer distance, relatively, below the diaphragm before entering the stomach. The thick epithelium lining the œsophagus terminates suddenly at the cardiac orifice by a festooned border. The lining membrane of the greater part of the stomach is soft, loose, yellowish, and thrown into longitudinal rugæ where the organ is contracted, especially near the pyloric end; but about three-quarters of an inch from the valve it changes its characters, becoming smooth, paler, and more closely adherent, though the distinction between a cardiac and pyloric compartment is not otherwise strongly marked. The last-named part has more muscular walls than the rest, and the pylorus is formed by a strong circular band of muscular fibres, leaving, when contracted, a very minute central aperture. The intestinal canal is long and slender, six or seven times the length of the animal, according to Hunter; but in a not quite full-grown specimen I found it twelve times the length. There is no cæcum, nor any perceptible difference externally between the large and small intestine, but they are narrowest at the part which would correspond to the ileum, and somewhat larger towards either extremity. The duodenum takes a wide sweep to the right and downwards, and is folded upon itself in a sigmoid manner before passing to the left beneath the ascending colon and root of the mesentery. After making numerous vermiform coils, the intestine ascends to the right, and, becoming colon, forms a simple arch round the root of the mesentery, and descends in a straight course into the pelvis. At the commencement of the duodenum, immediately adjoining the pylorus, is a conspicuous mass of compound glands (Brunner's) forming a circle round the intestine. There are no ridges or valvulæ conniventes in the small intestines, but the villi are long for the size of the animal, slender and cylindrical, and continue (though small and less numerous) to the end of the ileum. In the short tract of intestine which may be considered colon (about one-tenth of the whole) the mucous membrane is thicker and softer, and in the lower part thrown into longitudinal ridges. Peyer's patches are well marked in the lower half of the small intestine, and of roundish-oval form; there is no specially elongated one at the termination of the ileum, as in most carnivora, but a group of scattered solitary glands in its place.

The liver is wide tranversely, deeply divided into lobes, upon the same type as the monkeys and carnivora. The umbilical fissure is well marked, but not so deep as the two lateral fissures; the left lateral lobe is large, thin, and semi-circular in outline; the left central lobe is less than half the size of the right central, which is not subdivided by a cystic notch; the right lateral lobe is large and triangular; the caudate lobe is of great size, thick and truncated at the extremity, with a deep renal fossa; the Spigelian lobe of moderate size and bifid; the gall-bladder very globular, placed on the middle of the under surface of the right central lobe, projecting beyond its free edge. The common bile-duct enters the duodenum three-quarters of an inch below the pylorus.

The pancreas is large, and consists of numerous flattened semi-detached lobules, spreading out between the layers of the mesoduodenum and the posterior layer of the great omentum; it also has a long, free, tongue-like process hanging backwards behind the duodenum.

The family *Talpidæ* is represented in England by the common mole, a little animal the structure of which presents numerous points of interest well worthy of attention. As regards its digestive organs, it does not differ greatly from the hedgehog. The mouth is longer and narrower, and the teeth more sharply cuspidated, in accordance with its more purely insectivorous or vermivorous habits. The tongue is long, narrow, pointed, and very free; the frænum being situated far back. Its dorsal surface is evenly covered with minute, sharp-pointed, hard, conical papillæ, giving it the appearance of a fine rasp, among which are scattered fungiform papillæ, and there is a pair of large circumvallate papillæ. There is no under tongue, but in the interior, near the apex, is a large cylindrical lytta, a structure apparently not general among the Insectivora. The submaxillary and parotid glands are of great size, covering the short neck, or rather filling up the deep interval between the head and the shoulders. Their ducts appear to have the usual course. It is stated that a zygomatic gland is not present.

The stomach is of very great size, and has a largely developed fundus or cul-de-sac at the right end, which, when the organ is inflated, curves up towards the diaphragm. A considerable portion of the œsophagus is situated below the diaphragm. The intestinal canal is about seven times the length of the animal, and very narrow. There is no cæcum, and little external distinction between ileum and colon. The duodenum takes the usual course—curving round to the right, then passing to the left beneath the ascending colon, which arches round the root of the mesentery, and then descends pretty straight towards the pelvis; but here the rectum takes

a very remarkable and quite unique position among mammals, for instead of passing through the arch of the pelvis, which, as is well known, is extremely narrow, it runs in front of the symphysis, and terminates at the apex of a prominent naked papilla, a little distance behind the genital orifice.

The mucous membrane of the small intestine has no proper villi, but minute longitudinal or zigzag elevations take their place. The pancreas is composed of numerous rather fine, scattered, foliated lobules. The liver resembles that of the hedgehog in its general form and divisions, but the gall-bladder is lodged in a deep fissure near the middle of the right central lobe; the Spigelian lobe is large and simple, and the caudate lobe long, narrow, and sharp-pointed.

The *Soricidæ* or shrews are characterised by the shortness and simplicity of the alimentary canal. The stomach is more globular than in the hedgehogs and moles, with the cardiac and pyloric orifices approximated. There is no trace of a cæcum, and the intestine is but three or four times the length of the body, and loosely suspended to the edge of the mesentery attached along the spine, without that definite arrangement ordinarily met with in mammals. This disposition of the intestine, only found among mammals in some Insectivora and insectivorous Marsupials, resembles that ordinarily met with in reptiles, and did not escape the observation of Hunter, who, in his account of the anatomy of the great musk shrew (*Myogale mosehata*), an animal in some respects intermediate between the moles and shrews, says —"By the pylorus not being closely attached, the mesogaster and mesentery become one continued membrane from the right of the œsophagus to the pelvis, having the stomach and the whole intestines strung on the edge."(a) It is curious to find the shrews, though allied apparently through the higher Insectivora to the Lemures, Carnivora, and Primates, and probably offsets of the same great branch of Mammals to which the highest members of the class belong, presenting many features which place them considerably below all other Placentalia in grade of organisation.

The *Chrysochloridæ* (African golden moles) and the *Centetidæ* resemble the foregoing families in the absence of cæcum.(b) In the last-named, consisting of *Centetes* and some other less known genera from Madagascar, and of *Solenodon* from the West Indies, the general arrangementof the viscera is like that of the hedgehog, but the stomach is a short, deep, rounded sac, with the two apertures exceedingly approximated.

The visceral anatomy of the West African otter-like insectivore *Potamogale* is at present unknown.

The *Tupaidæ* consist of certain small squirrel-like animals from south-eastern Asia, more or less arboreal in their habits. In some parts of their structure, especially of the skull, they present approximations to the lemurs. The lower incisors are long, narrow, and directed forwards, as in that group, and it is interesting to note that there is a trace of a lemurine sublingua, though closely attached, except at its edges, to the under surface of the tongue. This family is usually separated from the foregoing by the possession of a short simple cæcum. Hunter mentions of a tupaia which he dissected, "the cæcum is similar to that of an opossum; the colon is short"—but in the only specimen of the group which I have been able to examine (*Tupaia tana*) the alimentary canal was very simple, and there was no trace of this appendage. The statement of the presence of a cæcum as a family character, therefore, requires modification.

The *Macroscelidæ* are all African, and are active, jumping, long-snouted little animals, which habitually live on the ground.(c) The stomach is like that of the shrews and *Centetidæ*, but the intestinal canal is formed on a different type, presenting an approach to that of the lemurs, and indicating a more vegetable diet. The cæcum is of considerable length, cylindrical, and obtuse, and the colon has no more the shortness and perfectly simple arrangement of the other insectivora, but—at least in the larger members of the group —is so long as to be folded once or twice on itself before terminating in the rectum.

One very remarkable form remains—the genus *Galeopithecus*, of which two species are known, both peculiar to the Indo-Malayan region. They are about the size of cats, arboreal in their habits, and, by means of a wide expanse of skin stretched between their limbs and enclosing the tail, can sail from bough to bough, though they are not capable of true flight. Their food is fruit and insects. They are strange, aberrant animals, having no close affinities with any other known species, and forming a kind of link between the *Lemures*, *Chiroptera*, and *Insectivora*, into each of which orders they have been placed by different naturalists. Their mouth is remarkably broad and rounded in front; the palate flat, and but slightly ridged; and the tongue very broad and flat, its anterior margin being notched or denticulated—an arrangement which has apparently the same relation to the singular comb-like lower incisors as the pectinated end of the under tongue has to the same teeth in the lemurs. There is no trace of a sublingua in *Galeopithecus*. The dorsal surface of the tongue is smooth, with small conical and fungiform papillæ, and a pair of circumvallate papillæ; the salivary glands are moderately developed; the stomach is remarkably elongated, having a large dilated fundus to the right of the œsophagus, and a more tubular portion extending to the pylorus, the opening of which is very minute, and quite remote from that of the œsophagus—contrary to what obtains in most insectivores; but what specially distinguishes these animals from the rest of the order is the great development of the colon, which is about equal to the small intestine in length, considerably more capacious, and in its commencement sacculated. The cæcum is also long, and drawn up into numerous sacculi by three longitudinal muscular bands. The liver is divided into the same number of lobes as in the insectivora, but the short pyriform gall-bladder is placed in a notch very near the edge of the right central lobe, with its apex directed upwards, and its duct (which is not convoluted) arising from its most distal part, as in the lemurs.

(*To be continued.*)

(a) "Essays and Observations," vol. ii., p. 195.

(b) For the anatomy of the *Chrysochloridæ* see Peters, "Reise nach Mossambique," p. 74. For *Solenodon*, Peters in "Abhand. Königl. Akad. zu Berlin," 1863.

(c) See Peters, "Reise nach Mossambique," Säugethiere, 1852, for the anatomy of *Petrodomus* and *Rhynchocyon*.

ORIGINAL COMMUNICATIONS.

PUERPERAL DISEASES TREATED WITH TURPENTINE.

By E. COPEMAN, M.D., F.R.C.P., F.R.C.S.

Case 1.—Mrs. R. was confined in 1864 with her fifth or sixth child. There was nothing particular about her labour, but she had not been quite well before. On the third day she had rigor, and had scarcely slept since her confinement. There was also slight tenderness over the pubes, and some abdominal distension, for which her surgeon gave one drachm of sp. terеb. and applied turpentine stupes. She was so much relieved that he did not give a second dose, and she seemed to be going on all right till a day or two before I was called in to see her (on February 15, about eighteen days after her confinement). She then became bilious, could not sleep, had a rapid pulse, and a tendency to diarrhœa. The lochia had been natural, and not offensive. I found she had had another rigor in the morning, and was restless; skin warm and comfortable; pulse 140 to 150; respiration panting; could not control her thoughts, but talked sensibly, although in a hurried manner. There was slight tenderness just above the pubes on the right side; no discharge; no fetor. Had a good bilious stool in the morning, and her surgeon had given her a dose of nepenthe, which, although it made her quiet, produced but little sleep. The state of her pulse and respiration made me very anxious about her safety, and her tongue was a little dry in the centre. Her nervous system was suffering from shock, and her symptoms indicated poisoned blood. I advised one-drachm doses of turpentine without delay, and a pill with quinine and henbane every four hours; turpentine locally to the tender spot, and a full opiate at night; wine and beef-tea (which she took readily) *ad libitum*.

On the 16th her surgeon reported to me that he had seen the patient at 8.30 a.m., and that she had passed a good night, with plenty of sleep, and expressed herself as feeling much the better for it. She had taken three glasses of sherry and water, a drachm of turpentine every four hours without sickness or relaxation of the bowels, and her tongue was in a better condition. Every three hours she had taken nourishment. These were all good symptoms. *Per contra*, pulse quite as rapid as yesterday, with the same quickness of respiration and some tenderness of the body. At 4.30 p.m. I visited her and found the pulse dropped to 130, and she had had quiet sleep all day without an additional opiate, wandering in her drowsiness, but quite clear in the head whilst talking to us. There was no abdominal pain, and scarcely any distension; but she had passed two loose motions of the colour of pea-soup, which I thought unfavourable. The

same treatment was continued, and an opiate enema ordered if required. Has taken half-drachm doses of sp. tereb. every four hours without nausea.

17th.—Mr. —— reported—"I am sorry to say I did not find things going on so well this morning. Last night, at eleven, everything looked well—no pain; pulse 130. This morning, pulse 140, with considerable pain in the left side below the ribs, but no tenderness in the body, and respiration not more frequent; bowels less relaxed; slight inclination to sickness. I ordered the turpentine to be discontinued internally, but applied a turpentine stupe to the painful side." At 4 p.m. we found things a little better and the pain in the side relieved. She was drowsy and the tongue centrally dry, both apparently from the effect of two opiate injections which she had had during the day. Bowels acted only once since the morning; stool of better colour and consistence. Pulse still very rapid, and I regretted being obliged to leave off the turpentine; and finding it was not given to her the last time so carefully as usual, and thus might have produced nausea, I advised Mr. —— to give another dose at night if he found she could take it.

18th.—Mr. —— informed me that late last night he found her better, and gave a dose of turpentine. The night was passed in so much comfort that her husband thought her very much better; but on being moved to have her bed made more comfortable she began to breathe with increased difficulty, with a good deal of bronchial rattle. This continued, and when I saw her at 3 p.m. I thought her in the greatest danger, the left lung being much congested, respiration impeded by mucous râles, pulse 144, and great inability to move or assist herself; yet both her countenance and manner appeared a little improved. She could still take nourishment freely, and her bowels were more staid. No pain in the side or tenderness in the body. The question was, How could we relieve the sort of passive pneumonia which threatened to suffocate her? I suggested that turpentine should be freely applied between the scapulæ, and stimulants freely administered. She took a glass of champagne at once, and was to have it frequently repeated. Mr. —— suggested ipecacuanha to make her sick and clear the lungs of mucus, but I was afraid. Yesterday, after leaving off the turpentine, we gave her two grains of quinine with dilute sulphuric acid and water every four hours, which she has taken up to the present time.

19th.—Passed a better night than was expected, and took nourishment well at intervals. Had a good breakfast, and also ate a mutton chop at 1 p.m. with relish. She received the sacrament the previous evening, and conversed with her husband about what she wished to have done when she was gone. Her mind this morning was tolerably clear and composed, but shortly after dinner she became very faint. Her husband gave her three or four glasses of champagne rather quickly; she took it without much difficulty, but soon after sank down in her bed unconscious, and died in the course of the afternoon.

Case 2.—Summoned on September 29 to Mrs. ——, the wife of a Medical friend, who had been confined ten days before, and was now suffering from severe puerperal diarrhœa succeeding the usual symptoms indicative of puerperal mischief. Turpentine had been applied to the abdomen, which I found distended, but not very tender. Her pulse was very rapid, and there was great prostration. We gave her three grains of acetate of lead and three of Dover's powder every four hours, with arrowroot and brandy at intervals. In a few days I received a very favourable report, the medicine having been quite successful in stopping the diarrhœa; she gradually gained strength and recovered.

Case 3.—Summoned to Mrs. —— on October 10, 1864, who was confined with her first child on the 2nd instant. Her labour was protracted; forceps were used, and the perincum was ruptured. A few days afterwards she had a chill and other indications of approaching puerperal mischief, which gradually subsided under the use of turpentine. I found the perineal lesion sloughy, and for the last three days she has been suffering from diarrhœa, which has very much reduced her strength. We applied turpentine externally to the abdomen, and gave three grains each of acetate of lead and Dover's powder every four hours, or, if need be, after each liquid stool. She was also ordered wine or brandy when required. Recovered.

Case 4.—Was summoned on October 14 to a very obscure case of puerperal disease, not apparently of uterine origin, but attended with acute pain in the left iliac region. She had a very severe labour, but went on well for a week; then she had pain, but was successfully treated for it by her surgeon, who used turpentine externally with great relief; but she could not take it internally without sickness. There were none of the usual symptoms of puerperal fever when I saw her, nor anything the matter, so far as I could see, with the uterus; but the iliac pain recurred at intervals, and at last was so violent that she sank under it, her abdomen becoming very tympanitic a few hours before she died. I suspected intestinal lesion, but a post-mortem examination was not allowed.

Case 5.—Mrs. ——, aged about 40, the mother of several children, was confined on Saturday, October 29, 1864. Her labour was natural, but the placenta was adherent, requiring extraction by piecemeal, and this was attended with considerable loss. On the 31st she had a severe rigor, followed by rapid pulse, abdominal pain, and scanty offensive lochia. The uterus was large and tender, and sensorium disturbed. She had another rigor on the following day, and when I saw her on Wednesday, November 2, her pulse was nearly 150, and all her symptoms indicated a severe attack of puerperal fever. We immediately treated her with turpentine internally, applied it also externally with hot flannels to the abdomen, and gave her a turpentine enema. The vagina was well washed out with warm water every now and then, and some of Condy's solution sprinkled about the bed, and applied to the ostium vagina on a napkin, in consequence of the excessive fetor of the discharge. For a few days she was in a very precarious state, causing great anxiety to us all, but then a piece or two of putrid chorion were expelled, and the discharge was less offensive afterwards. Not until the 6th did the pulse come down to 100. She had continued the turpentine in half-drachm doses night and day every four or six hours, and such was the relief it afforded her that she often wished to take it before it was due. By the 10th she was so much better that my attendance was no longer required, and on December 8 she came downstairs to her sofa. Her recovery was complete. She has had one, if not two children since, and is now (1870) in perfect health.

Case 6.—Summoned on November 2, 1864, to a case of severe diarrhœa in a poor woman who had been confined a fortnight, and whose case the surgeon felt so interested in, and the benevolent clergyman of the parish also, that the latter promised the fee for a consultation to meet the wishes of the former. I found the patient in a state of very great depression, with rapid pulse, pallid countenance (expressive also of great uneasiness), and a firm impression that she could not survive. The attack was evidently the result of some puerperal mischief, and we ordered turpentine fomentations to her somewhat distended and tympanitic abdomen. We also prescribed a pill containing three grains of acetate of lead and two of Dover's powder every four hours, or after each relief of the bowels, and wine combined with light nourishment. I did not see her again, but the result was satisfactory, the surgeon informing me that she gradually improved from the time of our meeting, and soon recovered.

Case 7.—Summoned to attend a patient on December 5, 1864, who was suffering from puerperal disease ushered in by rigors shortly after labour, and, according to the opinion of her very competent medical attendant, threatening serious mischief. We agreed at once to give turpentine internally, and use it as frequently as the skin of the abdomen would bear it externally. Chloric ether was also proposed to take the place of turpentine internally should the stomach tire of it, and some was given after a time on account of nausea, but turpentine was still used externally. The case went on well under this treatment, and on January 5 the patient was reported convalescent.

Case 8.—Mrs. S., aged 28, had been confined ten or twelve days with her first child, when I was called to see her on December 17, 1864. She appeared to be going on quite well until two days before my visit, when she was attacked with severe pain in the left iliac region, extending gradually to the whole of the abdomen, and ultimately producing sickness. Her labour was tedious and attended with loss, but nothing else particular occurred. The child was very small, weighing only two pounds and a half—probably premature. She had been married three years, and had not been pregnant before. I found her pulse rapid and small, her abdomen very tender to the touch, but not so much so on harder pressure. The lochial discharge had not been offensive, and there was no heat in the vagina nor uterine tenderness—indeed, I could find no uterine complication; yet her symptoms portended evil results, and in four days I heard she was dead. I am sorry to say no post-mortem examination was allowed, so as to clear up the nature of the case. Was there ulceration and perforation of the bowel, or escape of morbid matter through the open end of the Fallopian tube?

Case 9.—Summoned on April 4, 1865, to a severe case of puerperal fever, which, although still threatening, seemed to be

on the decline. Mr. M. had been giving her for several days half-drachm doses of spirit of turpentine with half a grain of opium every four hours, and I advised a continuance of the treatment at longer intervals. Turpentine stupes had been also applied. The result was favourable, and I heard afterwards that she recovered.

Case 10.—Summoned on August 15, 1865, to Mrs. W., on account of troublesome diarrhœa occurring at an early period after her first confinement. The labour was very tedious and painful from resisting perineum, which, however, was not ruptured. I found no uterine symptoms ; the lochia had been scanty, but were still flowing, and the abdomen was neither tense nor tender. But her pulse was very rapid (130), the tongue dry, countenance pallid and worn, no sleep, unable to pass water, and bowels loose and unrestrainable. We applied turpentine stupes, washed out the vagina, and gave three grains of acetate of lead with half a grain of opium every three hours ; but this not stopping the diarrhœa, we afterwards gave an injection of starch and opium, and a mixture with dilute sulphuric acid in infusion of roses and five grains of gallic acid every four hours. Having inquired further into the history of the case I found she was confined on Monday, August 7, at 2 a.m. ; that she was very well on Tuesday and until Wednesday night, when she felt ill and complained of a good deal of abdominal pain ; the lochia at the same time became pale, and had quite stopped on the morning of the 10th, when Mr. —— gave her half-drachm doses of sp. tereb. every three hours combined with an opiate, and applied turpentine stupes to the abdomen. He also ordered the vagina to be well washed out daily, and used the catheter, as she was not able to pass her urine. These measures soon relieved the pain in the abdomen, and she was getting better until Sunday, the 13th, when diarrhœa set in. and chalk mixture was given instead of turpentine ; but the diarrhœa continued, and I was called in on the 15th, as above stated. On the 20th the diarrhœa had almost ceased, and as she complained of feeling sick when she took the acid mixture it was discontinued, and she had wine more freely. The pulse was diminishing in frequency, but her countenance was pallid, her skin relaxed, her pulse weak, and she complained of great uneasiness and weight under the sternum, with difficulty of swallowing, for which she had some ammonia and quinine. I saw her again on the 24th, and found she had had a rigor the night before, but this had passed off, and I could not make out the cause of it. The diarrhœa had ceased, but she could not yet pass her water. Lochia again stopped, but there was no uterine or abdominal pain. Tongue a little furred ; no sickness ; pulse about 90 ; takes wine freely with gruel and beef-tea. Complains of her throat ; countenance very pale, but cheerful and resigned ; skin moist, body emaciated. The treatment was continued, and she slowly improved ; but afterwards had phlegmasia dolens, for which turpentine fomentations were employed, and in a few days this disappeared.

I called upon her on September 14, and found her dressed and lying on a sofa. She was still pale and weak, and had some stiffness in the right leg ; but she was convalescent, and intending to go into the country in a few days for the recruiting effect of change of air.

Norwich.

ON THE

INFLUENCE OF EPIDEMICS OF FEVER IN CHECKING THE ADVANCE OF THOSE OF CHOLERA (a)

BY ROBERT LAWSON,

Inspector-General of Hospitals, President of Epidemiological Society.

On a former occasion I drew the attention of the Society to the influence of epidemics of fever in checking the advance of those of cholera. The evidence from which this conclusion was drawn, though derived from India, Europe, and the intermediate countries, and extending over the period from 1817 to 1865, was imperfect and fragmentary in many instances ; and, from the want of statistical details, did not permit of the fever and cholera fields being defined so accurately as to illustrate this question in the most striking manner in all cases, though in the epidemic of 1864-65 in India, and in its progress toward Europe, this was made out satisfactorily.(b)

The conclusion arrived at, from the consideration of all the evidence, was, that when a cholera epidemic approached a district in which fever was epidemic, cholera did not become general and frequent within the fever field until the epidemic force of the latter was broken ; and, *vice versâ*, fever, as an epidemic, did not penetrate a cholera field until the epidemic force of that gave way. Sporadic cases of either disease, or even groups of cases, were often met with a long way within the limits of the field of the other ; but they never became numerous until the epidemic force of the prevailing disease was much abated.

It was clearly desirable to test this question by the details contained in the statistical reports for this country, which now embrace the cholera epidemics of 1849, 1854, and 1866 for England and Wales, and that of 1866 for Scotland. I have now done this, and as the results bear out the conclusion previously announced, they may prove interesting to the Society.

In testing this question the following limitations must be observed, otherwise the returns will only mislead, instead of elucidating the question at issue. Thus, though cholera will not become epidemic in a fever field while the latter disease retains its force as an epidemic, yet as that may subside in a few months, or even weeks, and its place be taken by cholera, it becomes necessary that the returns be taken for periods sufficiently short to bring out this sequence ; those embracing a whole year might merely show that both forms of disease had been unusually prevalent within the year, a result quite compatible with the relations of these epidemics just mentioned, though at first apparently opposed to them.

Secondly, as the sequence may occur at various points in succession in an extensive district, and from first to last these local changes may occupy a considerable period, it is requisite, when this has occurred, that the course of the diseases be investigated in each instance for a locality so circumscribed that the change had taken place about the same time over the whole.

In England the returns of deaths for London alone present the requisites just mentioned ; they have been published, with the diseases in detail, for each quarter. The population is so large as to offer a fair average, and the locality is sufficiently circumscribed. But even with these there is another distinction to be drawn before they can be applied to this investigation. The deaths from all varieties of fever up to 1868 were included under one denomination, and it is necessary to separate the enteric and infantile remittent from typhus and the other forms ; for, as will be seen hereafter, these prevail at different seasons, and the enteric may actually increase along with cholera, which corresponds with it as to its season of augmentation, and apparently also in some of its immediate exciting causes.

To apportion the deaths from fever in London to its various forms, I have assumed the admissions from typhus and the enteric form at the Fever Hospital, for the corresponding quarters of the same years, afford a fair view of the relative prevalence of these in the district at the time. Dr. Murchison's statistics show the mortality from typhus and enteric fever to have been very nearly in the same ratio as the admissions, and further, that very few deaths occurred in the Fever Hospital from other forms than these. It seems reasonable, therefore, to conclude that if the total deaths from fever in London be assigned to typhus and enteric in the ratio of the admissions from each, a fair approximation as to the relative prevalence of these within the metropolitan area will be obtained. The expedient is not altogether unobjectionable, but there are no other means of arriving at even an approximate result.

Since 1869 the returns of the Registrar-General give the deaths from fever under the heads of Typhus, Enteric, and Simple Continued fever, and the relative numbers under each differ so much from the results obtained at the Fever Hospital, that they may raise a doubt as to the trustworthiness of the method I have adopted. There seems to be a serious fallacy, however, in the manner in which the deaths among the general population are reported ; for while at the Fever Hospital, where undoubtedly the diagnosis was more precise than elsewhere, simple continued fever was not frequent, and a death from it scarcely met with, in the metropolitan district, and in the country generally, the deaths so returned are numerous, equalling, or even exceeding, those from typhus. If the deaths from typhus and simple continued fever for 1869-70-71 be taken together, and those from enteric fever by themselves, the former give a mean ratio of 3·42 per 1000 living, and the latter 3·03, and these, though smaller, bear nearly the same relation to each other that the admissions at the Fever Hospital did from 1850 to 1859.

(a) Read before the Epidemiological Society.

(b) See also "Sanitary Report for the Army for 1868," p. 307.

The monthly returns of the Registrar-General for Scotland give the deaths from fever in each of the eight prinicipal towns, and also specify in the aggregate the different forms under which they were registered. In the annual report the returns for the same towns are given for the year, and fevers are there classed under the heads of Typhus, Enteric, Relapsing, Simple Continued, and Infantile Remittent. Placing the typhus, relapsing, and simple continued forms together, and the enteric with the infantile remittent, I have been able from the two sets of returns alluded to to calculate the ratios per 10,000 living for each of these classes of fever in the respective towns for each quarter of 1866. The results may not be absolutely accurate, but they give a very close approximation to the truth.

The following table gives the mortality from the two classes of fever for each quarter in London in the form of the annual ratio per 10,000 living for these periods, and that from cholera of all kinds is added:—

Table I.

Year.	Typhus.				Enteric Fever.				Cholera.			
	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
1848	14·3	14·1	10·6	7·2	2·5	1·8	5·3	8·8	·2	·3	2·7	8·4
1849	9·5	6·4	4·4	2·2	2·8	2·7	8·3	7·8	9·0	4·7	225·3	8·7
1853	8·0	9·2	5·6	5·9	3·0	2·0	4·1	6·1	·1	·2	2·2	11·8
1854	6·4	9·8	4·8	3·8	3·2	1·5	6·2	7·7	·1	·2	155·1	15·7
1855	5·7	5·4	5·5	6·4	3·5	2·7	4·8	3·2	·2	·1	1·7	·3
1856	10·4	10·9	6·7	7·5	·8	·7	2·2	2·0	·1	·1	2·0	...
1865	11·9	8·4	6·1	8·2	·6	·9	2·9	4·2	...	·4	1·8	·3
1866	9·0	7·0	5·3	5·5	2·0	1·8	2·1	2·6	·1	·3	62·1	11·0
1867	6·2	5·5	4·7	5·6	1·1	1·2	1·9	1·9	·1	·1	2·6	·3
1868	5·8	5·5	6·3	8·2	·8	·9	2·6	1·9	·1	·5	3·4	·1

The deaths from fevers generally in London during the twenty years 1850-69 were in the annual ratio of 8·99 per 10,000 living, or in round numbers 9 in 10,000; and separating these into two classes according to the admissions into the Fever Hospital as already explained, 5·65 is obtained as the ratio for the typhus group, and 3·34 as that for the enteric. The mortality from enteric fever seems to have fallen considerably in 1862, and to have remained low with occasional exceptions since; but as the returns for the three years 1869-72 for London give a mean annual ratio of 3·02, that for the twenty years preceding—3·34—may be taken as a good approximation.

In 1846 a wave of cholera was experienced in Western India, at Kurrachee, and as far east as Aden and Mecca. This embraced Diarbekir to the north and Aleppo to the west in the course of the year. In 1847 the disease overspread European Russia as far as Moscow, and in 1848 extended to St. Petersburg and Finland, but it was not before October that the malignant form of the disease appeared in Western Europe, at Bergen in Norway, and in this country. While this wave was pursuing its course, a wave of fever, which first attracted attention in the Eclair near Sierra Leone in 1845, passed northwards along the West Coast of Africa. This was met with in the Mediterranean and at Teneriffe in 1846, in this country and Sweden and in Silesia in 1847, and continued in these places into 1848. But for this fever it is probable we should have had the epidemic of cholera in the third quarter of 1848, the same year as it prevailed at St. Petersburg, and corresponding with the epidemics of 1854 and 1866.

In the fourth quarter of 1847 the mortality from fever of all descriptions in London was in the annual ratio of 23·5 per 10,000 living. In Table I. the annual ratio per 10,000 from the typhus group is shown to have been 14·3 in the first quarter of 1848, and it fell to 7·2 in the fourth quarter. The ratio of enteric fevor was low the first two quarters of 1848, but it increased to 5·3 in the third, and to 8·8 in the fourth, and with this there was an increase of cholera. In the first quarter of 1849 the typhus group caused a mortality of 9·5 per 10,000; from this, however, it fell through each succeeding quarter to 2·2 in in the fourth. Enteric fever was little more frequent the first two quarters of 1849 than it was the previous year; it rose to 8·3 in the third quarter—three times more than the previous one—and remained nearly as high the fourth. Coincident with this increase of enteric fever was the great outbreak of cholera, which attained an annual ratio of 225·3 in the quarter. Here it is obvious that while the mortality from the typhus group of fevers in the third quarter of 1848 was 10·6 (nearly twice the annual average), there was little cholera; but in 1849, when in the same quarter it was 4·4 only, which is less than the average, a severe epidemic occurred. The great increase of enteric fever in the same quarter is also deserving of notice.

In 1852 cholera was again at St. Petersburg, and in 1853 it was prevalent from Moscow to Holland south of the Baltic, and in Finland, Sweden, and Norway to the north of it. In August of this year it appeared in England in the malignant form, but, except at Newcastle, with no great severity.

In 1854 another epidemic, which had been experienced the previous year along the coasts of the Mediterranean and in southern Europe, invaded the British islands and northern Europe, and was experienced with considerable severity in London. It will be seen in Table I. that the mortality from the typhus group of fevers was high in the first two quarters of 1853, but that in the third and fourth it was 5·6 and 5·9 respectively, or just above the mean for the twenty years. Enteric fever was below the mean for the first two quarters, but rose to 4·1 the third, and to 6·1 the fourth; and coincident with these there was a mortality from cholera of 2·2 and 11·8 respectively. In 1854 the typhus group rose to 9·8 in the second quarter, but the following one fell to 4·8, which is below the mean for the twenty years. Enteric fever, which stood at 1·5 in the second quarter, rose to 6·2 the third, and to 7·7 in the fourth. The rise in the third quarter was accompanied by a mortality of 155·1 from cholera, which declined to 15·7 the following one. Here, as in 1848-49, with the mortality from the typhus group above the mean, there was little cholera, though when below it a considerable epidemic showed itself.

In 1855 another epidemic of cholera was experienced in the south of Europe, from Constantinople to Lisbon, and it embraced Stockholm and Moscow in 1856, and was so severe at the latter that the coronation of the Emperor of Russia was postponed. This epidemic was scarcely perceptible in this country. At London, as will be seen by Table I., the typhus group of fevers caused about the mean amount of mortality in each quarter of 1855; but in 1856 it stood at 10·4 and 10·9 in the first two quarters, and at 6·7 and 7·5 the following two, all of them considerably above the mean. Enteric fever, which reached 4·8 the third quarter of 1855, was very low in the first two quarters of 1856, and in the third reached 2·2 only; and the cholera mortality the same quarter was 2·0. In this instance, though cholera was epidemic over a large extent of Europe in 1856, the immunity of London coincided with an unusual prevalence of the typhus group of fevers, exactly as in the early months of 1848; while on the other hand the enteric form did not present that large increase in the third quarter found in 1848, 1849, and 1854.

In 1865 another epidemic of cholera spread through the Mediterranean, and passed to the north gradually over Europe. In 1866 it reached this country, and was by far the least severe of the four epidemics which have been experienced here. In London the typhus group of fevers caused a mortality of 11·9 in the first quarter of 1865, which declined to 6·1 in the third, but rose again to 9·0 in the first quarter of 1866, from which it declined to 5·3 and 5·5 in the third and fourth. Enteric fever, which was very low in the first two quarters of 1865, rose to 4·2 in the fourth; but during 1866 the lowest ratio was 1·8 in the second quarter, and the highest 2·6 in the fourth. In 1865 there was very little cholera, but in the third quarter of 1866 an epidemic giving an annual ratio of 62·1; and, but for the circumscribed outbreak in East London, this would have been materially less. Here, again, we find the typhus group of fevers below the mean before cholera prevailed as an epidemic, as in the previous instances.

It will be remembered there was an epidemic of cholera affecting parts of the shores of the Mediterranean and south of Europe in 1867, and that during the summer of 1868 the frequency of sporadic cases of a malignant form attracted attention, both in this country and in the neighbouring parts of the Continent. The annual mortality attributed to cholera in England, which in 1867 was 43 in 1,000,000, in 1868 rose to 70, and in London that of the third quarter of the former year was 2·6 in 10,000, while in the corresponding period of the latter it amounted to 3·4. This fluctuation, though small, affords unequivocal evidence of the progress northward of the same pandemic influence which was experienced over the Mediterranean the previous year. That it was not more developed in London may have depended to a considerable extent on the increase of the typhus group of fevers. These, during 1867 and the first two quarters of 1868, had fluctuated about the mean, but in the third they rose to 6·3, and the following one to 8·2. Enteric fever was much below the average during 1867 and the first two quarters of 1868; in the third it rose to 2·6, coincident with the increase of cholera.

A remarkable relation between the mortality from enteric fever and that from cholera in the three epidemics may be here noticed. Thus, in the third quarters of 1849, 1854, and 1866

the ratios of deaths from enteric fever were 8·3, 6·2, and 2·1 respectively, and those from cholera 225·3, 155·1, and 62·1, bearing nearly the same proportion to each other.

Table II.—The Annual Ratio of Mortality from the Typhus and Enteric Groups of Fevers, and from Cholera, in each Quarter of 1866, *in the Eight principal Scotch Towns.*

Town.	Typhus.				Enteric.				Cholera.			
	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
Edinburgh ...	14·8	11·3	9·9	8·4	6·1	4·4	3·9	6·0	...	0·3	2·5	31·2
Leith	9·5	8·3	6·7	7·1	6·2	5·2	3·8	10·7	...	1·1	30·5	70·7
Dundee	33·7	22·3	17·0	10·8	7·6	5·0	3·7	3·8	...	...	6·6	39·3
Aberdeen	19·6	12·1	5·6	4·3	12·0	7·2	3·0	4·8	...	...	2·7	31·6
Perth	8·1	13·8	10·4	6·1	2·2	3·9	2·8	2·7	...	...	1·5	23·6
Glasgow	19·1	14·4	11·1	11·7	4·9	3·9	2·9	5·2	...	0·6	1·8	6·3
Paisley	37·2	23·0	17·8	21·5	5·4	2·9	2·3	4·6	...	...	1·0	7·1
Greenock	8·4	11·2	14·9	25·4	0·8	1·2	1·8	5·5	...	...	0·8	10·8

During the early months of 1866 there was a greater tendency to cholera in Scotland than usual, so that up to May (inclusive) from three to four deaths occurred from it monthly; in June they amounted to fourteen, and in July to thirty-four, but the Medical men and authorities of the localities where it manifested itself continued to designate it autumnal or British cholera. The subsequent progress of the disease, however, left no doubt as to its nature. The epidemic displayed its greatest force along a limited portion of the east coast, embracing the counties of Haddington, Edinburgh, Fife, Forfar, Kincardine, and Aberdeen. As the distance from the east coast increased, the severity of the epidemic diminished. The first four towns in the table, lying nearly north and south, are all in the districts where the disease was felt most severely; the other four are each more to the westward in the order in which they are inserted. The prevalence of the different forms of fever and of cholera each quarter in these towns will afford a good view of how far the diminished force of the latter epidemic was associated with the prevalence of the former.

Fever was very fatal in Scotland in 1865, and it continued frequent in 1866, though, with some exceptions, its force diminished as the year advanced. In Edinburgh the annual ratio of the typhus group for the first quarter was 14·8, and it declined to 8·4 in the fourth; the ratio for the enteric group was 6·1 in the first quarter, which declined to 3·9 in the third, but rose again to 6·0 in the fourth. Cholera appeared in the second quarter; in the third there was a ratio of 2·5, which advanced to 31·2 in the fourth. In Leith the typhus group stood at 9·5 in the first quarter, and declined to 7·1 in the fourth; the enteric group, as in Edinburgh, descended from 6·2 in the first quarter to 3·8 in the third, and rose again to 10·7 in the fourth. Cholera attained its greatest force in Leith, the ratio being 1·1 for the second quarter, 30·5 for the third, and 70·7 for the fourth. In Dundee fever was more than twice as prevalent as in Edinburgh in the first quarter, the ratio being for the typhus group 33·7, but it fell to 10·8 in the fourth; the enteric form, which stood at 7·6 in the first quarter, fell to 3·7 in the third, and remained about the same in the fourth. There was a ratio of 6·6 of mortality from cholera in the third quarter, and of 39·3 in the fourth. In Aberdeen the ratio of mortality from the typhus group in the first quarter was 19·6, which declined to 4·3 in the fourth; the enteric group gave a ratio of 12·0 in the first quarter, which fell to 3·0 in the third, and rose again in the fourth to 4·8. Cholera presented a mortality of 2·7 and 31·6 in the third and fourth quarters, being almost identical with those for Edinburgh. In Perth the mortality from the typhus group of fevers was 8·1 only in the first quarter; it rose to 13·8 in the second, and fell again to 6·1 in the fourth. The enteric group was low throughout, though with a slight rise in the second quarter. Cholera caused a death-rate of 1·5 in the third quarter, and of 23·6 in the fourth, which is less than in either of the four preceding instances. In Glasgow the typhus group stood at 19·1 in the first quarter, it fell to 11·1 in the third, and remained at 11·7 in the fourth; the enteric forms fell from 4·9 in the first quarter to 2·9 in the third, and rose again to 5·2 in the fourth. Cholera, which manifested itself in the second quarter, caused a mortality of 1·8 the third, and of 6·3 only in the fourth. In Paisley the typhus group of fevers presented much the same character as in Dundee in the first three quarters, having fallen from 37·2 in the first to 17·8 in the third; but instead of falling still further to 10·8, as at Dundee, in the fourth, it rose to 21·5. Enteric fever, which stood at 5·4 the first quarter, descended to 2·3 the third, but was doubled in the fourth. Cholera here gave ratios of 1·6 and 7·1 only in the third and fourth quarters. In Greenock fever was not very active in the commencement of the year, the typhus group presenting a ratio of 8·4 only, but it went on increasing to the fourth, when it reached 25·4; the enteric forms rose from 0·8 in the first quarter to 5·5 the fourth. Cholera gave ratios of 0·8 the third quarter and 10·8 the fourth.

To sum up these results, it is to be remarked that at Edinburgh, Dundee, and Aberdeen, the frequency of the typhus group of fevers diminished from the first quarter to the fourth; at Perth, where they were higher in the second quarter than in the first, the same decline took place; and at Leith, where the mortality from this group was lower, it fell to the third quarter, and then presented a very slight advance. It is obvious, therefore, that the epidemic force of fever in these towns, and, presumably, in the districts around them, diminished largely towards the end of 1866, and over this portion of the country cholera then attained considerable development. In Glasgow and Paisley the intensity of the febrile epidemic also diminished from the first to the third quarter of 1866, but in the fourth it increased somewhat at Glasgow, and considerably at Paisley; while at Greenock, where the typhus group had been comparatively low in the early part of the year, it went on increasing to the end, showing an increase of epidemic influence towards the end of the year in that vicinity, and concurrent with this increase there was a very small development of cholera only. It is worthy of remark, too, that while at Edinburgh, Leith, and Aberdeen an increased ratio of mortality from enteric fever accompanied the epidemic of cholera, at Glasgow, Paisley, and Greenock a similar increase, under the adverse influence of greater epidemic force in the typhus group, was attended with much less cholera. The results for the principal Scotch towns in 1866, therefore, are to the same effect as those from the three epidemics of 1848-49, 1853-54, and 1866 in London, and they bear out the general position laid down at the commencement of this paper.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

EXTROVERSIO VESICÆ.

There are at the present time four cases of this malformation in St. Thomas's Hospital, under the care of Mr. Sydney Jones. Three of them are males, one female. In one Mr. S. Jones has succeeded in making the ureters communicate with the rectum, and in closing the anterior orifice of the left ureter. The actual cautery is now being applied around the margin of the abdominal aperture, so that, by contraction, the right ureter may be drawn towards a sort of cloaca which exists between the ureters and rectum.

In a second case the communication is also complete between the ureters and the rectum. Clamp forceps had also been applied to the anterior ends of the ureters after the introduction of the galvano-caustics. These clamps remained a week, and then separated. Still no urine escaped in front; so that it was hoped the case was complete. In a few days, however, a light slough separated, allowing the escape of urine in front. In this case all the urine passed per rectum for about twelve days. A further attempt will shortly be made to close the ureters.

A third case is in a female. Mr. Sydney Jones found a well-developed vagina between the ureters and the rectum. He has succeeded in this case in making, by two lateral flaps, the lower part of a front receptacle.

The fourth case has not yet been treated.

BIRMINGHAM GENERAL HOSPITAL.

CASES UNDER THE CARE OF DR. RUSSELL.

These cases exemplify two of the rarer forms of disease of the stomach. In the Pathological Society's *Transactions*,(a) among the diseases of the stomach, there is only one case of colloid, and twenty-three cases of malignant disease. The first-mentioned case was of a colloid tumour connected with the

(a) My series is not complete.

desser curvature (i., 91). Of the twenty-three cases of malignant disease, in one only was the cardiac orifice affected alone; in two others the œsophagus participated, and in one of the two the entire stomach also. The same *Transactions* give twenty-nine cases of stricture of the œsophagus, twenty-five at least malignant, eight of the latter epithelial.

My first case—that of colloid—exemplifies the extent to which the stomach may be displaced when its weight is increased through increase of capacity, provided that there be no adhesion to surrounding organs, as is the rule in cases of carcinoma.

The history of the second case affords rather an interesting illustration of the obscurity often thrown over clinical inquiries through the difficulty of distinguishing between mere coincidence and necessary connexion. In this case the occurrence to which the patient confidently referred as the origin of his symptoms could have had but a subordinate place in their production. A word may be added on the cause of death in this case: it was by hæmorrhage. Dr. Wilks (Pathological *Transactions*, x., 159) refers to pneumonia as a very important cause of death in stricture of the œsophagus, attributable to extreme debility, to extension of the disease, or to implication of the pneumogastric nerve. There are, however, four cases recorded in which hæmorrhage was the cause of death; in three of the four the source of the bleeding was outside the œsophagus (carotid two, subclavian one). There is only a single death from hæmorrhage related in carcinoma of the stomach, the bleeding taking place from the tumour. In my present case the source of the hæmorrhage was analogous to that in the three cases of œsophageal disease, being derived from a cavity outside the organ. The blood was furnished by the spleen, which had sloughed, doubtless in consequence of the introduction of the bougie, which had entered the cavity of which the spleen formed one boundary. I can bear witness that the utmost gentleness was used when the bougie was introduced; but this circumstance only adds force to the acknowledged need of caution in using the bougie in this class of cases.

Case 1.—*Colloid Disease of the Pylorus.*

M. S., aged 34. My friend Dr. Harrison, of Walsall, was kind enough to obtain for me some particulars of her history. Characteristic symptoms were present two years and a quarter before death, but were preceded by failing health for three years anteriorly. She had pain, which she referred to the left side, and six months afterwards she began to vomit—never less than one hour after food, and frequently after a longer interval. At this time she became pregnant, but miscarried at the sixth month, and was dangerously prostrated. The sickness was less for a time, but returned, and shortly before coming under my care she vomited some blood. There are no important facts in her family history. In the Hospital her symptoms were simply typical of strictured pylorus, with extreme emaciation, but no special form of cachexia. A considerable tumour, not covered by intestine, and movable, was very distinct in the right lumbar region of the abdomen.

Sectio Cadaveris.—The entire stomach lay in the abdomen, quite below the edge of the liver, the pylorus occupying the right lumbar abdominal region. The stomach easily accepted four pints of fluid. The colloid disease occupied four inches of the pylorus, ceasing at the valve, and in the other direction by a well-marked elevated margin. The wall in this part was two inches thick; the diseased portion weighed ten ounces, and was of firm consistence. The section of the diseased portion presented the buff-coloured gelatinous appearance characteristic of colloid. It was divided into three equal laminæ, the middle layer presenting the areolar character belonging to the muscular coat, and under the microscope exhibiting not a few remains of muscular tissue. The mucous layer retained one or two stomach-tubes, and many loose epithelial glandular cells. The submucous tissue was much hypertrophied. The outer lamina seemed constituted of areolar tissue above the peritoneum, copiously infiltrated. The inner surface of the stomach at the strictured portion was very irregular, and had the same gelatinous aspect with the section, but was fairly resisting. The rest of the organ was quite healthy, and the stomach-tubes were well formed.

The microscopic appearances accurately verified the description of colloid disease by Mr. Sibley (Medico-Chirurgical *Transactions*, vol. xxxix.). The "colloid corpuscles" were very distinct, especially in sections hardened in chromic acid by our pathologist, Mr. Rickards, and in many the "kernels" were very apparent. There was no secondary deposit, glandular or otherwise, nor any other disease save emaciation—the heart only weighing four ounces and a half.

Case 2.—*Scirrhous Stricture of the Cardiac Orifice of the Stomach, with a peculiar History—Death from Hæmorrhage through Sloughing of the Spleen—Use of the Bougie.*

J. F., aged 46. The symptoms were simply those of stricture of the cardiac orifice, with very little pain, and not advanced emaciation. No special form of cachexia. The chief clinical interest lay in his distinct and reiterated assertion that he had no symptom whatever until nine months ago, when, in swarming by a rope down a well, he was suddenly in danger of falling; he clutched the rope convulsively, and instinctively drew up his body. He had a feeling at the moment as of something giving way in his inside. On going home to dinner, he found difficulty in swallowing, and tried to wash down his meat with a large draught of tea, but the whole was rejected. He asserted that he never swallowed solids from that day; but his wife's statement was not quite so positive, though he had certainly long ceased to swallow solids when admitted. After consultation with my colleagues, it was determined to pass a bougie, when an obstacle was discovered at the cardiac orifice. Not the slightest force was used, and the patient affirmed that he swallowed better for some days after the bougie had been passed; but from the day on which the operation was performed he complained of pain in the left hypochondrium, which at times attained great severity. Nine days afterwards he vomited some watery fluid deeply coloured with blood, sank rapidly, and died in the evening.

Sectio Cadaveris.—The cardiac orifice of the stomach was surrounded by a scirrhous collar, half an inch thick and one inch broad, gradually thinning towards the cavity of the organ. The mucous membrane covering it was entire. This collar, in external characters and in microscopic appearance, corresponded to the hardest form of scirrhus, with a very small proportion of cells. The muscular tissue of the œsophagus was hypertrophied, but the tube was not dilated. The œsophagus opened directly into a cavity capable of containing a pullet's egg, enclosed by the spleen, which adhered closely to the stomach by the cardiac end, by the stomach and by the diaphragm. The stomach communicated with this cavity by a large ulcerated opening. The cavity contained sanious matter derived from the spleen, which was in a sloughing condition. The stomach and duodenum were filled with freshly coagulated blood. There was entire absence of secondary disease, glandular or otherwise, excepting only that an enlarged gland lay beneath the thoracic duct, without obstructing its cavity. This gland, though very firm, did not present the microscopic characters of carcinoma. There was much emaciation, the heart weighing only five ounces.

ROYAL INFIRMARY, EDINBURGH.

SPONTANEOUS SEPARATION OF A UTERINE FIBROID.

(Under the care of Dr. MATTHEWS DUNCAN.)

[Reported by Dr. J. R. HARDIE.]

E. Y., who is 38 years of age, has been a widow for two years, and has one child, was admitted to Ward XVI. on January 31, 1872, complaining of difficulty and pain in micturition, a fetid discharge from the vagina, and of a growth in it. Her child was born five years ago, the labour being natural, and there was no flooding either before or after the birth of the child. Her ailments began two years ago with obstinate diarrhœa, which was accompanied with increase in the frequency and quantity of the menstrual flow. Menstruation occurred every fortnight or three weeks, and latterly the intervals were so short that she experienced difficulty in recognising the different periods. This excessive blood loss, she says, so weakened her that she often fainted. Patient knows of no cause for the commencement of her illness. This condition has remained more or less till the present time. The last menstruation, however, was after the interval of a month, and the quantity was not excessive. It occurred about a fortnight ago. She has only noticed the fetid discharge during the last five weeks, and her bowels have been very irregular in their action, being alternately costive and loose. On January 23, Y. experienced pain and difficulty in micturition, and then for the first time became aware of the existence of something unnatural in her vagina. Since that time she has been unable to urinate without the use of the catheter. With the exception of the pain while passing water she has suffered little from that cause. Last winter she had pains in her back and thighs, which, however, did not prevent her performing the ordinary light household duties.

On admission into the ward patient's urine was drawn off. It was natural in appearance, had a strongly acid reaction, specific gravity 1028, and contained a mere trace of albumen. Lodged in the vagina, and helping to distend it, was a thick brown fluid, which had a very strong fetor. About a pint of this was drawn off. It was faintly acid, contained about one-third of albumen, and when examined microscopically, blood corpuscles, more or less altered cholesterin, and *débris* were observed in it.

February 1.—On a physical examination being made, there is nothing particular to be felt per hypogastrium; but hanging out of the vagina was what appeared to be part of a decomposed ovum or fibroid. Dr. Duncan laid hold of the mass with a forceps, and, on pulling, easily removed what proved to be a large putrefying fibroid, which had lain wholly unattached in the vagina. It had no apparent pedicle. It weighed nine ounces. When cut into it exhibited the appearances of an ordinary fibroid, only it was in a rotting condition. The nurse was ordered to wash out the vagina twice daily with Condy and water. Before the tumour was removed, the pulse and temperature were noted, and observed to be as follows:—Pulse, 140; temperature, 101·8°. In the evening, pulse, 110; temperature, 98·9°.

2nd.—Patient expresses herself as being easy and comfortable. Pulse, 84; temperature, 98°. In the evening, pulse, 84; temperature, 98°.

3rd.—Morning: Pulse, 78; temperature, 97·8°. Evening: Pulse, 80; temperature, 97·5°.

4th.—Morning: Pulse, 72; temperature, 98°. Evening: Pulse, 78; temperature, 98·2°.

6th.—The vagina, which was formerly greatly distended, is now contracted to the ordinary size. There is no discharge nor fetor.

9th.—Dismissed.

Remarks.—In the history of the woman for the last two years we can closely follow that of the growth and separation of the fibroid. Its growth commenced about two years ago, and corresponds with the floodings, which she took to be menorrhagic in character. It is evident, however, that they were not so; for when the fibroid became completely detached from the uterus, and lay in the vagina, the cause for the bleeding having ceased, menstruation—healthy as regards time and quantity—was re-established. A gradual spontaneous separation of the tumour probably began last winter; this occurrence in all likelihood corresponding with the severe pains she experienced in her back and thighs. This process was completed about five weeks before admission, the last stage of it being the total separation of the fibroid from the uterus and its lodgment in the vagina. At this time it began to putrify, and it continued to do so until its removal on the patient being admitted to Ward XIV. This rotting of the tumour in the vagina was contemporaneous with a state of chronic septicæmia. Its existence before admission into Hospital is evidenced by the persistent diarrhœa, feverishness, and failing strength of which she says she was the subject. While under observation in the house the quick pulse, foul tongue, vomiting, high temperature, and anxious look, all pointed to some poisoned state of the blood, and the notion that this was caused by the presence of the decomposing fibroid in the vagina is supported by the fact that on its removal the symptoms detailed at once disappeared. On the morning of February 1 the pulse was 140, feeble and irregular; the temperature 101·8°. At noon the tumour was removed, and the vagina well washed out with a disinfecting lotion. In the evening the pulse had already fallen to 110, and the temperature to 98·9°. Next morning the pulse had further sunk to 84. On the 3rd it was 78, whilst the improvement in her general appearance and her expressed feeling of comfort are noteworthy.

PEKIN HOSPITAL.

CASE OF NÆVUS OF THE TONGUE.

(Under the care of Dr. DUDGEON.)

A MALE child, aged 18 months, from Tung-chow, near Pekin, was brought to this Hospital. At birth a small black spot was observed at the base of the tongue. Until twenty days ago this patch had remained *in statu quo*—at least, it had not attracted special attention. It suddenly, however, began to increase, and when I saw the little patient the tongue was about three times its natural size, of a purplish colour, with strongly marked and elevated papillæ. The mouth was closed with difficulty. A small point of ulceration near the tip on the left side had just commenced. The child was in excellent health, and was one of the prettiest Chinese children I ever saw. There was no secondary glandular enlargement, and, from the history of the case and the general appearance of the organ, I was convinced that it must be a case of nævus of the tongue—a somewhat rare disease, judging from the absence of any reference to it in our ordinary surgical treatises. I never saw an instance of this disease before, but believe it is described in Holmes's "System of Surgery"—a book which I have not at hand for reference. The extent of the disease, involving the whole organ, and its highly vascular character, precluded any operation short of complete extirpation, and to this course the parents would not submit. The little patient was removed home about ten days ago, and since then I have heard that this erectile tumour has assumed extraordinary dimensions, protruding beyond the lips, that the ulceration is extending, and that death is daily expected.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JULY 6, 1872.

THE CONJOINT EXAMINATION SCHEME.

WE are already in July, and the sultry weather does not incline to argument nor dispose to patience. We must therefore apologise to our readers for calling their attention to the threadbare theme on which we again consider it our duty to dwell, inasmuch as, although the subject presents no novelty, yet it involves the highest professional interests; and although sheer weariness might be urged as an excuse for its dismissal, yet to allow it to pass without renewed protest would be to consent to a revolution which bids fair to wreck the most honoured of our medical institutions, to divert the stream of English surgical education and examination to Scotland, and which can, as far as at present appears, be productive of no conceivable benefit to the student or to the Profession. It is not difficult, on the other hand, to foresee that it may probably prove of grave public injury, either by encouraging the formation of an inferior class of medical practitioners, or ultimately by reducing the great mass of students to the dead level of a minimum qualification.

Each division of the kingdom has its own scheme for a Conjoint Board of Examination. In each division the scheme is glaringly and hopelessly imperfect, inasmuch as it does not include some of the most important of the Examining Bodies. There is no shadow of agreement between the scope and

intention of the Scottish scheme and the English or Irish. In each division of the kingdom the co-operation of all the Examining Bodies cannot be obtained without fresh Parliamentary or Governmental powers. In each division of the kingdom it is highly probable that the Bodies which have already given their consent are on the brink of proceeding *ultra vires*, and that their action will only be productive of litigation and disaster.

To take the English scheme first: we find that in it the Council of the Royal College of Surgeons, which by Royal Charter has the power of electing a Court of Examiners to examine for its membership, is—practically, at least—to delegate its powers to an irresponsible unpaid body, called a Committee of Reference, which has no more legal standing than any voluntary society. What will be the legal worth of a diploma manufactured by such machinery? Will it be worth the paper on which it is written? We may be told that the Charter of the College will be verbally complied with; that the Council will still elect examiners, whilst the Committee of Reference only nominate. But will the law of England permit such an evasion of trust and delegation of power? This is a point which the courts alone can decide. It is a matter of notoriety that there are excellent lawyers who maintain that the law will not permit it; and certainly to the non-legal mind it seems an abandonment of responsibility on the part of a public body as dangerous as it is unnecessary.

The proposed composition of the Committee of Reference cannot possibly command the confidence of the public or of the Profession. Three universities, which among them grant less than a score of medical diplomas a year, contribute more than one-third of its members, and of these gentlemen one-half are already members of the General Medical Council. Surely the members of a body whose duty it is to supervise th medical examinations of the kingdom are out of place in a Committee which has the nomination of examiners. But beyond this the Committee being practically irresponsible, without any legal status, and unpaid, gives no guarantee to the public or to the Profession for the due performance of its duties. Who is to answer for the attendance of its members, or for the motives which will actuate them in dispensing their patronage?

It is to such a body that the great College of Surgeons of England—without doubt the first surgical institution in the world—is willing, whether legally or illegally, to delegate its powers. The Membership of the Royal College of Surgeons will no longer be a certificate that its possessor has been examined by the College—by the successors of Percival Pott, John Hunter, and Astley Cooper—but it will be a certificate that the candidate has been examined and approved by a certain number of gentlemen nominated by an unauthorised association without legal status or ancient prestige. The Medico-Chirurgical or the Obstetrical Society might exercise the same function to-morrow, with probably equal legality. The Faculty of the University of Edinburgh, in a report to which we shall directly refer, state the facts with exactness when they characterise the English scheme as one "leaving the various Corporations to give the licence in name, while depriving them individually of the power of testing the fitness of the candidates to receive the titles they confer."

The effect of this proceeding on the revenues and status of the English College of Surgeons can only be disastrous. Fewer men will most certainly apply for its diploma on these terms. The Edinburgh and Glasgow examinations will be open to them at a lower pecuniary cost; and the examination for the Membership of the College of Surgeons of England being confessedly a minimum, and no longer an independent one, will have lost all its old prestige. The College will endeavour —whether legally or not remains to be seen—to exclude holders of other diplomas from the surgical examination *per se*; and should it succeed it will simply enrich the coffers of the Scottish Corporations, and starve the Hunterian Museum and library.

It is true that the Society of Apothecaries and the University of London have, loyal to their professions, endeavoured to obtain legal powers to combine; but it is now tolerably clear that one or both will not obtain the necessary assistance from the Government in the present session; and, if report be true, it is to be believed that the Lord President of the Council is holding back, not unwilling to try his fortune in medical legislation again next year.

From the north we have received a temperately but wisely worded resolution from the Senatus of the University of Edinburgh, in which that body expresses its determination to have nothing to do with the proposed scheme of the delegates of the Examining Bodies of that kingdom. The resolution of the Senatus is founded on a report by the Medical Faculty of the University, which, for its prudence, common sense, and practical knowledge of the subject, is worthy of a body which includes such men as Christison and Laycock. The chief of the arguments adduced against the Conjoint Scheme were anticipated in our article of the week before last, and they have been allowed their weight by the Senatus. The Senatus ground their determination on the patent facts that to have intercalated into their system an examination conducted by an extraneous body would seriously interfere with the privileges of the University, would infringe their much-prized independence, and would be made a precedent for curtailing in other directions the autonomy of the University with respect to its degrees. Were great and undoubted advantages to the community at large to be secured only by such a policy, the Senatus would entertain the proposal; but they see in it only a system which must lead to the lowering of medical and surgical acquirements throughout the country, the encouragement of cramming, and the neglect of academical honours. The Senatus, with the Faculty, maintain that in the power of inspection of examinations already possessed by the General Council—a power which it has never yet systematically and properly exercised—lies the true remedy for the defects of the present system. At all events, they maintain that this remedy ought to be tried, and, should it fail, they would prefer a State Clinical Examination as a preliminary to registration to any combination of Examining Boards, and consequent congelation of examinations at the zero standard.

As we have heretofore said, the defection of the University of Edinburgh is fatal to the Scottish scheme, which we believe was never intended as anything more than a tub to be thrown to the General Medical Council. We think that the university of the Monros, and Abercrombie, Alison, Goodsir, and Simpson, has taken a right, wise, and dignified course in refusing to take part in these partial and perilous movements. In Ireland the Queen's University also characteristically maintains its independence. The scheme sanctioned by the Irish College of Physicians is an imitation of the English scheme, but it has not as yet, we hear, received the assent of the other Bodies. Meanwhile, no day is fixed, we believe, for the meeting of the General Medical Council, and when they meet it will only be to find their recommendations have not been carried—in England, because, *in limine*, they are impracticable in the present state of the law; in Scotland, because they are opposed by the prudence, independence, common sense, and experience of the leading teachers and the chief university; and in Ireland, because combination in that island is generally impossible.

This being the case, we would again recommend the General Medical Council to betake itself to a due performance of its duties—to visit and inspect examinations with some regularity and perseverance, and, by so doing, to raise the standard of medical education throughout the country. At least, this should be done before it attempts to dragoon the Examining Bodies into discarding their independence and embarking on

courses of doubtful legality; or, failing this, before it ventures to commit the medical profession to accept any measure of medical reform which the Government of the day may choose to dictate.

MR. STANSFELD'S PUBLIC HEALTH BILL AS AMENDED IN COMMITTEE.

This Bill, which has been the cause of so much controversy, has, by the exigencies of Parliamentary business, been shorn of its fair proportions, and reduced from ninety clauses to fifty-three, which, we understand, are to be passed this session, if possible. If we may characterise the alterations, we may describe them as the omission of all that sanitarians would agree upon, and the retention of that which local politicians, owners of property, vestry clerks, local boards, etc., may squabble about. All the valuable clauses, headed "Nuisances," "Water Supply," "Gas Supply," "Hospitals and Provision for the Sick," and "Analysis," are expunged. Thus there will be absolutely no law for suppressing nuisances other than now exists; the clauses retained will suffice, if they pass, to erect the sanitary authorities without which even the existing law is useless, and to clothe them with requisite powers, and will enable the Local Government Board to deal with the present anomalies as to areas.

The whole kingdom will be divided into areas, urban or rural, each with a local authority for carrying on the existing Nuisances Removal Acts, Common Lodging-house Acts, and others now in force in towns only. The proposed new clause as to Medical Officers of Health is as follows:—

"It shall be the duty of every urban sanitary authority to appoint from time to time a Medical Officer of Health in manner provided by the fortieth section of the Public Health Act, 1848, and any enactment amending the same. It shall be the duty of every rural sanitary authority to appoint from time to time a Medical Officer or Officers of Health, an Inspector or Inspectors of Nuisances, a Clerk and Treasurer, and such other officers and servants as it may deem necessary for the efficient execution of the purposes of the Sanitary Acts. The same person may, with the sanction of the Local Government Board, be appointed the Medical Officer of Health or the Inspector of Nuisances for two or more rural sanitary districts, by the joint or several appointment of the sanitary authorities of such districts, and with the like sanction any District Medical Officer of a union may be appointed a Medical Officer of Health. A Medical Officer of Health may exercise any of the powers with which an Inspector of Nuisances is invested by the Sanitary Acts or any of them."

The clause which appeared in the Bill as brought in, giving to the Local Government Board the same powers in regard to the appointment, qualifications, duties, salary, and tenure of office of a Medical Officer of Health for a rural district, as in the case of a District Medical Officer of a union, is omitted. This is not an improvement, as it is very undesirable that a Medical Officer of Health should be in any degree more at the mercy of his employers as regards tenure of office than a Poor-law Medical Officer; and committees of the House of Commons have, in the case of the latter, decided in favour of permanency of tenure.

Provision is made that "a rural sanitary authority (including any committee so formed as aforesaid) may at any meeting specially convened for the purpose form for any parish or contributory place within its district a parochial committee, consisting wholly of members of such sanitary authority or committee, or partly of such members and partly of such other persons contributing to the rate levied for sanitary purposes in such parish or contributory place, and qualified in such other manner (if any) as the authority forming such parochial committee may determine. . . A parochial committee shall be deemed to be the agent of the authority which formed it, and the appointment of such committee shall not relieve that authority from any obligation imposed on it by Act of Parliament or otherwise."

Should it be desirable, the Local Government Board may, "on the application of the authority of any rural sanitary district, or of one-tenth of the persons rated to the relief of the poor in such district or in any contributory place therein, by order, to be published in the *London Gazette*, or in such other manner as the Local Government Board may direct, invest such authority with all or any of the powers, rights, duties, capacities, liabilities, and obligations of an urban sanitary authority; and such investment may be made either unconditionally or subject to any conditions to be specified by the Board as to the time, portion of its district, or manner during, at, and in which such powers, rights, duties, liabilities, capacities, and obligations are to be exercised and attach: Provided that an order of the Local Government Board made in pursuance of an application from one-tenth of the persons rated to the relief of the poor in any contributory place shall not invest the rural sanitary authority with any jurisdiction beyond the limits of such contributory place."

There is a new provision transferring to the Local Government Board the powers of the Board of Trade under the Alkali Acts, and of the Secretary of State under the Highway and Turnpike Acts. All officers engaged in the discharge of duties which are transferred by the Bill to the Local Government Board are to pass over to the control of that Board, and there is the following special new provision in regard to the late Medical Officer of the Privy Council:—

"Whereas, the Medical Officer of the Privy Council has under and by virtue of the sixth section of the Local Government Board Act, 1871, been transferred to the Local Government Board in manner therein provided, and it is expedient to make provision as to the salary of such Medical Officer: Be it enacted that, notwithstanding anything contained in any Act of Parliament now in force, there shall be paid out of moneys to be provided by Parliament to such Medical Officer such salary as the Treasury may from time to time determine, and this section shall be deemed to have taken effect as from the 1st day of April, one thousand eight hundred and seventy."

The rest of the Bill relates to financial and municipal arrangements, which would be voted tedious by medical readers.

THE SLAUGHTER-HOUSE QUESTION.

The arguments against slaughter-houses in towns are so many and obvious that they seem at first sight to leave no room for anything that may be alleged on the other side. There is the cruelty to the animals in driving them through hot and crowded streets, the obstruction of thoroughfares, some amount of deterioration of the flesh, and the fact that blood, skins, bowels, and other refuse which easily becomes putrid, has to be carted out at the cost of fresh labour and fresh obstruction to the streets. We need not plead in mitigation, though it is a fact, that so perfect are the regulations laid down by the Metropolitan Officers of Health, and enforced by the local authorities of the metropolis, that the slaughter-houses are virtually inodorous and harmless. All the blood is received into vessels carefully closed, and so removed at once; the skin and other offal are also removed in the night. No putrefying substance is allowed to enter the sewers, and the use of carbolic acid and constant whitewashing render the well-kept slaughter-houses at the West-end less offensive than ordinary stables. They are licensed at a special yearly Court of Petty Sessions, and any infringement of regulations can be punished with forfeiture; and slaughtering without a licence involves a heavy fine.

Dr. Stevenson, in his report for the year 1871 of the health of St. Pancras, says that there are eighty-seven licensed slaughter-houses in that parish, and that they have been on the whole well-kept, and few complaints made of them. He says that—

"Now, the entire removal of all the private slaughter-houses will undoubtedly be attended with many inconveniences, and these can only be met by the establishment of public *abattoirs*

within easy distance of one another, in addition to the central *abattoirs* at present provided at the Metropolitan Market and elsewhere. Failing this, a wise course would be a more stringent application of the powers under which slaughter-houses are now licensed. . . . All slaughter-houses should in any future legislation be required to be fifty feet from a dwelling-house. They should be properly constructed, well ventilated, well supplied with water, properly drained, the walls lined with glazed tiles, slate, or zinc, and they should have an impermeable floor of asphalte. Such a slaughter-house would be a great convenience to a district, and entail little more nuisance than a butcher's shop."

Dr. Stevenson is not disposed to allow existing slaughter-houses to be kept up, if within the above distance from dwellings; and argues that there would be no injustice in this, since the Metropolitan Building Act, 1844, expressly provides for the disuse of such places after August, 1874; and persons who have rented them, or who have taken places near them, have done so in the faith that the Act would be adhered to. Therefore, "to allow the present slaughter-houses to continue under existing restrictions, would be to put money into the slaughterman's pocket at the expense and loss of comfort of his neighbours." Bearing in mind what Dr. Stevenson has said of the inconveniences to which the 225,000 inhabitants of St. Pancras may be exposed if deprived of eighty-seven places in which food is prepared, we may see what choice of plans there is.

In the first place, Dr. Brewer proposes simply to repeal the clause of the Building Act which provides that existing slaughter-houses shall cease to be used as such in August, 1874. He argues that the Act which condemns them looks only to one reason, which does not now exist—viz., the fact that they are *nuisances;* and it classes slaughter-houses for the preparation of human food in the same category with knackers' yards for slaughtering diseased horses, firework manufactories, tallow-melters, and the like offensive trades. But, owing to good sanitary regulations, slaughter-houses, as Dr. Stevenson testifies, are not now offensive. Moreover, all political philosophy is founded not on the hope of an impracticable perfection, but on a balance of probable advantages; and whatever makes food dear and scarce may be more deadly than the effluvia of putrefaction. But not only is meat spoiled in large quantities during hot weather by transport from a distance, and therefore made dear and scarce, but there is the *offal*—the *heads* and *plucks*, etc., which do not appear at the tables of M.P.'s, nor yet of sanitary philosophers, but yet form an important part of the food of the poor.(a) Moved by these considerations Dr. Brewer's Bill proposes simply to let things be.

A second plan is, not to allow of slaughtering at all times, but during the summer months only. Some would restrict the privilege to lambs, sheep, and calves.

The real objection to leaving things as they are is, that in many parts of London, under its present fragmentary, inactive, and inefficient government, private slaughter-houses may possibly be multiplied, and allowed to be established in the most improper places; hence that not only all the evils inseparable from well-kept places will exist, but there will be others, such as the preparation of diseased meat; and it will be recollected that some years ago even water-closets were used as slaughter-houses.

On the whole it occurs to us that the best plan would be to allow no new private slaughter-houses to be established in any large town; to limit the operation of existing slaughter-houses in populous neighbourhoods to sheep only; to establish more public *abattoirs* in convenient parts of the circuit of London or other towns; to make the Medical Officer of Health of each district responsible, and to require his signature to attest the fitness of all existing or proposed slaughter-houses; and to allow an appeal to the Local Government Board in any case of dispute.

But the final consummation to be aimed at is such an improved mode of killing and cooling the carcase as will allow dead meat to be sent any distance in hot weather. One of the largest butchers in London assures us that the flesh of animals quietly killed in Scotland, and allowed to *set* and become cool, is less liable to turn bad during its long transit than the flesh of animals hastily killed and imperfectly cooled is in being carted from a London *abattoir* to a butcher's shop five miles off.

(a) Anyone who wishes to test this may go of an evening to Hollis's pork-shop in Oxford-street, and see the poor buy *faggots* at a penny apiece, with a ladleful of rich gravy. If anyone asks, What are *faggots?* we pique ourselves on being able, in answer to the *undederivatur*, to point to the Italian word *fegato—i.e.*, liver. These faggots are choice morsels of viscera and fat done up together and baked. If pigs were not killed in Oxford-street the poor could get no faggots. The place where the pigs were killed has—or had when we inspected it—a positively aromatic smell.

THE REPORT OF THE SELECT COMMITTEE ON HABITUAL DRUNKARDS.

Certainly by far the boldest attempt ever made, not so much to make people virtuous by Act of Parliament as to check the indulgence in a vicious propensity, is embodied in the report of the Select Committee appointed to inquire into the best practical mode of controlling and managing Habitual Drunkards. Dr. Dalrymple has indeed achieved a great triumph. Upon the first occasion of introducing the subject to the attention of the Legislature he was complimented on his philanthropy, but unmistakably assured of the utter impracticability of his scheme. And yet now, after a lapse of but two years, a select committee of the self-same Parliament has endorsed his views and adopted his suggestions; neither have they forgotten to compliment him on the information he has acquired on the subject in his visit to the United States.

But the question remains, Is the House of Commons likely to adopt the report of the Select Committee? If the Bill were eventually lost, it would not be the first time that a Bill reported upon favourably by a select committee has been rejected on the third reading. We must, therefore, not be over-sanguine of success at present. The Bill, as proposed, contains certainly some most stringent clauses; but yet, unless the evil against which the enactments are directed is firmly and boldly grappled with, it had far better be left alone.

We have all along advocated legislation on this most important subject, and have called attention to the American law and the reformatories which have for years existed in the United States, and have ourselves submitted a programme based upon the model of the United States legislation. We are far, therefore, from objecting to the stringency of the provisions of the present Bill. Many of its clauses are all-fours with the laws relating to lunacy; but whether the insanity be acquired or natural can matter very little if it renders a man incapable of managing his affairs and is bringing ruin upon himself and those about him.

As to the penal clauses of the Bill, they, like all penal enactments, will have to be construed strictly—in other words, as favourably towards a defendant as the nature of language will allow; and, coupled with a right of appeal, there need be no fear of any abuse of the liberty of the subject any more than in the case of any other crime against society involving loss of liberty and the degradation of punishment.

THE WEEK.

TOPICS OF THE DAY.

We are informed that Mr. Cardwell has requested Dr. John Murray, the Secretary of the Volunteer Medical Officers' Association, to draw up a statement in writing setting forth the points in the recent regulations which are distasteful to these officers.

Mr. Stanley's despatches giving an account of Dr. Livingstone's discovery of the origin of the Nile in the River Chambezi—a thin stream starting 11° South, and rolling onwards along a course of 2600 miles—and the identity of the Lualaba and

Chambezi rivers, have doubtless been read by all our readers. The whole account is of unprecedented interest, and next to the enterprise of the great traveller is, we think, to be placed that of the *New York Herald*. Mr. Stanley describes Dr. Livingstone as stout and strong, and undismayed by all he has gone through. Livingstone feels that he has yet two problems to solve in connexion with the Nile, which will take him eighteen months of farther exploration. He has 180 miles to trace, and he has to investigate the truth of a report which has reached him respecting four fountains which supply a large volume of water to the Lualaba. All must hope that he will succeed in placing this crowning stone upon his work as a traveller; but it is also to be hoped that his communications with Europe will not be again cut off.

The Vicar of Folkestone has written to the *Times* stating that the memorial west window which it is proposed to place in the parish church to commemorate Harvey will consist of eight subjects from Our Lord's Miracles of Healing, and that underneath it will be recorded on a brass Harvey's great discovery. This project is, we believe, entirely apart from that set on foot by the Committee of which Dr. Bence Jones is treasurer, whose object it is to erect a statue to Harvey at Folkestone.

The St. Andrews Medical Graduates' Association holds its annual meeting at Willis's Rooms on Saturday, July 6, at 5 p.m., when the President, Deputy Inspector-General Gordon, M.D., C.B., will deliver the anniversary address, "The Army Surgeon, his Work and Works."

The Berlin correspondent of the *Times* states that cholera is approaching the Prussian frontier from Central Russia. This may be mere rumour; but according to the same correspondent a better cholera focus than Berlin could scarcely be found.

The Ophthalmological Congress, who meet in London this year, will assemble towards the end of the month. Dr. Soelberg Wells is secretary. A meeting to arrange preliminaries was held this week at the rooms of the Medico-Chirurgical Society. The English ophthalmologists propose to entertain their brethren at a *conversazione*, and there will be a farewell dinner at the Crystal Palace.

Dr. Eustace Smith has been elected Physician to the Eastern Hospital for Women and Children.

THE TESTS OF INSANITY.

At a meeting of a medical society recently held a paper was read, "On the Scientific Value of the Legal Tests of Insanity." The author, Dr. Russell Reynolds, suggested a conference between representatives of the legal and medical professions for the purpose of considering remedies for the evils supposed to exist. He suggested, among other points, "a revision of the test of insanity—that bearing upon the knowledge of right and wrong." Now, the knowledge of right and wrong is no legal test of insanity. The law only considers a knowledge of right and wrong as a test of liability to punishment. The law simply says that if a man knows right from wrong, and does wrong, he is liable to punishment, no matter whether he be sane or insane. The opinion of the judges on questions propounded by the House of Lords arising out of the McNaughten case is conclusive upon that point. Lord Chief Justice Tindal, who delivered the opinions of all the judges, with the exception of Mr. Justice Maule—who, however, did not differ from his brethren in this respect—used these words: "We are of opinion that, notwithstanding the party accused did the act complained of with a view, *under the influence of insane delusion*, of redressing or revenging some supposed grievance or injury, or of producing some public benefit, he is, nevertheless, punishable if he knew at the time of committing such crime that he was acting contrary to law." And, further, "that to establish a defence on the ground of insanity, it must be clearly proved that, at the time of committing the act, the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing; or, if he did know it, that he did not know he was doing what was wrong." Mr. Justice Maule's definition, not of insanity, but of the test of responsibility, is perhaps even more explicit. He says—"To render a person irresponsible for crime on account of *unsoundness of mind*, the *unsoundness* should, according to the law as it has long been understood and held, be such as to render him incapable of knowing right from wrong." The law does not profess to define insanity, but merely says that insane delusions or unsoundness of mind generally will not render a person irresponsible for his actions if he knew, at the time of the commission of the act, that he was doing wrong, such wrong being also contrary to the law of the land. The effect assigned by the law to a knowledge of right and wrong has really nothing whatever to do with physiology; it merely declares that no unsoundness of mind short of a defect of reason obscuring the perception of right and wrong shall render a person irresponsible.

A SANITARY SCANDAL.

How much need there is of some clear head and strong hand to bring our present jarring institutions into working order may be gathered from the following specimen:—Under existing laws it is the duty of the Medical Officers of Health, in the metropolis and elsewhere, to ascertain and report upon the existence of epidemic and other diseases, of which small-pox is the chief. As it is his duty to devise measures for the suppression of such epidemics, it seems but reasonable that he should know how many persons are sick, and where they live. Such information one would think would be readily given by the public institutions which treat the sick, because, valuable as they are as means of cure, they would be doubly so as means of prevention. Now let us look at the following choice bit from the last annual report by Dr. Stevenson, Medical Officer of Health to St. Pancras. Half of the 2799 known cases of small-pox in St. Pancras were sent into the Hampstead Hospital:—

"I have not," says Dr. Stevenson, "obtained any statistical information from the Highgate Small-pox Hospital. With regard to the courteous but firm refusal of the Resident Medical Officer of that institution to allow me even to inspect the books of the Hospital, I will merely express a hope that the 61st clause of the Public Health Bill, now before Parliament, may speedily become law, and that it shall become obligatory on the officers of any such institution to furnish Medical Officers of Health with all reasonable and needful assistance in the preparation of returns as to sickness. Unfortunately, also, I can obtain no records from the Poor-law Officers of this parish as to the number of pauper cases treated in the above Hospital, with the results."

Alas! the 61st clause of the Public Health Bill is expunged. Our enlightened Legislature uses its valuable time in devising means for enabling illiterate "working" men to exercise their political franchise in secresy. Pestilence is too insignificant a thing! So things must rest as they are, and a great public service is in the same position as a household would be supposing the housekeeper had orders to provide a large dinner, and the butler "courteously but firmly"! refused to say how many guests there were to be.

THE CONTAGIOUS DISEASES ACT.

In consequence of the advanced period of the session, the immense amount of work before Parliament, and the unsatisfactory position of the Contagious Diseases Bill, it is stated that a deputation of medical practitioners and others is about to be organised for the purpose of asking Mr. Gladstone to allow that measure wholly to drop during the present session; but, if necessary, to detach from it the police clauses, and pass them as a separate measure.

WEED IN WATERWORKS, AND GERMS IN WATER.

Amongst the causes alleged for the late scarcity of water in Bermondsey—as reported in the newspapers—one is the growth of weed in the reservoirs, interfering with the passage of water through the filters. As this may seem mysterious to some persons, we may say that even the most carefully filtered river-water, and, *à fortiori*, water that is not filtered, if exposed to the sun and air at the beginning of summer, becomes the seat of the most active growth of every variety of low organisms—visible and microscopic, animal and vegetable. Amongst the latter are many confervæ of slimy character, which grow so rapidly as to choke the sand-filters, and give great embarrassment to the engineers. When pursuing the practical study of hydrology some time ago, we got a bucketful of the refuse from the cleansing the cistern of some very large baths and washhouses, through which a large quantity of Thames water passes, and is exposed to the sun and air on the top of a high building. No one with such a resource within reach can be in difficulty in studying diatoms, paramœcia, confervæ, and the other multitude of beautiful forms, to which the best practical guides are the plates, drawn by Dr. Hassall, of the sediments in various waters examined for the Board of Health during the cholera of 1854. As practical facts it must be noted that filtered river-water ordinarily contains some germs, which are few, difficult of detection, and harmless; that such water, stored with access to air and light, becomes the seat of rapid growth in the early summer; that water may become offensive and unwholesome from the decay of growths from such germs—the filter-sand when washed sometimes smells very offensively. Hence the policy of storing water in deep and dark reservoirs.

AN ARCHBISHOP ON DOCTORS.

The annual meeting of the South-Eastern Branch of the British Medical Association was held on Saturday last at the Crystal Palace. The President-elect, Dr. Alfred Carpenter, was in the chair, and gave a most interesting and exhaustive address. We commend it to our readers as one well worthy of careful study and reflection. It is published in full in the *Croydon Advertiser* of June 29. Many good speeches were made in the course of the evening, one in particular by the Archbishop of Canterbury, which is worthy of being reproduced in our columns *in extenso*:—

"I have very great pleasure in returning my best thanks for the honour you have done me and the body with which I am associated, whether the ministers of religion or that branch of the Legislature with which I have the honour to hold a seat. You have been kind enough to propose my health as bishop of the diocese. I presume that I am at present supposed to be in Croydon, at which place I am bishop. I believe the Crystal Palace is divided into two dioceses, over neither of which I have the honour of presiding; but as bishop of the diocese in which Croydon is situated, and as bishop of the diocese in which so many of those I have now the honour of addressing are resident, it gives me very great satisfaction indeed to be present on this occasion. I think it a great mistake that there is no member of the medical profession in the House of Lords; and as we have now a Prime Minister who has done a great many things that nobody else ever did, perhaps he may break through old routine, and perhaps we may see the President himself take in the House of Lords the place which he ought to take, to the satisfaction of the whole country. Mr. President, there are private reasons as well as public reasons why I should be glad to be present on this occasion. I believe, I must confess, that there are very few people in the kingdom who have passed through the hands of so many doctors as I have had the good or bad fortune to do in the course of my life, and I must say that the experience I have thus acquired of the Profession has made me ready to state that amongst my most valued friends there have been, and are now, members of that Profession; and that the respect and regard which I entertain for the Profession has arisen from my intimate acquaintance and the many benefits I have received from the hands of that Profession. I may say that I began my acquaintance with the medical profession very early in life—as, indeed, most of you also have—and that the first experience which I gained was in a somewhat rough school. I was eight years old when I had the good or bad fortune to fall into the hands of a certain individual who lived at the village of Whitworth, in Lancashire—a very remote place—presided over by a certain Dr. Jones, who had, it was supposed, conferred the degree of Doctor of Medicine upon himself. He was a man such as I suppose does not exist at the present time. I waited on him every morning at eight o'clock, and it was well to go thus early, because I believe that about eleven o'clock he was in such a state as to be fit only for his bed; but, notwithstanding that his mode of practice was extremely rough with me, and, although I am speaking in the presence of gentlemen who are associated for the purpose of raising the medical profession, and, therefore, of expressing no great sympathy with that style of practitioner, still I think it would not be fair if I did not say that even to those who may be considered the Francs-tireurs, or volunteers, who, in a free, out-of-the-way manner have entered into the medical profession, we may be sometimes indebted—and I for one am greatly indebted, as, but for him, I should not be now here. It is a general notion among the poor that the object of medical men is to give them as much pain as they can, and do them as much harm as they can. Just now the medical profession is receiving great attention, not only in the way of fees, which, it seems, Government are likely to take in hand—and I do not wonder that the members of this association should be very anxious may be left alone—because, it seems, that the scale of remuneration does not meet with the approval of my friend on the left. I hope Mr. Watney will think twice before he engages himself as the champion of those who intend to strike because of the reduced wages the Government are anxious to introduce. The poor often entertain the idea that the doctor is their great enemy. I believe there is no greater mistake that we have to drive out of the heads of the poorer parishioners than this, for my own experience is that the doctor is your best friend. He does all he can for you, and even if he finds it impossible to restore you to perfect health, yet he may place you, as my kind friends have placed me, in such a state of health as to enable you to perform the duties of your position, and do some tolerable service, even though, as I feel, a great deal of the elasticity and the pleasure of life have naturally departed. I have to thank you for receiving me on this occasion as you have done, and I have to express my thanks to your President, to the gentleman who sits on his left (Sir W. Gull), to Mr. Seymour Haden, in London, and others not here present, for the kind attention they have paid me during dangerous illnesses, and which has enabled me to say, from my own knowledge of the medical profession, how much of the happiness and cheerfulness of our lives depends upon the care we receive at their hands."

The above observations are fraught with that kindliness of feeling, that acute judgment and sound common sense, which characterise everything emanating from Dr. Tait.

THE ABERDEEN TOWN COUNCIL AND THE EPIDEMIC HOSPITAL.

An unseemly squabble has been for some time going on between a body of medical gentlemen and the Local Board at Aberdeen. It will be remembered that a week or two since we called attention to a resolution passed at a meeting of the Aberdeen, Banff, and Kincardine branch of the British Medical Association, condemning the present hospital, and expressing their willingness to appoint a committee of their number to confer with the local authority on the subject generally. This resolution, on being sent to the authority, had been received but with little favour, especially that part of the resolution condemning the Mounthooly site; for the answer returned was a demand to know the grounds on which the Medical Association condemned the place. Now the unsuitability of the site and buildings as a permanent hospital has been declared at a public meeting of the inhabitants, the medical faculty in a body protest against it, and the officers for the city refuse to sanction the present building as a permanent epidemic hospital. The real question, however, for the Town Council to consider is this—Are the site and the buildings suitable and sufficient for a permanent epidemic hospital for the city of Aberdeen? This question has been answered in the negative by the professional gentlemen and the inhabit-

ants outside the Town Council. There must, therefore, be grave doubts as to the propriety of doing what the local authority seem determined on doing—viz., getting a certificate from the medical officer, and taking the other necessary and formal steps in order that they may get the Board of Supervision to sanction the present hospital as a permanent one. We have no hesitation in saying that, if this matter is to be brought to a satisfactory issue, the co-operation of medical gentlemen ought to be invited, qualified, as they undoubtedly are, to judge of the requirements as to the site and construction of such a building, and of the necessity for it. In the absence of such consultation and assistance from those best competent to form a correct opinion, the local authority will be acting in a most unwarrantable manner, and will be open to grave censure in the event of untoward consequences.

THE SEAMEN'S HOSPITAL, GREENWICH.

We regret to learn that the House Committee have within the last month removed the control and authority of the medical department from the hands of the Senior Medical Officer, and placed it with the House-Governor, a layman. Surely this is at variance with the usual practice of hospitals, and cannot tend to make the staff feel at ease. Within the last month, indeed, since the introduction of this change, two removals of the junior staff have taken place; and we shall not be surprised to hear of difficulty in supplying their places.

HEALTH OF THE POTTERIES.

Dr. Ballard, of the Local Government Board, last week attended a meeting of the Guardians of the Wolstanton Union to report on the sanitary state of the potteries and district. He said that the matters the Guardians had to deal with were relating to overcrowding in houses, defective ventilation of houses, and things of that kind, matters which the Board had not touched. Many houses were wholly unfit for habitation; the water supply of the district was really frightful, people having actually been killed from drinking water impregnated with poisonous sewage. At Harriseahead he found fifty cases of fever directly traceable to drinking water from a well into which excrement overflowed from a privy drain.

THE LAW RELATING TO BIRTHS AND DEATHS.

Lord Morley has presented to the House of Lords a Bill to amend the law relating to births and deaths in England. It makes compulsory, under a penalty in case of default, the giving notice to a registrar of the birth of every child born alive; and it continues upon the registrar the duty of ascertaining the required particulars and the registration of the birth without fee or reward for the information. Information of the finding of any living newborn child is also to be given to the registrar, and a penalty is provided for cases of neglect.

A NEW CONVALESCENT HOME.

A small home for convalescents in connexion with the Victoria Hospital for Sick Children was opened on Saturday at Albion-villas, Sydenham-park. The establishment of the home is mainly owing to the exertions of Miss Elwes, of Claremont House, Sydenham-park. It is fitted up with six beds at present, but the number will be increased as the necessary means are supplied.

PROFESSORSHIP OF MEDICAL JURISPRUDENCE AT GLASGOW.

Dr. Augustus P. Simpson, late Professor of Medical Jurisprudence in the Andersonian University, has been appointed to the chair of the same department of Medicine in the University of Glasgow, which had become vacant by the resignation of Professor Rainey.

ASSISTANT-SURGEONS IN THE NAVY.

It is announced that the next examination of Assistant-Surgeons of the Royal Navy for the rank of Surgeons will take place at the Royal Naval Hospitals at Haslar and Devonport, on the 16th inst.

POISONED BY ANILINE.

It is stated, on the authority of the *Court Circular*, that Maidment, the jockey, was so poisoned on his skin by the aniline dye of a silk jacket in which he won the Derby, that it was doubtful, at one time, whether he would be able to ride in the Grand Prix of Paris.

FROM ABROAD.—FRENCH SCIENTIFIC ELECTIONS—HÆMORRHOIDS IN PUERPERAL WOMEN.

It is more easy to find fault with our mode of filling up vacancies in our hospital appointments, and electing into our scientific societies, than to suggest any improvements of a radical character. At least, these are suggested easily enough, but are not invested with probabilities of success sufficient to warrant resorting to them. Some of our advanced spirits settle the matter in their offhand way by declaring that the adoption of the French system of *concours* would supply all that is wanting; but we fancy it is beginning to be believed that the competitive examination system, of which this may be said to be a variety, has been already stretched too far, being difficult in discriminating application, and not very satisfactory in some of its results. The *concours*, however well suited through the opportunity for display which it furnishes, and the encouragement it gives to the exhibition of some of the more showy qualities of the Latin mind, is less suited to the more plodding character and less elocutionary powers of the Teutonic race; and for these, as for other reasons, it does not find congenial soil in this country or in Germany. But even in its native land it is by no means the assured and received specific which it is supposed to be, and numerous have been the complaints made from time to time of the unfairness in which it has been conducted, the intrigues it has given rise to, and the unsatisfactory results it has often exhibited. Of course great men have triumphed in its lists; but such would often have made their way to the surface, whatever mode of election had been adopted. Indeed, it has become a very prevalent opinion in France, among even warm admirers of its operation in the choice of the lower grades, that it ought not to be resorted to for filling the higher appointments. For these a man's acquired scientific character and known ability ought to be a better guarantee for his appointment than his possession of rhetorical power and a good memory. It is well known that the bulk of the present Faculty are averse to the re-establishment of the *concours* for admission into its superior ranks and the higher hospital appointments. Even for the lower grades its mode of working frequently gives rise to the greatest discontent, and only the other day M. Desprès published a letter declaring in distinct terms that he threw up his post as one of the jury in the *concours* on account of the gross injustice and partiality he was witness of.

Some of the Academy elections are not much more satisfactory. When vacancies occur, the members of the section in which such happen are invited to present to the Academy a list of candidates arranged according to their scientific merits, and the secret committees at which these are decided upon are often the scene of most stormy debates. For the last election at the Académie de Médecine into the Section of Pathological Anatomy a list was sent up that excited amazement, not to say indignation, in the medical press and the Academy itself. It was headed by M. Bourdon, and then followed the names of MM. Laboulbène, Empis, Lancereaux, Charcot, and Cornil. M. Bourdon is a scientific nonentity;

but as it had been determined to elect him into the Academy on the first opportunity, on account of his position as a hospital physician and his great popularity, his heading the list was almost a matter of course. But the slur cast on so eminent a pathologist as M. Charcot by placing him only fifth on the list, and below men much his juniors and in nowise his superiors, if even his equals, excited general astonishment. The Academy rectified the injustice by placing him next to M. Bourdon, whom, for the above-named reasons, it had determined to elect.

The Académie des Sciences again has had its incident, in the shape of a battle-royal, in which the surgeons and physicians have had a severe hand-to-hand conflict with the physiologists, prolonged over several meetings of secret committees. The Section of Medicine and Surgery consists of six members, physicians and surgeons, these being the only representatives which our Profession has in the whole five Academies which constitute the Institut. If at its foundation Medicine was thought to have its right of representation in this august body, when it was far more of an art and less of a science than it is at the present day, its exclusion or diminution would surely be now absurd and unjust enough. Yet this has been more than once attempted. The men of "pure science," headed by the illustrious zoologist Geoffroy St. Hilaire, on the occasion of the candidature of Dupuytren, demanded the absolute suppression of the section. This attempt drew from Begin one of the most conclusive and eloquent appeals in favour of the rights of Medicine and Surgery (which has been republished by the *Gazette Hebdomadaire*), and proved so convincing that the attempt collapsed, and Dupuytren was elected. Still, the "pure science" members of the section have never heartily coalesced with those of their colleagues who had the hardihood also to seek how best to add to its practical applications; and the death of M. Laugier has given occasion to a new explosion of their discontent. They have, however, become somewhat more moderate in their demands, for they now seek only to reduce the number of physicians and surgeons to four, supplying the places of the two others to be filled by the devotees of experimental physiology. The invaders declared that, there being no Section of Physiology in the Academie, this one of Medicine was the natural place for it to obtain a footing; but it has been replied that the Sections of Anatomy and Zoology have always been, as they are still, more than half filled by physiologists; so that at all times Physiology has been fully represented in the Academy, its connexion, in fact, being much more natural with Anatomy and Zoology than with Medicine and Surgery. However, the physiologists have not been satisfied with this position, and have, under the leadership of Professor Claude Bernard, sought to bring Professor Marey in as the representative of Experimental Physiology. M. Bernard's action on the occasion may have seemed natural enough, entertaining the views he does of the comparative scientific insignificance of Medicine and Surgery. But the circumstance that has excited most surprise is that of M. Andral emerging from his seclusion and making this rarest of visits to the Academy an occasion for backing up M. Marey's claims, to the detriment of those of the practical surgeons. One would have thought that if ever pathology and practical and clinical Medicine stood in need of a defender it would surely have found such in Andral. The struggle has been a severe one, and continued over more than one meeting; but common sense and justice have triumphed, powerfully aided by the talent and good sense of Baron Larrey, and notwithstanding the persistent efforts of MM. Claude Bernard and Leverrier. The list now sent up and voted by the Académie is headed by the name of Sédillot, the well-known Strasburg Surgeon. The second set of names consists also of Surgeons—viz., MM. Gosselin, Jules Guérin, Huguier, and Richet; the physiologists, MM. Marey and Vulpian, are relegated to the third line, together with MM. Sappey and Piorry.

We transcribe from the *Boston Journal* the principal points of an interesting paper by Dr. Fordyce Barker, "On the Treatment of Hæmorrhoids in Pregnant and Puerperal Women."

As the pressure exerted by the gravid uterus upon the rectum, retarding the return of blood from the hæmorrhoidal plexus of veins to the inferior mesenterics, exists in every pregnant woman, some other agent must also contribute to the production of hæmorrhoids in those women in whom they occur. This may be either constipation or diarrhœa. In constipation there is probably the same atony of the coats of the hæmorrhoidal veins as exists in the muscular coat of the rectum, and the pressure of accumulated fæcal matter contributes to make these veins varicose, and, if long continued, to develope hæmorrhoidal tumours. The effect of a purgative is to stimulate an abnormal peristaltic action in directly an opposite direction to the returning blood. Some who are subject to piles are never constipated, but have habitually a loose, relaxed condition of bowels, the same atony of the venous coats resulting from the irritation and exhaustion of diarrhœa as exists in constipation. If the hæmorrhoidal veins have become varicose during the latter periods of gestation, the tumours may be developed by the long pressure of the fœtal head on the rectum during labour. The hæmorrhoidal veins sometimes swell enormously at this period, as they are probably weakened by the distension they have suffered during labour, and they regain the power of contracting with great difficulty. In many patients the hæmorrhoids are first developed by the action of the purgative given two or three days after confinement.

The indications in treating hæmorrhoids are to counteract the constipation or diarrhœa, and to stimulate and restore the tonicity of the hæmorrhoidal veins; and, for effecting this combined purpose, Dr. Barker believes that aloes is the remedy most to be relied upon. He has now for many years past constantly made use of it, with the best results, in treating the hæmorrhoids of pregnancy, whether these had been the result of constipation or diarrhœa. He prescribes a combination with other agents according to the exigencies of the case, and in such doses as, from observation of the individual, he finds necessary to secure one easy, free, daily evacuation of the rectum. Some require a grain morning and evening, while for others half this suffices. In the anæmic it is combined with sulphate of iron; and, during the last two weeks of gestation, belladonna is always combined with it. The following formula has frequently been employed:—Pulv. aloes soc., sapo. cast., āā ℈j., ext. hyoscy. ℥ss., pulv. ipecac. gr.v. This is made into twenty silvered pills, of which one is taken morning and evening. When there is anæmia a scruple of sulphate of iron is added. About ten days or a fortnight before the expected labour, from ten to twenty grains of extract of belladonna are substituted for the hyoscyamus. When there is an irritable rectum, with frequent small, teasing, thin evacuations, opium should be substituted for hyoscyamus, and a less quantity of aloes given, as in this formula:—Pulv. aloes, ext. opii aquos, sapo. cast., āā gr.x., in pil. xx.

When large hæmorrhoidal tumours present themselves during labour, Dr. Barker treats them by forcible dilatation. After the delivery of the child, and before the removal of the placenta, the patient being fully under chloroform, he pushes back the tumours within the sphincter, if this can be done readily. If it cannot he leaves them there, and introducing both thumbs, back to back, well into the sphincter, he opens them as wide as possible, and draws them through the sphincter. During this time firm pressure on the uterus is made by an assistant; and in several instances the operation has been followed by sudden expulsion of the vagina. The following ointment is directed to be applied twice a day to the tumours and well up into the rectum:—Ung. gallæ c. ℥i., ext. opii aq. ℈., sol. ferri persulph. ℥j. The tumours gradually disappear, and the patients suffer very little from the operation.

When hæmorrhoids come on after labour, they give rise generally to much more suffering than during pregnancy. They are often induced by the action of a purgative, and Dr. Barker became convinced long since that castor oil, wherever there is any tendency to piles, is one of the worst agents that can be used. To those who have hæmorrhoids, or are predisposed to them, he prescribes—Magnes. sulph., magnes. carbon., pot. supertart., sulph. sublim., āā, one, two, or three teaspoonfuls in the morning fasting. This produces a soft evacuation without pain, even when the hæmorrhoids are inflamed; and by procuring a daily evacuation, and using the ointment before named, the hæmorrhoids of puerperal women are soon removed.

PARLIAMENTARY.—ROYAL MILITARY HOSPITAL, DUBLIN—WATER SUPPLY OF BERMONDSEY—THE PUBLIC HEALTH BILL—VENTILATION OF COAL MINES.

In the House of Commons, on Thursday, June 27,

In answer to Mr. M. Henry, who asked whether the attention of the Secretary for War had been called to the conviction of Charles Hammond and William Bailey, two of the attendants of the lunatic wards of the Royal Military Hospital, Dublin, of the manslaughter of a patient under shocking circumstances,

Mr. Cardwell said: The attention of the authorities has been drawn to this unhappy case, which occurred in the lunatic ward of the Military Hospital at Dublin. The two Staff Surgeons in immediate charge of the Hospital and of the lunatic ward, and the non-commissioned officers concerned, will be removed, and his Royal Highness the Field-Marshal Commanding-in-Chief has called upon the General Officer Commanding in Ireland to place the establishment on a better footing in respect of supervision and discipline. The ward is a place of observation for a short time, and confirmed lunatics are removed. The remedy, therefore, which the question suggests is not the one suited to the case.

Questions were put by Mr. Kay-Shuttleworth to the President of the Board of Trade, and to the President of the Local Government Board, in reference to the defective water-supply at Bermondsey.

Mr. Kay-Shuttleworth gave notice that on the motion for going into Committee on the Public Health Bill he should ask the President of the Local Government Board whether he proposed to ask Parliament for any further powers enabling the Local Government Board to deal with the question of the use of water from surface wells or other dangerous sources during a dearth of water-supply.

On the motion of Mr. Stansfeld, the Public Health Bill was committed *pro formâ* in order to be reprinted with the omission of some clauses and the amendment of others, the amendments being based on suggestions which had been made in the House and by deputations to the Local Government Board.

On Friday,

In answer to Mr. Rylands, who asked whether it was the intention of the Government to proceed with the Public Health Bill during the present session,

Mr. Stansfeld said it certainly was the intention of the Government to proceed with the Bill. His hon. friend and the House were aware that he committed the Bill *pro formâ* last night, with the view of moving certain amendments and omitting certain clauses. However unwillingly, he had been obliged to come to the conclusion, considering the advanced period of the session and the pressure of public business, that it had become necessary, in the interest of the Bill itself, to do what was sometimes called "throwing part of the cargo overboard." He had considered what sacrifices it would be requisite to make in order to insure the passing of a measure which it would be worth the while of Parliament to pass. Last year, he might remind the House, they consolidated certain departments of the Local Board. Most members were aware that the Bill upon the table might be divided into three parts—the first part organising local sanitary authorities; the second, which was the body of the Bill, giving new powers to those authorities, and imposing new duties upon them; and the third part containing a number of miscellaneous clauses, some important, some merely conferring facilities for procedure upon the local authorities. The best course to take appeared to be this—to rest satisfied for the present with the consolidation and concentration of the local authorities, and to withdraw the clauses with reference to nuisances, hospitals, rivers, and other matters, thus making it a Bill for constituting the new sanitary authorities and giving them some facilities.

Mr. Corrance asked the right hon. gentleman whether he could name a day for bringing on the Bill.

Mr. Stansfeld said it was impossible at this moment to name a day until the Mines Bill had been disposed of.

In answer to Mr. Kay-Shuttleworth, Mr. Chichester Fortescue said that the real cause of the deficient water-supply in Bermondsey was the insufficient storage of water in the Company's works.

On Monday,

Lord R. Montagu asked the First Lord when the Public Health Bill would be in the hands of members, remarking that all the useful clauses had been cut out of the Bill and only the objectionable ones left.

Mr. Gladstone could not give the noble lord the information he desired, but probably, if all the good clauses were expunged, and all the bad ones were left, the later the Bill came into the hands of the noble lord the better.

On Tuesday the House of Commons went into Committee on the Coal Mines Regulation Bill. An amendment, which would virtually have annulled Clause 48 of the Bill, which provides for the ventilation of the mines, was negatived by 298 to 20.

THE HUNTERIAN MUSEUM.

One of the most interesting features in connexion with the annual election of Fellows into the Council of the Royal College of Surgeons, is the exhibition of additions about to be made to the Museum, and which have accrued since the last meeting. Professor Flower, the Conservator, states in his report that in the pathological collection eighty-eight additions have been made, against sixty-two during the past year, and that the microscopical characters of all recent specimens sent to the College, and thought worthy of preservation, had been carefully described and delineated by Mr. Goodhart, the Pathological Assistant, on whose great zeal a well-deserved eulogium is expressed.

Although but very little has been expended in the purchase of osteological specimens, the additions are of considerable importance. Amongst those specially mentioned is the skeleton of an extremely rare whale, the *Berardius Arnuxii*, purchased for the Museum by Professor Wilson, F.R.S. The series illustrating the structural peculiarities of the human race has received two very valuable additions in skeletons of both sexes of the extinct aboriginals of Tasmania, presented by Mr. M. Allport, of Hobart Town. Both have been articulated. The male is in exceedingly good preservation; that of the female is unfortunately less complete, but still presents many interesting features.

The liberality with which the Smithsonian Institution of Washington is conducted has been shown by various important additions to the Museum in former years, but especially during the present, in a series of skulls and skeletons of North American mammals, several of which were new to the collection. The College has reciprocated this liberality by presenting a set of casts of the interior of crania of various races of men and animals, and some duplicates.

Another important addition is the skeleton of an adult male Porbeagle shark, about eight feet long. This is valuable, from the great difficulties which have usually attended the attempts made to preserve the osseous system of cartilaginous fish. These difficulties have been overcome by the great skill of Mr. James Flower, the experienced articulator to the College. This will be found a very instructive specimen to students.

In the dermatological collection Mr. Erasmus Wilson still shows the deep interest he takes in it by presenting twenty-five beautifully executed models; and M. Voillemier, Surgeon to the Hôtel-Dieu, Paris, has presented two, representing elephantiasis of the scrotum, with its cure resulting from operation.

Amongst the contributors are Professors Gervais, of Paris, and Peters, of Berlin; Sir William Fergusson, who gives a great number of preparations; Sir James Paget, Messrs. Hilton, Holden, Busk, Clark, Gay, Curling, Wilson, Jackson, the Zoological Society, and the Smithsonian Institution. Mr. Kiernan, a late member of the Council, has presented the whole of his collection.

During the day of election the theatre, where these additions are displayed, was visited by a large number of the Fellows. It will remain open for the inspection of the members and their friends for a few days longer.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

No. XIX.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

THE MEDICAL SOCIETIES THIRTY YEARS SINCE.

Establishment and Progress of the Royal Medical and Chirurgical Society; its opposition to Reporters; Sir B. Brodie as its President—Causes of the Establishment of the Pathological, Obstetrical, and Clinical Societies—Importance of the Unity of Medicine—Specialism: Repudiation of it by the Great Surgeons of former days; its Evils to the Public and the Profession.

Sir Henry Holland, in his "Recollections," speaks of "the multiplication of societies and institutions of every kind, dividing and subdividing all the concerns of human life." There can be no doubt that many advantages have flowed from this source, but it is equally clear that disadvantages of a grave character have also been the result. In looking back at the state of the Profession, so far as the medical societies are concerned, the changes have been of a curious kind, and occasionally appear to have been caused by antagonistic forces. This will be clear, I think, to those who favour me with the perusal of this article. When I commenced reporting the societies in the *Lancet* (1834) there were three only that were considered of importance sufficient to be reported. These were the Medico-Chirurgical Society, the Medical Society, and the Westminster Medical Society. The first of these then held its meetings in Berners-street, as now, but they had only recently removed from their chambers in Lincoln's-inn-fields, where they had been located since their formation in 1809. The Society was an offshoot of the Medical Society, and the consequence of a quarrel. The late Dr. Yellowby was the most active of its founders. Early in its career the Society determined on publishing their *Transactions*, and it must be admitted that the volumes issued have been and are of great value and importance. But the earlier volumes are characteristic of the Society at the period they were published, and the later ones are characteristic of it at the present day.

The meetings, from 1809 until just before the Society was removed to Berners-street, were attended by very few of the Fellows—eight, ten, or a dozen only were present; but they were the prominent members of the Profession, and contributed "cases" rather than "papers"—short, clear, and not borne down with a weight of "learning," as at the present day. It is refreshing to turn back to the earlier volumes of the *Transactions*, to observe their simplicity in the narration of cases, and their thoroughly practical character: we have no speculative theories, no arguing, no repetition. But now, when a "case" is contributed to the *Transactions*, the author is not content with its narration and a few apposite comments, but he ransacks the literature of the Profession, even to ancient times, to discover and embody in his paper every case that bears anything like a similarity to his own. The tediousness of this is not all; the details of the cases are often painfully minute, and the daily or hourly progress of the patient not only unnecessary, but wearisome. And then when the contributions come to be published, the volume of *Transactions* is swollen out with a mass of information, all very well in its way, but, I beg leave to say, quite out of place. The lengthened papers, the elaborate tables, would surely be better published as monographs by their different authors. If papers and cases which were presented had been of moderate proportions, there would have been less ill-feeling engendered, less jealousy with respect to the selection of papers made for publication, and—what is of some importance—less reason for the multiplication of societies which of late has taken place.

The Society for many years entirely discountenanced anything like discussion of a formal kind, and if an observation were now and then made it was of the briefest possible length. When the *Lancet* was established there was a great desire on the part of the editor to report the proceedings of this Society, but any attempt to do so was strenuously opposed by the Council. Occasionally, however, a report did appear, to the astonishment and dismay of the Society; the Fellows of which, on assembling at the following meeting, would look anxiously around to see if they could detect the "traitor," who must have been one amongst the dozen then assembled. It would have surprised some of them if they could have known the truth, but the truth even now I do not feel justified in stating. The service rendered was one of the strictest confidence, and the name of the "offender" is known to less than half a dozen persons now living. Eventually, however, but not till about 1836—thirteen years after the establishment of the *Lancet*—a modified permission to report was granted by the Council. This, too, had been effected only after great perseverance and difficulty, and at first was so much hampered and interfered with as to discourage and annoy the reporter. In the first place, the "abstracts," which at that time were almost worthless from their extreme brevity, were sent regularly to the old *Medical Gazette*, and retained by them sometimes till too late for us to publish the same week as our then contemporary. Things at last arrived at a climax, and I insisted upon knowing who sent the abstracts to the *Medical Gazette*, inasmuch as it was an infringement of the regulations of the Council, which granted permission for any reporter to copy the abstracts which should be found in the library. Mr. Williams, the sub-librarian, declined to give me the information, but, on my explaining to him that I had a right to know, referred me to one of the honorary secretaries who "managed the business." This was Wednesday morning; we went to press on the Thursday evening, and as I had an important discussion to report I was extremely anxious to obtain the abstract in time. Accordingly, I immediately went to the honorary secretary alluded to, and requested him to furnish me with a copy of the abstract I required. He treated me at first somewhat off-hand, if not rudely, and declined to accede to my request. However, after a few sharp "passes," I said, "Now, sir, I know you send the abstracts regularly to the *Medical Gazette*, and I am determined to have the privilege of being allowed to copy the abstracts in the library. If this is refused me I know my remedy." Eventually we parted good friends, have been on terms of intimacy ever since, and I never afterwards had any difficulty in obtaining the abstracts in time. It is necessary here to explain that reporters were not on any occasion to take notes of the cases or papers read for publication. The curious ground taken by the opponents to an ample and fair report, was that such publication would interfere with the sale of the *Transactions*. On one or two occasions I ventured to disobey the mandates of the Council, and reported the case and discussion pretty fully—the first time of my doing so being the case of Mr. Brunel, brought before the Society by Sir B. Brodie. On this occasion the meeting was very crowded, and, as such general interest was excited by the case, I took full notes of the whole proceedings, and published a long report in the ensuing number of the *Lancet*. I was not called upon to answer for my "misdemeanour," which was tacitly overlooked, and in private commended by the illustrious author of the paper himself. Speaking of Sir B. Brodie, I may digress for a moment by saying that reporting was never fully developed in the Society until he was president. He seemed to be the first of the presidents who had the courage and ability to foster discussion and commend reporting. The most interesting sessions of the Society in any time were those during which Sir Benjamin was the president. He stimulated the Fellows to speak, and, if he found that discussion was flagging or altogether avoided, he would himself continue, or open the debate, in speeches always practical, always sensible, suggestive, and interesting. What a mass of information has been preserved to the Profession in the reports which I had the honour and privilege of making, and which are the only records extant of the sayings of some of the foremost men of twenty or thirty years ago. Some few years since it became evident to the most superficial observer that the Medico-Chirurgical Society could not much longer continue in its present state. There was much dissatisfaction expressed at the results of the elections, or, rather, as to the vicious mode which had been long followed in "breeding," as it were, "in-and-in," so that the same name might be seen on the list for years as the holder of one office or another. Then the almost entire exclusion of Surgeons in general practice from the list of office-bearers had given great offence to that important class of the Profession. The Society had retained its traditionary views regarding the "apothecaries," and had apparently forgotten that the "apothecary" of 1840 was a different man altogether to the apothecary of 1809. Still the Society would not go with the times, but limited the admission to office to *one* "general practitioner." This, in my belief, was a fatal error; for, though it might have suited in 1809 to "throw a sop" to one of the "top apothe-

earies"—men then generally uneducated and the "mere waiters on the Physician"—it was an insult to maintain that limit at a time when Surgeons in general practice were as well educated in most respects as the so-called "upper grade." Another source of complaint of a serious character was the mode in which the selection of papers for publication was carried on, or, more properly speaking, of the selection itself. No doubt there was some ground for this complaint; but the Council determined on a step which made the selection still more invidious, and the discontent more general and intense. This was the publication occasionally of what were called "Proceedings," and consisted in the printing and circulating amongst the Fellows abstracts (shorter or longer) of all the papers and cases read before the Society which were excluded from the *Transactions*. Nothing could have been more unfortunate than the results of this proceeding. Moreover, the attempt of some of the more energetic of the Fellows to introduce pathological specimens of cases for the purpose of discussion were not cordially received by the Council. Beyond all this, the office of President was held for two years. There were Fellows of the Society—young, rising, ambitious men—who could not see any probability of their living long enough to occupy the "woolsack."

These were amongst some of the more prominent causes which tended to the establishment of the Pathological Society,—a most useful institution, unquestionably, and one that has rendered good service to the Profession, but which would have been still more useful had it remained a part of the Medico-Chirurgical Society. I shall explain why in the course of this paper. From, to some extent, similar causes as those mentioned above, the Obstetrical and Clinical Societies owed their foundation. Without attempting for a moment to depreciate the importance and value of these Societies, I think it will be admitted, by most of those who have watched the progress of events, that it would have been far better for the Profession, and for the public too, if the new Societies had not been established. Whatever may be the advantages of the division of labour—and these are many—I contend that whatever conduces to the union of Medicine has far more advantages. With respect to the Profession itself this, I think, is undeniable; but, with regard to the public, this consideration has vastly more weight. The confidence of the general community in Medicine has been sadly and irretrievably shaken by what is called "specialism"—a term most objectionable in itself, and in its results beyond all calculation mischievous. Let me, for instance, take two cases in which it may be admitted. If "specialism" is ever justifiable in practice, it is with respect to the eye and deformities of the limbs and body. Well, who were the great pioneers of practice in diseases of the eye in the last generation? Certainly, I should say, Lawrence, Tyrrell, and Wardrop. But would not these great Surgeons have repudiated the title of "oculists"? I know they would, and with great reason. No men were ever more anxious to support and act on the principle of "unity" than these justly eminent Surgeons. Their monographs on "Diseases of the Eye" are still books of reference; but Lawrence prided himself more on his admirable work on "Hernia," Tyrrell on his operative skill and general proficiency, Wardrop on his operation for the treatment of aneurism by ligature on the distal portion of the artery, and his most ingenious and able work on "Diseases of the Heart," far more than for all they had written on eye diseases. Take the second. The two men who have done more for orthopædic Surgery than all other Practitioners of our time are Stromeyer on the Continent, and Little in our country. But these men would repudiate the title of "specialists." To them the practice of orthopædy was but "a halt," as it were, "on the road-side," not the "journey of life." But their enlarged views with respect to practice, their profound knowledge of the human frame in all its aspects, make them far better Practitioners than those who devote themselves merely to the study and treatment of crooked spines and deformed legs. The proposition holds equally good with respect to other specialities. Is it to be assumed that the "skin-doctor," who advertises daily the number of "cures" at his so-called "Hospital" or "Dispensary," is a better Physician for skin diseases than he who takes a broad view of the disease—who, in fact, treats his patient on general principles, and regards the eruption on the surface as a mere "symptom"? We think not. With regard to other specialities of a minor kind, one really has hardly patience to discuss them. But look at the effect of these "special" Hospitals and Dispensaries on the larger general Hospitals. They not only divert funds that might be more usefully and profitably employed, but they intercept from the general Hospitals cases which, under different circumstances, would form the material of clinical instruction to the rising race of Practitioners. It is gratifying to observe that the evil to some extent has met with a check by the appointment of Practitioners to lecture on what are called "special" diseases in our general Hospitals. This is the more to be rejoiced at, because eventually, there can be no doubt, this step will stop the progress of private enterprise in the formation of special Hospitals and Dispensaries; for it is well known that, however grand or "universal" may be the title of these institutions, they are usually the private property, and have been established for the private gain, of their founders.

I hope to be pardoned for this somewhat lengthy digression from the subject of my paper, but it has a direct bearing upon it, and may not be without its use in carrying out my argument.

Well, then, I say if the various societies which of late years have sprung up had been allied with the Royal Medical and Surgical Society, so as to form, as it were, a Royal Academy of Medicine, the cause and honour of the Profession, as well as the interests of the public, would have been enhanced, instead of, as they are under present circumstances, injured. That this view is entertained by the more distinguished members of the various societies is proved by the efforts that were some time since made to effect an "amalgamation" of the various Medical bodies. I fully believe that the "inexorable logic of facts" will eventually result in this amalgamation. Whatever tends to the unity of Medicine, to the reprobation of the unwarrantable pretensions of mere "specialists," cannot fail to be of advantage to the public and to that large portion of our Profession who form "the rank and file" of the Practitioners of Medicine.

In my next article I shall give some "Random Recollections" of the other Medical societies with which in early life I was associated.

DISTRIBUTION OF PRIZES AT ST. THOMAS'S HOSPITAL.

On Thursday, June 27, his Grace the Lord Archbishop of Canterbury distributed prizes to those students of St. Thomas's Hospital who had succeeded in gaining the highest number of marks in their respective years at the competitive examinations during the past academical session. The names of the prizemen were published in our last week's issue. The Archbishop appeared gratified with the enthusiastic reception accorded to him. In his address his Grace acknowledged with emphatic earnestness his personal indebtedness to the medical profession for his restoration to health after a protracted and serious illness. The Archbishop then alluded to the various links which bind the clerical and medical professions in their capacities as ministering to the sick and the suffering around us. The consolations of the gospel and the skilfully devised remedial measures should be judiciously interwoven and blended to the comfort, succour, and perhaps restoration of those in need of such divinely appointed help. The apostles, following in the footsteps of their Lord and Master, "went about doing good," and "healing all manner of diseases among the people."

The Archbishop reminded the company of a fact not by any means generally known, and one that most of those present were probably unaware of, to the effect that the power of conferring degrees upon those gentlemen qualified to receive the same had descended to his Grace from a remote antiquity. Previous to the Reformation this power was exercised by the Pope, but a statute was passed after the Reformation entitling the Archbishop of Canterbury to that prescriptive right. A more recent Act of Parliament, however, deprives gentlemen thus qualified from making use of such titles to practise their Profession.

The Archbishop concluded his address by urging the ladies and gentlemen present to assist as far as they were able in promoting the social and moral welfare of the medical students. By far the larger majority of these young men, having left their quiet homes in the country, were deprived of parental care and supervision. Exposed to all the temptations and frivolities of a London life, at a time when, from their ignorance of the world and the plianey of youth, they were least able to resist the subtle influences around them. With the view of providing some healthful recreation for the students

away from all contaminating influences, the Archbishop has most liberally offered free access for the students to the grounds of Lambeth Palace, where there is ample room for cricket football, and athletics.

PROFESSOR HOLMES'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

In his fourth lecture, continuing his remarks upon the treatment of thoracic aneurisms by galvano-puncture, Professor Holmes observed that, considering how many of the aneurisms of the thoracic aorta are sacculated and in many cases do not show any tendency to ulcerate into the neighbouring viscera, he sees no reason to doubt that in some hitherto undetermined proportion of aneurisms of the thoracic aorta a radical cure by rapid coagulation of blood by galvano-puncture is possible. It must be remembered, however, that the clot formed by electrolysis is much softer and less stable even than the natural blood coagulum, being mingled with much gas, formed by the decomposition. It requires, therefore, some amount of circulation in order to consolidate it, and it is more to be regarded as a nucleus for future coagulation than as itself the obliterating medium.

An aneurism is best adapted for electro-puncture when it is pressing upon the parietes but has not absolutely perforated them. In those aneurisms (as one shown from St. Thomas's Hospital museum) which consist of two portions, one lying within the thorax and communicating with another great sac external to the bony walls of the chest, the consolidation even of the whole external sac would not tend in any perceptible degree to check the progress of the internal aneurism, while the absence of any considerable current through the sac is unfavourable to the production of solid coagulum even in the external partition itself.

Signor Ciniselli has tabulated the cases in which this treatment has been used, and he has indicated the favourable and unfavourable signs for its employment.

It would seem that there is usually a distinct bruit in those cases of thoracic aneurism in which the method by electro-puncture gives the best results, and this is a favourable symptom for the proposal. It is not, however, an absolutely necessary one, since, on the one hand, an aneurismal bruit may be absent even in aneurisms which are sacculated and communicate with the aorta by a moderately small opening; while, on the other hand, the possibility of spontaneous cure being admitted in tubular aneurisms, such as the one marked 1641 in the Museum of the College, the possibility of the cure by galvano-puncture can hardly be denied.

In innominate aneurism, whether limited to that artery or extending downwards into the arch of the aorta, supposing that the method discussed in a previous lecture should be contraindicated, or should have been tried and failed, the Surgeon would be more than justified in endeavoring to consolidate the contents of the sac by galvanism.

Signor Ciniselli's table contains the record of all published cases down to the period stated—about two years ago. This table is worthy of study, for it shows that the treatment has already been less hopeless than is generally supposed; since, out of the twelve cases in the later portion of the table, five of them were considerably benefited by the treatment. Though it is not claimed that a complete cure was established in either of the cases, the patient has surely a better chance of the natural or Medical cure than if the tumour had progressed unchecked; and even allowing that the disease will certainly burst out again, it is fair to ask the question whether the respite is obtained at too great a risk or no. If not, the same considerations as justify the amputation of a limb, or a testicle, or a breast for cancer, will justify this operation also; and all the more since the disease threatens to end life more speedily.

The dangers attending this treatment arise from two causes—the inflammatory reaction produced in the sac and the cellular tissue which surrounds it, and the gangrene or ulceration of the skin at the points of entrance of the needles. Inflammation of the sac and cellular tissue may be produced possibly by the electric action itself, or by the rapid formation of soft coagula in the sac. In order to obviate the decomposing action of the electric current, various plans have been suggested. The best is to coat the needle with some non-conducting material which does not soften at the temperature of the blood, so as to leave uncovered only the part which is free in the sac. Dr. Duncan's method is this, and he employs vulcanite as the non-conducting medium. Ciniselli believes that the previous application for about five minutes of the positive pole to each needle, and the negative to the tissues in which the needle is embedded, will isolate the needle sufficiently to obviate both the inflammation of the sac and the cauterisation of the tracks of the needles.

The pain produced by this operation has been very variable in the cases which Professor Holmes has witnessed, and he is of opinion that if the patient has suffered much in a previous application, or if he is very apprehensive, general anæsthesia may be used without any inconvenience; and anæsthesia, in fact, is very desirable in order to avoid disturbed action of the heart during and after the process.

The best answer to the question whether the method may be used in order to avert the danger of the imminent rupture of the tumour, and so to postpone death, if not to cure the disease, is furnished by a case under the care of Dr. Duncan, of Edinburgh, in which nodules were growing out from a large aneurism of the aorta, and one of them was red, and bore upon its summit a dark blue circle as large as a crown piece, partly denuded of epithelium, and apparently gangrenous. In this case the rupture of the aneurism was twice averted, and death twice postponed, by the galvano-puncture; furthermore, the external tumour diminished in size and pulsation, although the patient ultimately died from hæmorrhage and erysipelas, which followed upon an attempt to produce coagulation in the intra-thoracic portion, which was growing.

The result of present experience of galvanism in intra-thoracic aneurism is to show us that the method may often avert death when imminent from the rupture of the sac, and that with that view alone it is deserving of further trial; that it may in exceptional cases produce a temporary or even a permanent cure, the Professor himself feels satisfied. He quoted from a private letter from Signor Ciniselli the following observations:—"We must not exaggerate the value of this method. The circumstances which are favourable to a perfect success occur very rarely in practice. In the majority of cases which present themselves the disease is in too advaneed a condition, and should not be operated upon, because the operation will be useless, and perhaps mischievous. In the cases where the most favourable conditions exist it may be possible to obtain consolidation, and the cure of an idiopathic aneurism; but as the cause which produced the aneurism—viz., an atheromatous condition of arteries—still exists, as this increases it causes a recurrence in another part of the vessel. But, admitting this, as we are treating of a malady for which, up to the present time, no surer remedy has been discovered, I submit that it is a considerable step in the treatment of internal aneurisms to have discovered a method which, employed according to the rules sanctioned by experience, proves innocent, procures a cure (even if temporary), alleviates the patient's suffering, and prolongs life."

After aequiescing in this sober but encouraging view of Ciniselli, and reading some brief notes of three cases in which he had had personal experience of the galvanism treatment, Mr. Holmes passed on to subclavian aneurism, under which term he includes cases in which the innominate above is not involved, and in which the aneurismal dilatation commences somewhere above the clavicle.

Aneurisms of the subclavian artery have proved hardly less difficult to treat than innominate aneurisms, nor is the cause doubtful. The Hunterian operation is the only treatment which as yet has been tried at all extensively, and its results have been disastrous. Galvano-puncture has afforded one undoubted success; Mr. Poland gives a case which recovered under the use of compression applied to the subclavian above the tumour; and recovery has occurred in a case where direct pressure was employed.

In scattered cases, in which measures such as refrigeration or the application of escharotics or irritants to the integuments have been followed by recovery, it is *probable* that recovery was spontaneous. Allusion was made to the elaborate researches of Koch and Poland, which leave but little to be done more than to direct attention to them, and arrive at the results to which present experience seems to conduct. It was pointed out that subclavian aneurisms are usually tubular, and are generally symptomatic of extensive arterial degeneration, which greatly increases the risk of hæmorrhage upon the separation of the ligature, as in this diseased state of the vessel the blood is peculiarly prone to find a channel between the clot and the wall of the artery.

When the disease of the vessel extends upwards to the outer border of the scalenus anticus, and the application of the Hunterian ligature to this part is thereby impossible, the operator—in spite of the objections which have been advanced against this course—should seek for the second part, and put his ligature upon it, tying at the same time any branch which may be given off from it.

In all cases, however, there must be great danger in performing any such operation when the sac extends above the clavicle. There is not merely the danger of finding a diseased and dilated artery, but also the risk of wounding the sac, or of so contusing it that it may burst or suppurate; besides all the great operative difficulties connected with the operation when the clavicle is elevated by a large tumour; and besides, too, the risk of imperfect coagulation and consequent suppuration in the sac.

When the aneurism is seated higher up, the choice of an operation on its proximal side becomes still more embarrassing. Here we must distinguish between the two sides. The old doctrine that the first part of the left subclavian is inaccessible, has been shown to be erroneous; still, though the operation is not impracticable, it is so difficult, and involves such certainty of formidable anatomical lesions, that it should only be practised as an alternative to otherwise certain death.

With present experience, galvano-puncture seems to offer more prospect of cure, or at least of prolonged life.

Is the matter different on the right side? This will depend upon the answer which experience will give as to the possibility of ligaturing a vessel with certainty of securing the rapid union of the deep parts of the wound and of not dividing the external coat. If the good effect of catgut for these purposes should prove to be only exceptional, and if the results of acupressure or temporary deligation should also disappoint us, we shall be driven in this case also to resort to galvano-puncture or manipulation in such cases as are not amenable to pressure; unless we are to adopt Sir W. Fergusson's suggestion of amputation at the shoulder-joint.

If compression could be applied effectually on the proximal side of the tumour, in the same way as compression is applied to other deep-seated arteries, instrumentally or digitally, with chloroform or without chloroform, combined with distal pressure or no, doubtless a great point would be gained in the treatment of this formidable malady; and that this may be successfully done is proved by a case under the care of Mr. Poland. A case under the care of Mr. Barnold Holt shows how much more amenable to compression such arteries as the subclavian have become since we have been familiar with protracted anæsthesia. Other cases were referred to, recorded by Mr. Gay and Mr. Poland, which show the feasibility of compression in aneurisms of the usual subclavio-axillary variety. The mechanical difficulties of directing and steadying the pressure will be found great, no doubt, but not more so than the ingenuity of our mechanists may be trusted to overcome.

In considering the question whether pressure can be exercised with effect upon the first part of the subclavian artery, the Professor is of opinion that in some exceptional cases (such as one recorded by Mr. O'Reilly), in which pressure with the finger or a pad commands the circulation, it would be justifiable to give chloroform, and make an attempt to cure the aneurism by rapid pressure.

With respect to direct compression of the tumour, there is much difficulty in effecting this satisfactorily, and the published cases are by no means decisive of its advantages, though in some cure is claimed. As to distal pressure, further experience is required.

A Seasonable Suggestion.—Mr. George Sampson Elliston, a surgeon at Ipswich, in giving his evidence at an inquest in that town last week on the body of a youth who had been accidentally drowned in the river Orwell, said—"There are so many valuable rules and suggestions in the printed regulations issued by the Royal National Lifeboat Institution—instructions for restoring the apparently drowned—that he thought they ought to be more generally distributed and known along the banks of the river."

Presentation to a Surgeon.—Mr. H. S. Leverton was presented, on Friday last, by the members of the "Temple of Peace" Lodge of Oddfellows, of Truro, with a handsome silver centrepiece, together with an address engrossed on vellum signed by the members of the lodge living in the town and neighbourhood, in "recognition of Brother Leverton's unwearied kindness and attention to the members of the lodge as their surgeon for the long period of twenty-one years."

REVIEWS.

A Manual of Chemical Physiology; including its Points of Contact with Pathology. By J. L. W. Thudichum, M.D. London: Longmans. Pp. 195.

In his preface the author says—"The first part of this little treatise was written and printed as the introduction to my 'Researches intended to promote an Improved Chemical Identification of Diseases,' which have been published in several numbers of the 'Annual Report of the Medical Officer of the Privy Council.' It has been found so useful in my experience as a teacher, that I have, with the permission of Mr. Simon, ventured to reproduce it in the present form. It is a complete but concise epitome of the branch of science commonly termed 'physiological or animal chemistry,' and will be found to contain its latest acquisitions."

With our intellectual appetite pleasantly whetted by this modest little flourish of trumpets—knowing well, too, how much some such manual was wanted—we sat ourselves down to the pleasing task of making ourselves masters of the cream of the book. But, as we read, lo! it struck us, "Have we not seen something like this before?" and, turning to the familiar Kühne, we found this new manual in many parts very closely following the German author. The three varieties of the saliva—the chordal, sympathetic, and the paralytic—are the same. Yea, he follows Kühne in the perilous assertion that one variety (called by Dr. Thudichum ganglionic) is produced by reflex irritation through the submaxillary ganglion without any communication with the brain. This Kühne speaks of, and later research has gone to show that Kühne was wrong, though the question is not yet settled; but doubt on the subject our author has none. We cannot, indeed, say the work is altogether an abstract of Kühne, for that would, if well done, be welcome and highly serviceable, though not perhaps worthy of a place in the Reports of the Medical Officer to the Privy Council. Unfortunately, where Kühne is abandoned, we have something which seems to us of more than questionable authority.

But to the contents of the volume itself. On the second page we are told that the "chordal" saliva—saliva that is secreted by the submaxillary gland under the influence of stimulus to the chorda tympani—contains 4 per cent. of solid matter. This made us open our eyes; but on investigation we found the numbers carefully taken from Bidder and Schmidt, as quoted by Kühne, only it should have been 4 per 1000 instead of 4 per cent. We pass by a doubtful statement as to "ganglionic" saliva, and we find that by implication we are to believe that there is no ptyalin in submaxillary saliva, for it is referred to under the head of "parotid saliva" as if only existing in it. The interesting remarks on starch, and even the formulæ which follow, vividly remind us of Kühne, though there is no reference to that authority. And so we pass on to the mixed saliva, which, we are assured, "can be collected in quantity, on irritating the fauces with a feather, and producing vomituritions." As "vomituritions" are not pleasant to us, we prefer inhaling ether to tickling the fauces with a feather. The collected saliva, we are told, so acts that chewed pap after some standing with cupric sulphate and caustic potash at 70° C. yields red copper suboxide. In point of fact, no standing is required; the thing is done in a twinkling. We are told, moreover, that saliva does not change all the starch of our food into sugar; the pancreatic juice has a *trifling* influence in the same sense as saliva. (The italics are ours.) Farther on the author tells us that "in the stomach digestion saliva, by its ptyalin, forms some sugar." This is not lucid, but we have an inkling of what it means. In point of fact, in the presence of acids of the concentration of gastric juice ptyalin is inert; it is not destroyed, but it has no power of changing starch into sugar until alkalinity is restored.

Touching on the liver, the author tells us that "it has generally been believed that the main function of the liver was that of forming sugar. We know now that such is not the case." Well, that may be so; nevertheless, we hold that if anything has been proved with regard to the liver, it has been shown that it does produce sugar. No doubt glycogen is first formed; but if an experiment is made with due care, sugar is invariably found in the liver also. Dr. Dalton's experiments leave no room for doubt on the question.

Among the bile-colouring matters the author is in his element—he can coin names, and he revels among them. Accordingly, we have a list, such as cholonematine, boviprasine, fuscopittine, muscoprasine, and ethochlorine, "all

possessing characteristic properties," about which we can only plead ignorance. So, too, with regard to a function of bile spoken of. "Bile, then," says our author, "represents the accomplishment of a purpose which we term chemolysis of albumen." This may be something we know quite well under a new name, or it may be something with regard to which we know nothing. Either way, the utterance is to us mysterious, —indeed, we may say unintelligible, and so have done with it.

Turning to blood, we find a substance spoken of as paraglobuline, sometimes also (says the author) termed globuline, or fibrino-plastic substance; but later, as at page 56, he speaks of paraglobuline and fibrino-plastic matter as two different substances—so that in point of fact we are left in the dark as to the exact nature of the substances alluded to. In this connexion, too, we have an account of an acid hitherto unknown, and which possesses hitherto unknown properties. The author calls it hematic acid; for our own part we should prefer waiting till something more was known about the substance—its existence, for instance—before saying much about its properties.

At page 32 there is an account of the coagulation of the blood—of fibrinogen and fibrino-plastin—and, of course, the discovery of the nature of fibrine is assigned to Schmidt of Dorpat. Surely it is time Dr. Andrew Buchanan had some slight share in the discovery made twenty years before Schmidt had it awarded to him.(a) Next we are told that by the putrefaction of fibrin en certain principles albumen is obtained. Well, we should be glad to know both the principles and the precautions necessary.

Turning to muscles, we find in a short abstract of fifty-eight pages dealing with the whole of chemical physiology as much as a page and a half devoted to the chemistry of that "mysterious fluid" beef-tea and Liebig's extract of meat—very interesting, no doubt, but somewhat beside the question.

There are several other points we should like to allude to—such as pyæmia (described as a patholytical process)—but we pass on at once to the urine.

We are told that the urine "contains a yellow colouring matter called urochrome, which by chemolysis yields various remarkable products"—such as uromelanine, uropittine, omicholine, and omicholic acid, etc. Now, these substances may, or may not, exist in the urine; meanwhile, they are not recognised. Dr. Thudichum, it is true, gives certain spectroscopic means of identifying them; but then we are forced back on this conclusion: when we deal with a substance like blood-colouring matter, about which a good deal is known, we know that certain means exist whereby its spectrum may be altered—we know the conditions of alteration, and we still speak of the substance as blood-colouring matter altered. Here the opposite plan is adopted upon what seem to us altogether insufficient grounds: new substances are described and new names are applied to them. Often the substance is the same slightly metamorphosed; nevertheless, it is gifted with a new name. Surely we have got past the stage of word-science, though it is true that in Dr. Thudichum's hands science speaks in words unknown to others.

Short as the former portion of the book is, we were soon tired of it. The latter portion, consisting of an analytical guide, and teaching the student dogmatically how to obtain the various chemical compounds of the body, and how to bring out their reactions, seems very much better than the former, though that, too, is of unequal value.

(a) See Glasgow Philosophical *Transactions*, 1845.

NEW BOOKS, WITH SHORT CRITIQUES.

Healthy Houses: a Handbook of the History, Defects, and Remedies of Drainage, Ventilation, Warming, and kindred subjects; with estimates for the best systems in use, and upwards of 300 illustrations. By William Eassie, C.E., etc. London: Simpkins, Marshall, and Co. 1872. Pp. 230.

*** This is a book written by an engineer and man of action, and therefore differs from one which might be written by a physician or speculative sanitary philosopher. Instead of dealing with principles and theories, the author grapples with matters of fact, shows what ought to be done, and gives abundant accounts of the materials required, and of their respective merits and prices. For instance, in a chapter treating on Damp, he deals very shortly with the effects of damp, although they are mentioned shortly and emphatically as rheumatism and blear eyes, but describes the facts—the quantity of water certain walls will absorb, the amount of heat required to evaporate the water, and the multitude of damp-proof devices for preventing the walls from sucking up damp from the ground, or from being rendered damp by a driving penetrating rain. Damp-proof *courses—i.e.*, constructing a line at the bottom of a wall with some material which damp cannot rise through (of which the simple slate seems as good as any, unless it be Taylor's perforated tiles, which allow of ventilation as well)—dry areas, and hollow walls, are all described, with figures and estimates. The means of hindering wet from being driven through a wall are also described, and of these there seems nothing more effectual than the homely remedy of soft soap and alum. Fire—the modes in which houses may be set on fire, and the various contrivances for rendering buildings fireproof, are given in detail. Warming, Ventilation, Lighting, Drainage, Water-supply, and Ice-wells all receive due notice. Mr. Eassie supplies abundant evidence of the dangers which surround us, of fæcal contamination, even when a house is designed with the best intentions, and the owner hopes to have everything perfect. He tells us that drain-pipes should never be laid within a house; but we all know, as a matter of fact, that in our blessed London system all the sewers are in front, and the drains, including those of the stables, must pass from back to front underneath the house. Supposing a drain to be laid under a house, we have the precautions necessary for making it air-tight and water-tight, especially on a sandy or other shifty soil. Examples are given of the accidents to which the best laid pipes are liable, and of the scampish, careless, and rascally way in which these vital accessories are treated by common builders. In a chapter on Sinks, Traps, etc., it is said—"In no case should the waste pipe of sink, lavatory, or bath lead direct into the drains"; yet, as we all know, these pipes all do lead direct into the drains or soil-pipe in nine houses out of ten. Water-closets and all their possible dangers are fully treated of, with the remark that they are generally put in every conceivable improper place. Mr. Eassie says that the time is fast approaching when the arrangement of houses generally, and the position of the closet in particular, will be made a matter of scrutiny by the inspector employed under some stringent sanitary act. His faith is remarkable; but his denunciation of existing water-closets is so too, especially when he speaks of their being ventilated into the bedrooms. We believe that most "gentlemen" inspect their own stables and wine-cellar, but Mr. Eassie says a "gentleman" should inspect his servants' water-closet if he wishes to be safe. The fact is, that under a thin varnish of civilisation we all, like the lowest savages, run the risk of being poisoned by fæcal contamination of earth, air, and water. We are glad to see that Mr. Eassie commends the roof-gardens and smoke-tunnels that have been advocated in this journal.

Science Primers. II.—Chemistry. By Professor Roscoe. III.—Physics. By Professor Balfour Stewart. London: Macmillan. Pp. 104 and 135.

*** These are the two first published volumes of a series intended "to state the fundamental principles of their respective sciences in a manner suited to pupils of an early age." They are intended rather to train the mind than to give information; and accordingly a series of experiments have been devised, which, being performed by the teacher, gradually elucidate the principles of the science taught, and the power of observation in the pupil is awakened and strengthened. The first volume in the series has not yet made its appearance, owing to the unfortunate illness of Professor Huxley. Now, it is well known that we, of all men, have no antipathy to the advance and cultivation of science; yet we make bold to question the propriety of giving instruction in science to children "at an early age." You cannot put more than a pint into a pint pot; and a child's mind is not over-capacious. The three "R's" ought certainly to occupy the first place; and if they are duly attended to, not much room is left for science. An illustration comes promptly to our mind.

Our parish was blessed with a good schoolmaster—he knew his work, and did it. Unfortunately, as will happen to schoolmasters, he grew dyspeptic and he grew hypochondriac. He thought he was going to die, though he was strong as an ox; and so for a time he gave up his school. His place was taken by a bran-new teacher, about whom the parish presently went mad. He taught the children to sing and to march, to draw figures of the circulation on slates, and a hundred other things. It would be hard to tell what he would not have taught had not Providence seen fit to remove him to a sphere of greater usefulness, when his place was taken

by one less gifted, though possessed of ten times the amount of knowledge. He found the children could do many wonderful things. Meanwhile discipline was gone, and the useful arts of reading, writing, and ciphering lost!

Natural Philosophy for General Readers and Young Persons. Translated and edited, from Ganot's "Cours Elémentaire de Physique," by E. Atkinson, Ph.D., etc., Professor of Experimental Science in the Staff College. London: Longmans. Pp. 522.

*** This is a book we beg to commend to the Profession as exceedingly well adapted for the use of young people. The principle on which it is founded is to explain all the ordinary phenomena of nature on scientific principles, and we can conceive no better way of exciting interest in the minds of inquiring youth. It is all very well to create instances—that is, to perform experiments—but these are not things which occur every day; they soon are past and gone, and their very memory forgotten. Here we have explanations of the occurrences we daily see around us—of the machinery used in every-day life; and withal this is done on true scientific principles. It would hardly be possible to cite examples of all phenomena thus dealt with, but we may give a few at random. How a pedlar carries his pack, or an ostler a bucket of water, the application of pendulums to clocks, the hydraulic press, Artesian wells, travelling barometers, pumps, balloons, propagation of sound, speaking tubes and trumpets, stringed instruments, reed instruments, thermometers, reflection and conduction of light and heat, steam-engines, etc., etc. The book is, moreover, fitted for teaching purposes, for it is exact as well as what is termed "popular." In translating it Dr. Atkinson has done good service to the cause of science—the more so that he has materially improved it by additions of his own. Unfortunately the illustrations, being French, represent articles not always exactly like our own.

The Pharmacopœia of the Hospital for Diseases of the Throat. Edited by Morell-Mackenzie, M.D. Churchill. 1872.

*** This little book is likely to be consulted by readers who neither treat nor are treated at the Hospital in Golden-square. It contains numerous formulæ for topical applications in throat disease, many of which we have not met before, and many of which, both new and old, are likely to prove very useful in the treatment of a class of diseases in which the patient himself almost instinctively looks for local medication. These formulæ are for lozenges of various kinds—inhalations, atomised fluids, and throat-collyria. Many of the prescriptions for medicated stimulant vapours to be used for inhalation are undoubtedly worth trying—*e.g.*, vapor cubebæ, vapor folii pini sylvestris, vapor juniperi Anglici, vapor myrti, vapor pumelii, vapor thymolis, etc. The directions, also, for preparing and using cold, dry, fuming, and atomised inhalations, etc., are quite worthy of being studied by all who are anxious to excel in the elegancies and minutiæ of medical practice as well as in medical theory.

Modern Turkey. By J. Lewis Farley, Consul of the Sublime Porte at Bristol. London: Hurst and Blackett. Pp. 353.

*** The interest of this volume to the physician centres to a great extent in the drawing attention to a new health-resort for invalids. The author describes Beyrout and the Mountains of Lebanon. No doubt the expense of reaching the spot would be a drawback, but it would be well worth the while of any incipient *portrinaire* to give the place a trial. The free open life which can be lead all through the winter, and the possibility of an easy escape to the mountains during the summer heat, are well worthy of attention. The author describes Beyrout as being in all respects save gaiety a desirable place of abode. Otherwise the book will well repay perusal.

The Diamond Fields, with Notes on the Cape Colony and Natal. By F. Algar. Pp. 64.

*** This is one of a series of colonial handbooks designed to give reliable information to intending emigrants. As far as we can judge the advice contained in it seems sound. It does not seem tempting to our profession, yet we know a goodly number of men in the Cape Colony who are doing well, though the distances over which they have to travel to see their patients would astonish our stay-at-home folks. Except a man has capital it is probable that he will do well to avoid the diamond fields.

*** *The Edinburgh Medical Journal* for this month contains the first of Dr. Pettigrew's "Lectures on Circulation." This one mainly deals with circulation in plants. We should have been glad to see some more new diagrams; almost all here given are old, and some of them bad. The lecture is excellent.

FOREIGN AND COLONIAL CORRESPONDENCE.

AUSTRALIA.

Melbourne, April 24.

Doings of the Diphtheria Commission.

The Diphtheria Commission have added to the reasons for regarding them as the laughing-stock of the Profession by the issue of a circular which, for excessive stupidity, may be regarded as a typical example. In this document are propounded a series of queries, ostensibly with the object of obtaining information on the subject of diphtheria, but in effect to elicit only the reply that no sane person could supply any answers to the questions. For if the Commission intend anything, they intend to get at the collective experience of the Profession in this disease, so that the whole of what any one person has observed in the course of his practice should be stated. The arrangement of the circular, however, is such as to refer only to one case. For example, among the queries are—"Size of the house, including the number and dimensions of rooms." Now, supposing a man had had, say fifty cases, of diphtheria under his care, considering that the sizes of houses vary, and that therefore, to be accurate, he must give the cubic measurement of every one of the rooms of all the houses, it is obvious he would require to express himself somewhat at length. The space afforded, however, for this purpose is just one inch of foolscap. So also—"Description of closets, including arrangements for removal of night-soil and refuse;" unless the person questioned should reply, "Some of them were defective, others were not," it is quite impossible to make use of this part of the paper. One of the queries is "Period of attack;" but as the Commissioners do not say which attack, and what period, the most eager desire to reply could result only in hopeless discomfiture. It is asked, also, as one of the queries, how long a time had elapsed before Medical aid was sent for. Considering how little it is the rule for Medical men to take notes of the cases which come within their experience, the Commissioners would be just as likely to obtain a satisfactory reply if they had asked what tailor and what greengrocer any of the subjects of diphtheria had dealt with. One query asks—"Have you known diphtheria to occur among the Jewish and Chinese population?" What occult motive the Commission might have had in propounding this inquiry, it is quite impossible to say. The question, however, has given considerable offence to the Jewish portion of this community, who naturally object to be coupled with the Chinese, these latter being principally remarkable for the excessive dirtiness of their habitations.

Besides issuing the circular, the Commission have summoned and examined a number of Medical men. The feeling of annoyance and humiliation at having to appear before a body so generally held in contempt, is almost universal; but as the law empowers the Commission to inflict a fine of £20 for refusal to appear, or to answer when questioned, it is felt to be one of those instances in which a little brief—but at the same time absolute—authority is confided to an utterly contemptible public body; and that, although the objects of their temporary despotism may despise them, there is nothing for it but to comply with their instructions, seeing that, like Sampson in *Romeo and Juliet*, they have "the law on their side." It is generally understood, however, that, as they have no power to compel the furnishing of replies to the circular, they are not likely to get many.

I have to record the death of Dr. John Bayldon, acting Superintendent of the Ararat Lunatic Asylum, on the 6th inst. A man of rare Professional attainments, and of perfect social qualities, his death is felt to be a loss of an irreparable kind. He was only 35, but he had for some time suffered from Bright's disease. Dr. Bayldon was a highly distinguished graduate of the London University, and was the first who took the degree of Bachelor of Science.

A Medical Officer of Health is required for Glasgow. The salary offered is £600 a year. He will be required to devote his whole time to the duties of the office.

The Cholera on the March.—It would seem that cholera is marching rapidly southward; the last advices state—"From May 14 to June 1 last there were 1301 cases at Kiev and 532 deaths. On June 1 alone 204 cases and 189 deaths were recorded. The disease is spreading southward in the direction of Bessarabia."

PROVINCIAL CORRESPONDENCE.

IRELAND.

Dublin, June 28.

Exhibition of Arts, Industries, and Manufactures.

"Let us satisfy our eyes with the memorials and the things of fame that do renown this city." With these words of the "immortal bard," which are woven into a scroll at the eastern extremity of the Leinster Hall in the Exhibition Palace, I may most fitly introduce an account of the Dublin Exhibition of 1872. And, in the first place, a few general details relating to the origin of the present undertaking, and to the topography of the building in which the various collections are now deposited, may be of interest to those of your readers who purpose visiting Ireland and its capital during the ensuing summer.

Some eighteen months ago two brothers, foremost among our merchant princes, Sir Arthur and Mr. Cecil Guinness, purchased the extensive series of buildings in Earlsfort-terrace, known as the Exhibition Palace, with the intention of preserving them as a place of amusement and of instruction for their fellow-citizens. Last December these gentlemen placed the palace at the disposal of a committee of noblemen and gentlemen for the purpose of holding an Exhibition of Arts, Industries, and Manufactures therein in the present year. The public spirit which characterised the action thus taken by Sir Arthur Guinness and his brother has had its just reward in the completion and opening of a most interesting Exhibition, which will doubtless attract many strangers, besides forming a source of intellectual pleasure to the inhabitants of Dublin. As the undertaking was intended to be devoted more especially to the illustration and promotion of the resources of Ireland, a separate and important portion of the palace, called the "Leinster Hall," has been set apart as the Irish department of the Exhibition. The long and very beautiful transept and apse, forming the largest part of the glass structure, has been given up to British and foreign exhibitors; while the Loan Museum, Ancient and Modern Picture Galleries, National Portrait Gallery, and Sculpture Hall are situated in the more permanent portion of the buildings. In the present letter I shall briefly call attention to the Loan Museum and National Portrait Gallery, divisions of the Exhibition of a perfectly novel character, and which are of themselves well worth a visit.

The Loan Museum is located in a series of rooms off the Ancient Picture Gallery, to which flights of steps lead from the Sculpture Hall—the first part of the Exhibition reached by a visitor on entering the building. This museum is intended to further the objects for which its great prototype, the South Kensington Museum, was founded, and it contains splendid collections lent by her Majesty the Queen, his Royal Highness the Duke of Edinburgh, his Excellency Earl Spencer, Lady Mayo, Lord Gough, and others. In it we meet with the mace of the King and Queen's College of Physicians, said to be the most elaborate piece of workmanship of the kind in the United Kingdom. This mace was made in Dublin about twenty years ago by Mr. James West, of College-green, is of silver, and weighs 243 ozs. 5 dwts. The total cost was £273. It is surmounted by the crown-royal, beneath which is a larger crown, containing in niches statuettes of Hippocrates, Avicenna, and Harvey, besides the armorial bearings of William and Mary, of Dr. Stearne, and of the College. Underneath runs the legend: Πάρ' Ὑψίστου ἔστιν ἴασις. Along the verge are the monograms "C.R." and "W.M.," several times repeated. The following Latin inscription, from the pen of Dr. Travers, Professor of Medical Jurisprudence in the School of Physic, is executed in Niello work:—"Collegium . Medicorum . in Hibernia . auctore Joh. Stearne, J.U.D. & M.D. Coll. S. Trin. Dublin Socio. A.D. MDCLX. fœliciter . inchoatu : : Instauravit . Carol'. II. Dei Gratia M. Britanie . Francie . & Hibernie . rex fidei . defensor . A.D. MDCLXIIII ∴ Auxerunt . Gulielmus et Maria . rex et regina A.D. MDCXCII ∴ X + X ∴" Around the base is this legend: "Gulielmo Stokes, Præside A.D. MDCCCL.," with the crest of Dr. Stokes.

The lover of antiquities will find many objects of interest in the museum. A set of drug-pots, in enamelled majolica ware, and dating from the sixteenth century, are to be seen in one of the rooms. As a curiosity, Dr. Evans, of Dawson-street, exhibits the first prescription compounded for the Duke of Wellington, when a baby.

Passing to the National Portrait Gallery, which includes nearly 300 portraits of eminent personages connected with Ireland by birth or service, arranged as far as possible in a chronological order, we observe the likenesses of several members of our own Profession. Of these the first is a portrait of Sir Patrick Dun, Knt., M.P., President of the King and Queen's College of Physicians in Ireland in 1692, when the Charter of William and Mary conferred that title upon the previously existing College of Physicians. Sir P. Dun is represented in this painting in the scarlet robes of a Doctor of Physic, with the full-bottomed wig of the period. Next in point of time we meet with a portrait, by Gainsborough, of Sir Edward Barry, Bart., Fellow of the College of Physicians from 1740 to 1776, and President in 1749. Close beside each other are likenesses of Oliver Goldsmith, "M.B"(?), poet, novelist, historian, and dramatist; one by Sir Joshua Reynolds, the second by Hogarth. In the latter the unsuccessful Physician is represented writing in a poorly furnished garret, at the time probably when he had turned from the practice of his profession in disgust, and was devoting himself to literature. Poor Goldsmith! perhaps the College of Surgeons were justified in rejecting him in 1758; but, notwithstanding his *penchant* for James's powder, are we not now only too glad to speak of him as of a brother in calling?

Sir Joshua Reynolds is said also to have painted Sir Nathaniel Barry, Bart., Fellow of the College of Physicians from 1758 to 1785, and President in the years 1767 and 1779. This picture represents Sir N. Barry in the ordinary dress of a physician of the period, and was given to the College by the second Sir Henry Marsh in 1865. Last among the portraits of the worthies of the Profession in days long gone by, is one by the late Mr. Martin Cregan, of Doctor Charles Lucas, M.D., M.P. for Dublin, author of a treatise on water, orator and political essayist, who lived from 1713 to 1771. This celebrated man was he who, in 1761, brought into Parliament a Bill for "Preventing Fraud and Abuses in the Vending, Preparing, and Administering Drugs and Medicines." The Bill became law, and was known as Lucas's Act. It provided, among other things, that the inspectors of apothecaries' shops should be appointed by the College of Physicians, and that the number of Fellows of that College should be unlimited, the qualification of candidates being that they were "learned and worthy Doctors of Physick." In "Whitelaw and Walsh's History of Dublin," vol. ii., p. 749,(a) the following story is told of Dr. Lucas, who, at the time of the passing of his Act, kept an apothecary's shop in Charles-street. Having had a quarrel with the College of Physicians, he revenged himself in a singular manner. He obliterated all the labels of his shop, and disguised sundry substances so as to make them resemble different kinds of medicines. When the inspecting physicians came to examine they were exceedingly embarrassed to ascertain the different kinds, and he boasted that they actually acknowledged a substance to be good rhubarb, which he afterwards proved to be *toast and turmeric!*

Dr. Lucas was also a member of the Corporation of Barber-Surgeons, and the following notice of his death appears in the list of the "free brethren" of that worshipful body:—"Chas. Lucas, Esqre., M.D., Dyed greatly regretted by his Brethren, the 4 Nov., 1771."

The modern school of Medicine and Surgery is also fairly represented in the National Portrait Gallery. On the south wall of Gallery No. I. hangs the portrait of Sir Philip Crampton, Bart., Surgeon-General to the Forces, and Surgeon-in-Ordinary to the Queen in Ireland. This painting, the work of Sir Francis Grant, is contributed to the collection by Sir John Crampton, son of the great surgeon. The surgical branch of the Profession is further represented by a portrait of Mr. Cusack, who succeeded Sir Philip as Surgeon to the Queen—an honour which, alas! he did not live long to enjoy, dying but three short years after his distinguished predecessor. The King and Queen's College of Physicians lends paintings of two of its most able fellows of recent years—Robert Mayne and Thomas Edward Beatty. Both have passed away, but their memory is yet green amongst us, and in both cases the artist—Mr. T. A. Jones, now President of the Royal Hibernian Academy—has skilfully depicted the well-known lineaments, and so preserved the very form and feature from oblivion. Poor Mayne died of typhus fever in 1864, in the very zenith of his age and fame. Beatty was with us but yesterday, when, full of years and honours, he too entered into rest. In his case, especially, the likeness is most admirable—the very man seems to gaze upon one from the canvas. The portrait was

(a) Quoted in Moore's "History of Pharmacy in Ireland," p. 27.

painted for the Medico-Philosophical Club, of which Dr. Beatty was a favourite member.

I must now bring this letter to a close, hoping on a future occasion to have an opportunity of introducing other departments of the Exhibition to your readers.

GENERAL CORRESPONDENCE.

CONTROL OF INEBRIATES.

Letter from Dr. Robert Druitt.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is very easy to laugh aside anything, however important and useful, if it can be made appear to conflict with our popular English idea of "liberty." Hence we have seen that an influential paper derides the conclusions arrived at by that Select Committee of the House of Commons which was presided over by Mr. Dalrymple, and which investigated and has reported on "The Best Plan for the Control and Management of Habitual Drunkards." It is very easy to say that any person, however sober, prudent, and respectable, who happens to be dining at a tavern, and to take a glass too much, may be dragged before a magistrate and heavily fined; and that all old English conviviality will cease, all family harmony be destroyed, and husbands and wives be found informing against each other if ever they take a pint of beer too much.

All this nonsense may be dismissed; and we may fix our attention on two crying and palpable grievances which afflict society, and which the law may be made to reach without trenching on liberty or interfering with our amusements, our follies, or even our peccadilloes.

The first is the frequency with which offences against decency and order are committed in public by persons under the influence of drink. It is fair to say, Let people drink as much as they like in private—there need be no punishment for that; but, on the other hand, there ought to be a really deterrent punishment against public offences which drunken persons commit. A man who exhibits himself in a tipsy condition, unable to take care of himself, and therefore occupying the time and attention of the guardians of the public peace; a man who fights, or who assaults women, or who annoys fellow-passengers in a railway-carriage, ought to be visited with a punishment which should render him cautious about committing a second offence. But these are matters for the police, not for the physician.

Members of our Profession have a sadder and a higher task in combating the passion for secret drink which afflicts persons who never come in the way of the police, "or are dealt with by the authorities" (as the Report of the Committee says), "but which is probably even a more fertile source of misery, poverty, and degradation than that which comes before the police-court; for this no legal remedy exists, and without further legislation it must go on unchecked."

Such are the cases in which, if I may paint from the life, some young, imaginative, romantic girl, of feeble body and excited brain, gets married. The "living happy ever after" is found to be a delusion. Children come quickly; perhaps exhausting miscarriages; the husband may be cross or poor; his family may grumble at the "delicate" wife; she, poor thing! exhausted, bloodless, and spiritless, may bravely try to do her duty in the family, and for this purpose listens to the insidious advice, "Why not take a glass of port wine at eleven o'clock?" or, peradventure, a little glass of gin. Thus a little spurt is got up; but the appetite is bad, and the food coarse; it is easier to drink than to eat; and so, step by step, the poor victim is led on, till at last the hideous discovery is made some day by the astonished husband that his wife "drinks." Then there is a row, a family council, great fits of crying, and promises of amendment. Possibly these may last; possibly not. Then, after a deceitful calm, fresh discoveries are made: the tradesmen's bills are found unpaid; bills come in for brandy; articles of plate or jewellery are pawned; the children's dresses are scanty, and their food curtailed; and, worse than all, a drinking mother is a source of demoralisation to her whole surroundings. The children are sent out for drink, and taught to lie about it; the servants rob, and misconduct themselves, because their mistress is afraid of them; and the tradesmen cheat and screw up their charges, because their money is in arrears.

Now, let the unhappy husband try to mend this state of things. He consults his parson, but (for reasons I should not like to state in a medical journal) ordinary religious teaching is useless or mischievous. The lawyer proposes a "deed of separation," which would only be letting the poor creature go to the deuce unchecked. The physician, on the other hand, says, "Let me treat the patient, and I'll cure her. Such and such a cause of exhaustion can be suppressed; palatable and nutritious food be insisted on; tonics and harmless stimulants be substituted for alcohol; rest, care, and tenderness will accomplish the rest." But then comes this difficulty: the patient will not submit to treatment—she will drink on—and there is no power to stop her, unless legislators will stoop to matters of fact, and support the recommendations (or some of them) of Mr. Dalrymple's Select Committee.

London, July 2. I am, &c., R. Druitt.

PUBLIC HEALTH BILL AND MEDICAL OFFICERS.

Letter from Mr. J. Wickham Barnes.

[To the Editor of the Medical Times and Gazette.]

Sir,—The alternative offered to Poor-law Medical Officers by Dr. Rumsey's letter is quite a gratuitous one: I mean that no such alternative is offered by the Bill itself. His first proposition expresses, in a tone of disparagement, what the Bill really offers to Poor-law Medical Officers. His second proposition expresses, in a tone of elevated confidence, what he himself would like the Bill to have offered.

Dr. Rumsey would counsel Poor-law Medical Officers to withhold all support to the first proposition, and to adopt the policy enunciated by his second proposition; or, in other words, to take up a policy—not of support and gratitude for what is really offered—but a policy of agitation for something that is not offered, but which Dr. Rumsey thinks ought to have been offered by this Bill. As to "being constituted in town and country alike Deputy Officers of Health," the eleventh clause sufficiently shows that there was no such intention on the part of the authors of the Bill, but, on the contrary, that they expressly avoided, for the present, the crushing opposition to the Bill which would have followed its extension to towns. Agitation, then, for what has been expressly and avowedly left out of the Bill, would appear to most minds a fruitless waste of time. In the thirteenth clause we have the importance of the Poor-law Medical Service in sanitary work honourably recognised, and we have a real improvement in the status of all rural Medical Officers. Here, then, the Bill emphatically claims a policy (not of blind agitation, but of gratitude and support) on the part of our Association. Lastly, I would merely remark that my experience of Poor-law Medical Officers would lead me to expect that all duties arising from their appointment as sole Medical Officers of Health in their respective districts would be discharged in a fearless, upright, and honourable manner, and that they would stand in no need of the purifying influences of Dr. Rumsey's "Principal Officer of Health," who, he most condescendingly tells us, "would be ready at all times to support you and to relieve you from the disagreeable duty of initiating proceedings against nuisances created by your private patients." I am, &c., J. Wickham Barnes.

MEDICAL CLUB.

Letter from Dr. Lory Marsh.

[To the Editor of the Medical Times and Gazette.]

Sir,—At the extraordinary general meeting held at the Club on May 30 last, it was unanimously resolved "to continue the Club on the proprietary principle." Captain Valpy (late of the 89th Regiment) having submitted a proposal to the meeting to become the future proprietor, negotiations have since been concluded with that gentlemen, and on the 1st inst. he undertook the responsibilities and liabilities of proprietor of the Medical Club. Captain Valpy's experience in the commissariat and paymaster's department of the army for over nineteen years, and his having been a member of the Club for several years, will afford him very great facilities for further developing and improving the management of it.

Captain Valpy proposes to continue the Club as a "Medical Club," and to place it upon a new and enlarged basis, a copy of the details of which, when completed, will be forwarded to each member. I am, &c., Lory Marsh,

July 3. Late Hon. Sec. and Treasurer.

Heat in New York.—Intense heat prevails throughout the United States. Fifty deaths from sunstroke occurred in New York on Monday last.

OBITUARY.

CHARLES TRUSTRAM, M.R.C.S.

On the evening of the 24th ult., after visiting a patient in the neighbourhood of The Parade, Tunbridge Wells, Mr. Trustram returned to his home shortly before ten o'clock, and went to bed apparently in his usual health. At two o'clock the next morning he woke up a relative, who was on a visit at his house, and complained of severe illness; and, notwithstanding every attention paid to him by Mr. Watson and Mr. Manser, he died in about an hour afterwards. The cause of death was angina pectoris, which had been coming on for some little time. The deceased gentleman was born at Shillington, in Bedfordshire, on February 6, 1809, and was the eleventh child of a family of sixteen; and his family, who had long been resident in Bedfordshire, were at that time living at the parsonage-house and holding the rectory farm of Shillington. After being educated at schools in the neighbourhood, he was apprenticed to Mr. Hicks, of Baldock, in Hertfordshire, a well-known surgeon in that locality, with whom he remained five years. In 1829 he entered at St. Thomas's Hospital, and attended lectures also at Guy's Hospital, and during part of that time he was dresser to Sir Astley Cooper. In 1832 he commenced practice at Tunbridge Wells, and very shortly afterwards he succeeded in restoring the use of her arm to a young lady, a member of one of the county families of Cornwall, who had previously been under the care of several leading doctors of the day, and the father of the lady handed to Mr. Trustram a cheque for 100 guineas with which to buy a watch. Mr. Trustram practised as a surgeon for forty years in that town, and during a large portion of that period he rendered valuable service as an Honorary Surgeon to the Infirmary and Dispensary. He was one of the most successful practitioners of the day. He was for a long series of years a leading public man in the town, ever ready to help forward public measures. For many years he was an active member of the Local Board. He took the initiative at the Board for bringing about the present town water-supply. As a surgeon his opinion and skilful treatment were highly valued, and his services were largely and gratuitously bestowed on the poor. The deceased was a widower, his wife having died about fifteen months since, and he leaves a son and three daughters to deplore his loss. Dr. Carpenter, in his address as President of the South-Eastern Branch of the British Medical Association, held on the 28th ult., thus speaks of the subject of this sketch:—"He was a very kind and valued friend, a merry fellow, and one who had long been a considerable support to us. We must all feel sorry to miss him from his place, for seldom has he missed attending our meetings, and he was always ready to assist in promoting good-humour and harmony. I am sure we all deeply regret his loss."

WILLIAM CORBET, M.B. Dub., F.R.C.S.I.

A very worthy and amiable man has passed away from among us, in the fulness of a green old age. Dr. Wm. Corbet, Resident Physician of the Dundrum Criminal Lunatic Asylum, died on Saturday last, after a few hours' illness. Dr. Corbet had been the principal officer of the Asylum for more than twenty years, and was in the 79th year of his age at the time of his death. He was in his usual health on Saturday morning, made his daily visit throughout the Asylum, and was proceeding in his carriage on his way to Dublin, when he was struck down with paralysis, which proved fatal in ten or twelve hours. Among his professional brethren Dr. Corbet was known as a learned and able man, peculiarly versed in the literature of his profession, and possessing a sound practical judgment. To the public he was less known than he would have been if his modest and retiring disposition had not kept his merits in the shade. In the Asylum, to the management of which the latter third of his life was devoted, he found a suitable and congenial field. In his death the public service has sustained a real loss.—*Dublin Evening Mail*, June 24, 1872.

ERNEST T. CHAPMAN.

We much regret the death, on June 25, of this gentleman, a chemist of high standing, and son of Dr. John Chapman, well known in the Profession by his writings on cholera and the diseases of the nervous system. Mr. Ernest Chapman, who was only 27 years of age, distinguished himself by a multitude of original researches, and especially by his share in perfecting the method of water analysis which is known as "Wanklyn, Chapman, and Smith's." In the autumn of last year he undertook the chemical management of a large wood distillery at Rübeland, in the Harz, and he was engaged on the day of his death in the manufacture, for mining purposes, of an explosive compound, apparently nitrate of methyl. From some cause unknown the substance exploded, killing Mr. Chapman and three workmen with him, destroying the bomb-proof building in which their operations were carried on, and dangerously wounding ten others.

ROBERT KEMP, ASSISTANT-SURGEON H.M.'s 16th LANCERS,

Died at Secunderabad, Deccan, on May 19, from heat-apoplexy after a few hours' illness. The deceased, who was then attached to the 33rd Regiment serving in India, joined the Abyssinian expedition under General Napier at a very early stage, and had his full share of the work and hardships of that short but brilliant campaign. On the return march from Magdala he was seized with fever and sent home invalided, after which he was temporarily attached to the 93rd at Fort George and at Perth. On returning to India again he was appointed Assistant-Surgeon in the Artillery, and did good service during the outbreak of cholera at Secunderabad. By all who knew him his early removal will be sincerely mourned.

J. GORDON SMITH, M.D., M.R.C.S.,

Was a native of the parish of Auchindoir. It is only a few years since he went to Aberdeen from Rhynie, where he had been practising for some length of time. After his arrival in Aberdeen he was for several years associated with the late Dr. Christie, and on the death of that gentleman he succeeded him to a great extent in his large and varied practice. He died at his residence in Aberdeen last week. He had been for some time in rather weak health, but his death had not been expected. He was rapidly acquiring a good position and extensive practice in that city. He leaves a widow and family to mourn his loss.

MEDICAL NEWS.

University of London.—The following are the names of the candidates who have passed the recent D.Sc. Examination:—

Branch VI.—*Electricity.*
Muirhead, Alexander, University College.
Branch IX.—*Animal Physiology.*
Martin, Henry Newell, M.B., Christ's, Cambr., and University.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, June 27, 1872:—

Bull, William, Nenagh, Ireland.
Dustan, Henry, Oaklands, Jersey.
Eastes, Thomas, Folkestone, Kent.
Joynes, Francis James, Chipping Norton, Oxon.

As Assistants in Compounding and Dispensing Medicines:—

Plummer, Arthur, Newbury, Berks.
Goldsmith, John Jackson, Abingdon, Berks.

The following gentleman also on the same day passed his Primary Professional Examination:—

Mason, Richard, St. Thomas's Hospital.

At the recent competitive examination for the prizes in botany, given annually by the Society to medical students who are in attendance on the second summer session of their medical studies, the successful candidates were—1st, Augustus Joseph Pepper, of University College, a gold medal; 2nd, Robt. Edmund Carrington, of Guy's Hospital, a silver medal and a book.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Diver, Thomas, M.D., M.R.C.S., L.S.A.—Medical Officer to the Workhouse, Portsea, Ireland.

Goodenaugh, W. Hessman, L.R.C.S.E.—Parochial Medical Officer for the Parish of Flisk, Fifeshire.

Hackney, John, M.R.C.S., L.S.A.—Medical Officer for the Hythe District, Kent.

Lyell, R. W., M.B. Lond., M.R.C.S.E., L.S.A.—House-Physician to the Seamen's Hospital, Greenwich.

PATCHETT, W. ASHTON, M.R.C.S. Eng., L.S.A.—Senior Resident Surgeon to the Workhouse Hospital of the Manchester Township.

SPENCE, JAMES B., M.D.—Assistant Medical Officer to Staffordshire Lunatic Asylum, Burntwood, near Lichfield, *vice* E. C. Fox, M.B., resigned.

NAVAL AND MILITARY APPOINTMENTS.

MEDICAL DEPARTMENT.—William Richardson has been appointed to the rank of Staff-Surgeon in her Majesty's Fleet, with seniority of June 19, 1872; Assistant-Surgeon Richard Jackson, from the 3rd Foot, to be Staff Assistant-Surgeon, *vice* Henry Walker, who exchanges; Staff Assistant-Surgeon Robert Sutherland retires upon temporary half-pay; Staff Assistant-Surgeon John George Thornley, M.D., retires upon temporary half-pay; Surgeon-Major Edward Schaw-Protheroe, Royal Artillery, resigns his appointment as Surgeon to the Royal Military Academy.

BREVET.—Honorary Assistant-Surgeon George Edward Pool, retired, late Bengal Subordinate Medical Department, to have the honorary and local rank of Surgeon in the East Indies.

BIRTHS.

ALLINGHAM.—On June 25, at White Friars, Chester, the wife of J. H. Allingham, M.R.C.S., of a son.

GORDON.—On May 28, at Bermuda, the wife of Dr. London Gordon, Staff Surgeon *Royal Alfred*, of a son.

HOOD.—On June 28, at 65, Upper Berkeley-street, the wife of Wharton P. Hood, M.D., of a daughter, prematurely.

MACMUNN.—On June 30, at the Royal Hospital, Chelsea, the wife of John Alexander MacMunn, M.D., of a daughter.

NORMAN.—On June 29, at Monmouth, the wife of George Allen Norman, M.B., of a son, stillborn.

PERRY.—On June 28, at 67, Charlwood-street West, St. George's-road, the wife of George Perry, M.R.C.S. Eng., Assistant-Surgeon Scots Fusilier Guards, of a son.

SEALY.—On June 27, at Oak Hill House, Weybridge, the wife of George J. Sealy, M.D., of a daughter.

SELOUS.—On May 24, at Seetapoor, Oudh, India, the wife of Surgeon E. Selous, I.M.S., of a son.

MARRIAGES.

BARRETT—STEVENS.—On June 27, at St. Peter's, Onslow-gardens, Henry, second son of George Barrett, Esq., of Winter's Hill, Bramley, Guildford, to Mary Louisa, third daughter of the late W. V. Stevens, M.R.C.S., of Milton House, West Brompton.

BRIGGS—FAWSSETT.—On July 2, at the parish church, Wisbeach, Cambridgeshire, David Graut Briggs, of Calnthorpe Manor, Lincolnshire, to Elizabeth, youuger daughter of Frederick Fawssett, F.R.C.S., Wisbeach.

CASSELS—SCUDDER.—At the parish church, Prittlewell, Thomas Cassels, M.D. Lond., to Jane Elizabeth, youngest daughter of Henry Scudder, Esq., of Hamlet Lodge, Prittlewell, and Thundersley, Essex.

EADY—HATCH.—On June 25, at St. Andrew's, Ham, Dr. George John Eady, eldest son of George John Eady, M.R.C.S., of Chertsey, to Elizabeth (Bessie), daughter of William Hatch, Esq., of Ham.

GRANT—KEILLER.—On June 18, at 21, Queen-street, Edinburgh, Gregor Hugh Grant, Esq., Bhangulpore, Bengal, to Jane Maria Elizabeth, second daughter of Alexander Keiller, M.D., F.R.C.P.E.

HIBBERD—ADAM.—On June 27, at St. Paul's Presbyterian Church, Westbourne-grove, Edward Hibberd, M.D., of Westbourne-place, Harrow-road, to Anna Bella, eldest daughter of Joseph Adam, Esq., of Westbourne-villas, Harrow-road, W.

OLDMAN—MAULE.—On June 26, at the parish church, Godmanchester, Charles Edmund Oldman, B.A., M.R.C.S.E., of Spalding, Lincolnshire, to Beatrice, second daughter of Edward Maule, Esq., of Godmanchester, Huntingdonshire.

DEATHS.

BACON, JANE, relict of the late John Fergusson Bacon, Surgeon Bengal Army, at 13, Belgrave-terrace, Torquay, on June 26, aged 64.

COLCHESTER, THOMAS, late Surgeon Royal Artillery, at his residence, Bushey-heath, Herts, after a lengthened illness, on June 29, aged 70.

DIAPER, LOUISA MARY, widow of the late Dr. Herbert Diaper, Surgeon-Major Bengal Army, at 30, Aldridge-road-villas, Westbourne-park, on June 27, aged 43.

EVEREST, GEORGE JAMES, M.D., son of the late John Cole Everest, Esq., of High Leigh, Cheshire, at 13, Mayland-road, Shepherd's-bush, on June 28, aged 77.

HARDY, MARY, daughter of H. Nelson Hardy, F.R.C.S. Edin., at 21, Fitzroy-square, on June 26, aged 16 months.

JONES, HELEN, widow of the late Dr. Walter Jones, of Montreal, daughter of the late Captain John James Hamilton, Assistant Adjutant-General, Bengal, and the loved sister of Mrs. S. Scott Alison, drowned in the St. Lawrence, Canada, while endeavouring to escape from the steamboat *Kingston* when on fire, on June 11.

PHILP, GERTRUDE, daughter of F. R. Philp, M.D. Cantab., F.R.C.P., at Colby House, Kensington, on June 30.

MCDOWALL, ROBERT, M.D., of Cheltenham, at No. 1, The College Grounds, Great Malvern, on June 27, aged 85.

O'CALLAGHAN, W., L.F.P.S., eldest son of the late Daniel O'Callaghan, M.D., co. Cork, at 35, Moore-street, Chelsea, on June 21.

SMITH, KATHERINE, widow of the late R. Prichard Smith, M.D., and only daughter of the late Sir Nathaniel Dukinfield, Bart., at Mortimer House, Reading, on June 27, aged 83.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—Resident Medical Officer and Secretary. Candidates must be duly qualified. Applications, with testimonials, to Arthur Chamberlain, Esq., Hon. Secretary, 8, The Crescent, Birmingham, on or before July 15.

DORSET COUNTY HOSPITAL.—Honorary Physician. Candidates must have taken their regular professional degree in some University of the United Kingdom, or be Fellows or Licentiates of the College of Physicians. Applications, with testimonials, to "The Chairman of the Committee," Dorset County Hospital, Dorchester, on or before July 31.

DORSET LUNATIC ASYLUM.—Two Assistant Medical Officers. Candidates must be duly qualified and registered. Applications, with testimonials, to John Brown, Clerk to the Visitors, on or before July 10.

GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, 18, BRIDGE-STREET, MANCHESTER.—Resident Medical Officer. Must be duly registered. Applications and testimonials to be sent in on or before July 22.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.—Dental Surgeon. Candidates must be Licentiates in Dental Surgery of the Royal College of Surgeons of England. Applications, with testimonials, on or before July 17.

HOSPITAL FOR SICK CHILDREN, 49, GREAT ORMOND-STREET.—House-Surgeon. Candidates must possess some legal qualification to practice. Applications, with testimonials, to Samuel Whitford, Secretary, on or before July 17.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

LEEDS PUBLIC DISPENSARY.—Junior Resident Medical Officer. Candidates must possess at least one legal qualification (registered). Applications, with testimonials, to John Horsfall, 31, Albion-street, Leeds.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Lecturer on Physiology; also, Demonstrator of Anatomy. Applications, with testimonials, to R. Harrison, Registrar (from whom further particulars may be obtained), on or before July 6.

NEWBURY.—Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to John Tanner, Clerk, Speenhamland, near Newbury, before July 15.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY.—Resident Medical Officer. Candidates must be doubly qualified and registered. Applications, with testimonials, to the Secretary, A. R. Emmerson, on or before July 15.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—Resident Medical Officer. Applications, with testimonials, to Ernest Morgan, Secretary, 20, John-street, Adelphi.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Particulars may be obtained from S. S. Wigg, Esq., Honorary Secretary, 33, Gordon-street, Gordon-square.

SEAMEN'S HOSPITAL, GREENWICH.—House-Surgeon. Candidates must possess at least one qualification. Applications, with testimonials, to Kemball Cook, Secretary, on or before July 6.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Applications, with testimonials, to the Hon. Secretary, on or before July 29.

WESTERN GENERAL DISPENSARY, 10, LISSON-GROVE, N.W.—Resident Surgeon and Apothecary. Candidates must be Members of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Apothecaries' Society. Applications, with testimonials, to W. Kimpton, Secretary, before July 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Honiton Union.—Dr. Mayne has resigned the Third B District—area 5510, population 626, salary £28 per annum; the Third C District—area 1450, population 126, salary £4 10s. per annum; the Tenth District—area 4730, population 714, salary £30 per annum; and the Eleventh District—area 2100, population 299; salary £8 per annum.

Leek Union.—The Leekfrith District is vacant; area, 18,800; population, 3303; salary £30 per annum.

Prescot Union.—Dr. C. M. Deane has resigned the Rainford District; area, 5696; population, 2784; salary £25 per annum.

APPOINTMENTS.

Altrincham Union.—James G. Purcell, M.R.C.S. Eng., L.R.C.P. Edin., to the Workhouse.

Chipping Norton Union.—Saml. Haigh, M.R.C.S. Eng., L.S.A., to the Fourth District.

Knighton Union.—Charles J. Covernton, M.R.C.S. Eng., L.R.C.P. Edin., to the Llanbister District.

Liverpool Parish.—Wm. Alexander, M.D. and M.C. Queen's Univ., Irel., as Assistant Medical Officer of the Brownlow-hill Workhouse; Christopher Elliott, B.A. and M.B. Dub. Univ., L.R.C.S. Ire., to the Dingle Mount Workhouse.

St. Columb Major Union.—Chambre R. C. Vigurs, M.R.C.S. Eng., L.S.A., to the Fourth District.

THE outdoor Medical Officer of St. Mary's District, Marylebone, has resigned.

MR. JOHN MILLS has given 300 volumes for the library, and Mr. Foster White has made a present of prints and chromos, to adorn the walls of the Convalescent Home, Lauderdale House, Highgate. It is expected that the Prince of Wales will open the "Home."

PARIS FACULTY OF MEDICINE.—The following gentlemen have, as the result of the *concours*, been admitted *agrégés* or Substitute-Professors in the Section of Medicine:—MM. Hayem, Damaschino, Fernet, Lancereaux, Bergeron, Duguet, and Rigal.

We regret to state that an accident occurred to Dr. Lush, M.P. for Salisbury, last week, which has prevented his attendance in Parliament. His horse slipped upon the tramway at the foot of Westminster-bridge, and the hon. gentleman was thrown with great violence, and sustained severe injury, but we are glad to state that he is progressing favourably.

Coroner for Sussex.—The office of Coroner for the Western Division of Sussex is vacant by the death of Mr. Richard Blagden. There is good reason to believe that if a medical candidate started he would be elected.

Health of Paris.—There were 689 deaths in Paris in the week ending the 28th ultimo, or 72 less than in the preceding one. There was a diminution in the deaths caused by all diseases except scarlatina and erysipelas, which showed a slight increase. There was one case of cholera (not of the Asiatic kind), and 140 deaths from pulmonary affections.

Cottage Hospital.—A bazaar will be held on the 27th and 28th proximo, in the grounds of "Place," Fowey, Cornwall, by the kindness of the Rev. Dr. Treffry, in aid of the funds for the restoration of the church windows, the completion of the admirably managed Cottage Hospital, and the debt on the new bells, when it is to be hoped sufficient sums will be realised for such desirable objects.

The Académie des Sciences.—The following is the result of the contest (described in another part of our present number) between the surgeons and the physiologists for the vacancy in the Section of Medicine and Surgery caused by the death of M. Laugier—a result much due to the exertions of MM. Bouillaud, Larrey, and Nélaton:—At the first scrutiny there were present 54 electors, M. Sédillot obtaining 22, and M. Marey 18 votes; and as M. Jules Guérin received 6 votes and MM. Gosselin and Vulpian each 4 votes, the result was very favourable to the surgeons—viz., 32 to 22. At the second scrutiny, 53 voting, M. Sédillot obtained 34 votes and M. Marey 19.

Royal College of Surgeons.—The annual election of Fellows into the Council of this institution took place yesterday, the 4th inst., when Messrs. Henry Hancock, of the Charing-cross Hospital, and Thomas Blizard Curling, of the London Hospital, Vice-Presidents of the College, were re-elected; and Mr. Barnard Wight Holt, of the Westminster Hospital, was elected in the vacancy occasioned by the decease of Mr. Samuel Solly. The numbers polled by the candidates were as follows, viz.:—Mr. Henry Hancock, Harley-street, 41 (including 10 plumpers); Mr. Thomas Blizard Curling, Grosvenor-street, 31 (including 1 plumper); Mr. Barnard Wight Holt, Savile-row, 30 (including 6 plumpers). The voting was over at 3.10 p.m. Only forty-eight Fellows voted. In the evening the Fellows dined together at the Albion Tavern, Sir William Fergusson, Bart., F.R.S., in the chair, supported by the Directors-General of the Army and Navy Medical Departments; the Presidents of the Royal Colleges of Physicians and Surgeons; the Master of the Society of Apothecaries; the Right Rev. Bishop McDougall and Mr. Dalrymple, M.P. (both Fellows of the College); Messrs. Baker, Evans, Tait, and Thomas, of Birmingham; Lund and Turner, of Manchester; Cattlin and Rugg, of Brighton; Wiblin, of Southampton; Green, of Bristol; Wood, of Shrewsbury; Colgate, of Eastbourne; Image, of Bury St. Edmunds; Jones, of Plymouth; Paget, of Leicester; Stevens, of Biggleswade; and a great number of metropolitan Fellows—in fact, this was one of the largest gatherings since the establishment of the festival, owing, no doubt, to the well-deserved popularity of the distinguished chairman. We reserve until next week a report of the interesting speeches made on the occasion.

Conversazione at the Royal College of Physicians.—On Saturday evening last a *conversazione* was held at the Royal College of Physicians, and was numerously attended by members of the Profession. Amongst the distinguished visitors were Archbishop Manning and the Lord Mayor of London. Amongst the objects of interest exhibited in the library were the following:—Minerals from Vesuvius (the Baroness Burdett-Coutts). Recent Lava and Dust from the Streets of Naples (Sir James Lacaita). Collection of articles from the Indian Museum (lent by the Secretary of State for India in Council). Photographs of West India Scenery (Dr. Gavin Milroy). Photographs of the Pyramids; Specimens of the Stones of which they were built (Dr. Carpenter). Electric Forceps (Dr. John Taylor). A new form of Siemen's Induction Tube for the production of Ozone; an Experiment illustrating the relation existing between Combustibles and Supporters of Combustion (Mr. Thomas Wills). Objects dug out of the Lake Habitations of Switzerland; Caterpillar of "*Bombyx processionea*," from Oporto, in use as a counter-irritant (Dr. John W. Ogle). Two Microscopes, with 1-50th and 1-80th Object Glasses (Messrs. Powell and Lealand). Six Microscopes, with objects seen under one-fifth and one-tenth of an inch (Messrs. Thomas Ross and Co.) Hand Microscopes, with fixed Illuminators for opaque objects—devised by Dr. Guy; also suitable objects, transparent and opaque, mounted on disc; Electrotype Process, for fishes, ferns, and other natural objects; Enlarged Microscopic Objects on Plaster Discs, by the Woodbury Process; Microscopes, Monocular and Binocular, with objects (Mr. How). Collection of Wild Plants from the neighbourhood of Saffron Walden, Essex (Henry Stear, Esq.). Autotype of Fellows of the Royal Society in the Rooms of the Society; Miniatures from Photographs on Porcelain and Enamel (Mr. Henry Barraud). Siege Bread, and Cuirass worn during the Siege of Paris, 1871 (Surgeon-Major Wyatt, Coldstream Guards). Engravings of Old London (J. E. Gardner, Esq.). Photographs from Dr. Woodward, of Washington, and Nerves of the Cornea (Jabez Hogg, Esq.). Book of American Autumnal Leaves, by S. J. Kellogg (S. Stocker). Works of Art in Silver, etc. (Messrs. Elkington). The Works of George Cruikshank, between 1803 and 1871, with 313 illustrations; "My Garden," by Alfred Smee, Esq., F.R.S.; Select Portraits, by Titian; and Select Works of Velasquez, photographed from rare engravings in the British Museum (Messrs. Bell and Daldy). Two Volumes of Autograph Letters of celebrated Actors, with Engravings; Autograph MSS. of Charles Dickens, "Robert Bolton, the Gentleman connected with the Press" (Mr. Bentley), etc. Many of these objects were viewed with great interest. The gathering was altogether a most agreeable and instructive one.

Composition and Quality of the Metropolitan Waters in June, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	17·90	0·097	0·147	0·003	14·5	3·9
West Middlesex .	19·00	0·070	0·131	0·001	15·5	4·6
Southwark & Vauxhall . . .	19·13	0·102	0·131	0·003	15·6	4·0
Chelsea . . .	18·07	0·093	0·166	0·002	14·6	4·0
Lambeth . . .	18·87	0·090	0·111	0·003	14·8	3·9
Other Companies.						
Kent	27·43	0·009	0·220	0·000	20·6	6·0
New River . .	17·93	0·042	0·131	0·000	14·9	3·8
East London . .	19·73	0·048	0·168	0·001	16·0	4·8

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was more or less turbid—namely, in that of the Lambeth, the Chelsea, and the Southwark and Vauxhall Companies.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 107,859,997 gallons; and the number of houses supplied was 495,649. This is at the rate of 33 gallons per head of the population daily.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The letter of our Paris Correspondent is unavoidably delayed this week.

Dr. McCraith's interesting paper on Lithotomy in Smyrna is in type, and shall be published as soon as possible.

Dr. Williams, Malvern.—The number referred to is, as may be seen in a recent advertisement, that for February 6, 1869. Try Trübner, Paternoster-row, for the journal, but we fear you will have to wait. You very greatly mistake the aims of the *Medical Times and Gazette* if you suppose it inclined to ignore any *rational* method of treating disease.

Corrigendum.—We were wrong in stating last week that the task of selecting a German physician as director of the new hospital and medical school at *Myako* (misspelt *Nyaka*) had been entrusted to the Professors of the University at Leipsic. Dr. Junker, who has been selected for this important and responsible post, was Surgeon of the English, as well as of the German, Hospital at Saärbrucken during the late war.

Winton.—1. There are instruments for plugging the posterior nares in cases of severe hæmorrhage; but the ordinary mode of using a bougie or wire—passing it through the nostril into the pharynx with the loop of a piece of silk on it, and bringing out the silk through the mouth—is easily done in most cases, according to the instructions in surgical works. But plugging is seldom required in the case of young people. 2. A combination of quinine, sulphuric acid, and small dose of sulphate of magnesia. 3. You should recommend the patient to give up study and seek fresh country air. A little book lately reviewed in our columns, the "Hygiène Scolaire" of Dr. Guillaume, ascribes nose-bleeding to the mental excitement and stooping posture of study, and gives a curious table, whereby it appears that in the Municipal College of Neuchâtel, out of 350 boys from 7 to 16, 97 were subject to headaches and 77 to nose-bleeding; whilst out of 731 girls, 296 were affected with headache and 155 with nose-bleeding.

THE BERMONDSEY WATER FAMINE.

The following remarks by Dr. Parker, the able Medical Officer of Health for Bermondsey, reached us last week too late for insertion:—"The Southwark and Vauxhall Water Company have for several years caused much discontent by the unsatisfactory way in which they have supplied water to Bermondsey. For three days the week before last the supply was almost *nil*. The explanation offered is that a quantity of fish-spawn has choked the filter-beds, but this excuse does not account for the constant—and annually increasing—complaints. The districts supplied by this Company have increased enormously in population, and the Company's works have not kept pace with that increase. There is plenty of water in the district now. The general deficiency has become such a notorious fact that the insurance offices have increased their rates of insurance in large establishments in Southwark. This was stated by a manufacturer on an occasion when I brought the water question before the Vestry last year. After about ten years' warfare between the Vestry and the Water Company, during which the Company has been before the Board of Trade three times, the press have now come to the rescue; but sensational and absurd articles have been written, calculated to do more harm than good. An inquiry must soon take place, which I do not wish to prejudice or anticipate, but nothing will be satisfactory until it is proved not only that the Company have got the water, but that they have got the mains and pumping power to deliver it. I am happy to say that the parish has not suffered in health. The want of water at our public baths has been alluded to. They were stopped as regards the high service for warm baths for two days; but this occurred at least three times last summer."

COMMUNICATIONS have been received from—

Dr. J. WILLIAMS; Mr. J. DIXON; Mr. W. P. TRUSTRAM; Dr. HYSLOP; Mr. SYDNEY JONES; Dr. CARR; Dr. WICKHAM BARNES: Dr. LORY MARSH; Dr. LETHEBY; Dr. J. R. HARDIE; Mr. TEEVAN; Dr. LAWSON; Dr. E. COPEMAN; Mr. J. CHATTO.

BOOKS RECEIVED—

The Diamond Fields, with Notes on the Cape Colony and Natal, by F. Algar—Braithwaite's Retrospect of Medicine, vol. lxv.—Half-yearly Abstract of the Medical Sciences, vol. lv.—Are the Beneficent Uses of Public Institutions adequately supported by their Present Organisation? a Social Question, by James Hawkins.

PERIODICALS AND NEWSPAPERS RECEIVED—

Croydon Advertiser—Mental Journal, July—Royal Cornwall Gazette—Pharmaceutical Journal—Medical Press—Edinburgh Medical Journal, July—Philadelphia Medical Times—Monthly Microscopical Journal, July—Popular Science Review, July—Science Gossip, July—The Medical Archives, June—Food, Water, and Air, July.

APPOINTMENTS FOR THE WEEK.

July 6. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

8. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

9. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

11. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

12. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 29, 1872.

BIRTHS.

Births of Boys, 1079; Girls, 1068; Total, 2147.
Average of 10 corresponding weeks, 1862-71, 2037·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	580	490	1070
Average of the ten years 1862-71	665·8	620·8	1286·6
Average corrected to increased population	...	...	1415
Deaths of people aged 80 and upwards	...	...	30

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	4	5	1	...	10	...	2	...	2
North ...	751668	19	8	4	...	8	...	6	1	5
Central ...	333887	...	2	1	...	6	...	2	1	6
East	638928	6	8	..	...	5	1	4	2	13
South	966132	14	10	5	...	15	1	...	...	11
Total	3251804	43	33	11	...	44	2	14	4	37

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·710 in.
Mean temperature	60·3°
Highest point of thermometer	78·7°
Lowest point of thermometer	46·8°
Mean dew-point temperature	51·1°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·45 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 29, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending June 29.	Deaths Registered during the week ending June 29.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2147	1070	78·7	46·8	60·3	15·72	0·45	1·14
Portsmouth ..	115455	12·1	75	49	72·2	44·4	57·0	13·89	0·05	0·13
Norwich	81105	10·9	43	32	74·5	47·0	58·7	14·83	0·53	1·35
Bristol	186428	39·8	123	54	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	56	29	73·5	45·2	57·7	14·28	2·69	6·83
Birmingham ...	350164	44·7	265	119	75·8	49·0	58·1	14·50	1·36	3·45
Leicester	99143	31·0	117	58	80·0	45·0	59·2	15·11	0·71	1·80
Nottingham ...	88225	44·2	59	38	79·7	44·4	60·3	15·72	0·65	1·65
Liverpool	499897	97·9	401	210	71·1	45·6	57·1	13·94	0·97	2·46
Manchester ...	352759	78·6	226	153	...	...	...	...	...	...
Salford	127923	24·7	78	54	74·5	45·2	57·4	14·11	1·60	4·06
Oldham	84004	20·2	65	33	...	...	...	...	...	...
Bradford	151720	23·0	164	55	75·0	50·0	59·8	15·44	0·99	2·51
Leeds	266564	12·2	311	89	75·0	49·0	58·4	14·66	1·65	4·19
Sheffield	247847	10·9	249	95	77·0	48·5	58·2	14·55	1·37	3·48
Hull	124976	35·1	80	41	74·0	46·0	58·5	14·72	0·76	1·93
Sunderland ...	100665	30·4	139	45	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	129	60	...	...	...	...	...	...
Edinburgh	205146	46·3	148	102	73·0	45·7	56·6	13·66	1·20	3·05
Glasgow	489136	94·8	357	268	...	...	...	...	...	...
Dublin	310565	31·9	194	190	70·9	43·0	57·1	13·94	0·39	0·99
Total of 21 Towns in United Kingd'm	7393052	34·0	5480	2842	80·0	43·0	58·3	14·61	1·02	2·59

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·71 in. The highest was 29·96 in. on Sunday morning, the 23rd ult., and the lowest 29·45 in. on Tuesday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE PRINCIPLES OF THE TREATMENT OF FEVER.

By Dr. LIONEL S. BEALE, F.R.S.,
Fellow of the Royal College of Physicians; Physician to King's College Hospital.

Lecture V.

OF THE ACTION OF STIMULANTS IN SEVERE CASES OF FEBRILE AND INFLAMMATORY DISEASES, AND OF THE PRINCIPLES UPON WHICH THEIR ADMINISTRATION IS BASED.

WHEN considering the circumstances which lead to death in severe cases of fever, I showed that the failure of the heart's action, the alteration in the composition of the blood, and the obstruction of the capillaries, and the consequent interference with the process of nutrition, all contribute to bring about a fatal result. Now, in slight cases frequent doses of alcohol tend to prevent these occurrences, and when the attack is severe, to mitigate its severity, to postpone the occurrence of the dangerous phenomena, and to prevent them from progressing to such an extent as to render a fatal result probable.

Alcohol, then, exerts a twofold action when given in cases of fever. It acts *directly* upon the nerves of the stomach, and through these excites almost instantly increased contraction of heart. The less *direct* action of alcohol is much more complex, and occurs more slowly; for before it can exert the indirect influence I refer to, it must be absorbed by the blood and circulated with it to all parts of the body. Although I have drawn attention to the facts upon which my views concerning the important indirect influence of alcohol are based, the subject is of such vast practical importance that I shall offer no apology for passing in review the several scientific arguments, which, it appears to me, prove conclusively the way in which, by the judicious use of this most important remedy, the saving of life is effected. But first, a very few words concerning the direct action of alcohol.

1. *Direct Action of Alcohol in keeping up the Heart's Action, and promoting the Capillary Circulation.*

Now, as to the probable action of alcohol in saving life, and retarding a fatal result in desperate cases of fever and extensive internal inflammation, I will remark that its value in exciting the heart to more vigorous contraction is admitted by all. The fact is in accordance with the actual experience of many of the effect of stimulants upon themselves, and physiological experiment has proved that by the action of alcohol upon the nerves of the stomach the heart's action is accelerated. The value of stimulants in promoting the capillary circulation has been recognised by several physicians, but Sir D. J. Corrigan especially has dwelt upon the great importance of giving alcohol in fever, because it maintains the flow of blood through the minute vessels of the tissues of the body. In his "Lectures on the Treatment of Fever," published in 1853, and containing the results of great experience and many years of careful observation, occurs the following passage, which deserves to be quoted at length:—

"Ask yourselves for what is it in typhus fever you prescribe wine? Is it for delirium? No. Is it to prevent its approach? Again, no. Do you give it for a dry tongue? Certainly not. What is it that, as you consider a patient's state, would lead you to think of its employment? Is it not the state of the function of circulation, taken as a whole, indexed to you by the pulse on the one hand, and by the state of the capillary system of circulation in the skin on the other?

"It is for this you give it. It is the specific remedy directed to remedy the general lesion of the function of circulation, and hence in its administration you may give it whether there is or is not delirium; for delirium may be present or absent in a case requiring its exhibition for the function of circulation. You should give it indifferently whether the tongue is moist or dry; for the tongue may be either, and yet wine may be required; and hence the tongue's becoming moist is not an indication that you may dispense with its use, nor is its continuing dry a sign to make you discontinue it. You may give it with a soft abdomen, or with an abdomen tympanitic, for similar reasons. You are giving wine, recollect, as the specific remedy for the lesion of the function of circulation (remember always, comprising under this the capillary and cardiac circulation); and by the state of pulse, and changes in the colour of the maculæ, you are to judge of the necessity of continuing, decreasing, or augmenting its dose. Under its exhibition you will see the vessels of the conjunctiva contract, the maculæ become rose-coloured, and the patches of skin on dependent portions of the body lose their dark livid hue. Keep this, then, in mind—the lesion in fever for which you give wine, is the lesion of circulation; and if this function from debility require it, you must give it under all circumstances of derangement of other functions." (a)

2. *Indirect Action of Alcohol on the Blood and on the Bioplasm of the Tissues.*

In order that a correct idea may be formed of the manner in which the indirect action of alcohol upon the constituents of the blood and upon the bioplasm in fever and inflammation is effected, it is necessary to direct the reader's attention to some questions of scientific detail, some of which may appear only very remotely connected with the subject, but which are nevertheless important, partly because they indicate precisely the change which is effected by the agent, partly because they enable us to correct erroneous theories which have hitherto been acted upon. And first as regards the conclusions formerly taught, and still to some extent believed, concerning the value of bleeding in fever and inflammation. (b)

Of Bleeding, and the Life of the Blood. Vital Stimuli, and of the life-giving and renewing Theory.—From the earliest ages those who have devoted themselves to the study of disease, have regarded the condition of the blood as of the highest importance. To a bad state of this fluid many ailments have been correctly ascribed. To alter this state was and is the main object of treatment. Modern research has confirmed the opinion so long and so generally entertained with reference to the high importance of a healthy state of blood; and modern practice is eminently conservative of this fluid. Of late this view, like every other correct doctrine, has been assailed and doubts cast upon its correctness, but it has not suffered from the attack.

The principles upon which the removal of large quantities of blood was advocated and carried out at various periods in the history of Medicine have been proved to have been founded upon incorrect data. The old theories of inflammation, even yet maintained by some, have been completely upset by observation and experiment. The blood, which used to be freely drawn for the purpose of reducing an excess of action is now considered, and in cases of the very same class, to be absolutely necessary for the recovery of the patient. It has been proved conclusively—(1) that morbid changes, which were formerly supposed to be checked by bleeding, really continue in spite of it; and (2) that by violent bleeding the general condition of the patient is rendered much more serious than before. Formerly a patient was bled to *cut short the disease;* now he is bled only for the purpose of relieving the tension of over-distended capillaries.

The blood has been, and still continues to be, regarded as a living fluid which carries life to all the tissues. Vital power is said to be reduced by abstraction of blood. Vital power is said to be restored or "renewed" by those remedies which increase the quantity of blood or improve its quality. That the blood is the medium by which nutrient matter is distributed to all the tissues of the body, is beyond question. That its qualities are altered in disease, and that in many instances the blood is, as it were, the starting-point of certain morbid changes, is undoubtedly correct. But that the blood transmits *vital power* to the body generally, to the tissues of the body individually—that vital power is diminished by its abstraction, or increased by any alteration occurring in the blood—seems to me utterly untenable. There is no reason whatever for assuming that what we call *vital power* can be carried from one place to another by any fluid or solid, and distributed to structures in a distant part of the body. Nor is it probable that this wonderful vital power can be added to or taken from any tissue at all. When we give stimulants, we do not increase *vital* power at all. The blood will, I dare say, continue to be called a *vital fluid*, but the term is not correct; for there is every reason to think that the soluble albuminous constituents and the red blood-corpuscles are as inanimate while circulating in the vessels of the living body as they are after the blood has been withdrawn from the vessels. (c)

(a) "Lectures on the Nature and Treatment of Fever," by Sir D. J. Corrigan, Bart., p. 58.

(b) The views put forward in the following pages have been taught by me since the year 1860, and will be found published in the *British Medical Journal* for 1863.

(c) The matter of which each red blood-corpuscle is composed tends to assume the crystalline form when its movement ceases. This is well seen in guineapigs' blood. Each red corpuscle becomes a tetrahedral crystal.

Every kind of pabulum and every stimulant, like every narcotic, and every medicinal remedy is inanimate. Everything which contributes to nutrition is lifeless. Living matter never lives upon *living matter*. The pabulum of the tissues, especially in the case of man and the higher animals, results, no doubt, entirely from the death of living matter; but, as pabulum, it is inanimate. But although the blood is not a living fluid, it contains masses of living matter (colourless corpuscles and minute particles of bioplasm in great number), and many corpuscles which are not living (fully formed red corpuscles).

Neither blood, nor lymph, nor chyle, nor cod-liver oil, nor alcohol, nor any nutritive substance whatever, can be correctly spoken of as *life-giving*. Nor do certain conditions call forth "*vital energy*," or act as "*vital stimuli*," or increase vital power which already exists. Heat, various external conditions, and excitants or irritants, as they are termed, act simply by diminishing to some extent the restrictions under which life is ordinarily carried on,(d) and thus pabulum is permitted to come more readily and more quickly into contact with matter that already lives.

What happens in Nutrition.—The food that is absorbed in an altered state by the blood does not transmit life to the tissues; for, as I have shown, every tissue contains in its substance matter in a state of active vitality, or *bioplasm*. The pabulum that passes from the vessels and permeates the lifeless tissue is inanimate. It comes into contact with the living matter; and certain of its constituents then acquire at once vital properties, powers, or endowments. By contact with and absorption into the living, life is communicated to that which was lifeless. There is no reason to suppose that living matter (for instance, the so-called "nucleus" of a cell) exerts any influence upon matter at a distance from it; but it appears probable that in all cases the changes which occur in nutrition are simply these:

The inanimate pabulum permeates the inanimate tissue (cell-wall, intercellular substance), and comes into contact with the living or germinal matter or bioplasm. Certain of the inanimate constituents of the pabulum become bioplasm. Particles of the living matter or bioplasm after a time undergo change—in fact die, and become gradually converted into inanimate "cell-contents," "cell-wall," or "intercellular substance." These inanimate *formed substances* may accumulate and undergo condensation and other physical and chemical changes, or they may be resolved by the action of water, oxygen, and the like, into new substances as fast as they are produced. Such new matters produced by the agency of the bioplasm of "gland cells" may pass into a tube or duct, and in many cases constitute a secretion.

The rate at which bioplasm grows and is reproduced is determined solely by the facility of access of the proper pabulum; so that, if nutrient matter comes into contact with the living matter readily, the living matter increases rapidly. In short, the more it is fed, the faster it grows. The *power* of growth on the part of living matter remains the same, but actual growth always occurs under certain restrictions. The restrictions or impediments to the access of nutrient matter vary in different cells, and in the same cell at different periods of its existence. Alcohol and many other substances cause changes which result in increased impediment of access of nutrient matter.

Alcohol is not a Food, but is absorbed as Alcohol.—It is probable that whenever alcohol is taken, a certain proportion, which increases as the dose is augmented, passes into the blood and circulates with that fluid as alcohol. It may permeate the tissues and produce changes in them. Many other active agents are taken up by the blood, and under certain circumstances produce a direct action upon the tissues. These substances may then undergo change, and perhaps be completely decomposed, and their elements excreted in an altogether different state of combination from the body. Being transmitted by the blood to different parts of the body, such soluble materials may modify the growth of tissues and affect the rate at which growth takes place. Nay, we know that by certain soluble matters introduced from without circulating with the blood the formation and growth of tissues may be actually prevented. For the further elucidation of the matter under consideration, it is desirable to refer briefly to the varying rate of growth of bioplasm under altered conditions of life.

Of Slow and Rapid Growth.—We can tell at once, by the characters of a cell, whether it has been growing quickly or slowly. Whenever the outer part of the cell (formed material) is firm and hard, and not very permeable to nutrient matter, the growth must have been slow. Where, on the other hand, the envelope is very thin, or where there is no envelope or cell-wall at all, the greatest facilities for rapid growth exist. Contrast the pus-corpuscle, consisting almost entirely of bioplasm, which has grown perhaps in the course of a few hours, with a fully formed cuticular cell in which the bioplasm is surrounded by a very thick layer of slightly permeable cuticular substance. The restrictions under which the growth of the bioplasm of the last is carried on are far greater than those which limit the growth of the first. But anything which renders the wall of a slow-growing cell more permeable will facilitate the access of pabulum, and its bioplasm will then increase more rapidly. Thus rapidly growing bioplasm may spring directly from bioplasm which has been growing very slowly. Pus may result from the rapid growth of the bioplasm of epithelium, fibrous tissue, nerve, or other tissue which has been growing very slowly. Cancer grows faster than healthy epithelium or other normal tissue, but not so fast as pus. Epithelial cancer is less permanent as a tissue, and grows more quickly than the normal epithelium, but it is more lasting than pus and less quickly produced. On the other hand, anything which tends to coagulate or harden bioplasm on its surface will have the effect of retarding its growth.

Disease is not due to Defective Action.—From the considerations advanced in the last few paragraphs it must be clear that the doctrine that disease is a *deficiency of action* must be erroneous. The idea that support is required to counteract this tendency to depression of the vital powers is purely fanciful, as is also the notion that something extra must be added in order to make up for the loss occasioned by the diseased state. Although we see structures in disease growing so fast that difference in bulk is perceptible from day to day, still pathologists continue to talk of "*deficiency of action*," "*defective vital power*," "*diminished vitality*," as if it was certain that by these phrases the phenomena of disease were to be explained. The surgeon "*stimulates*" the wound with caustics, and fancies that he "increases" the "*vitality*" of the surface just below; the physician pours in brandy, and supposes that he "*increases the vitality*" of the affected tissues. But it is easy to prove that by these measures many cells that were alive are *killed*, and that those that escape death live and *grow more slowly than before*. This *diminished rate of growth and life* is really what is required—it is indeed the very condition which approaches to the healthy state; but then it is, as compared with the morbid state, the very reverse of "*increased vitality*."

Probably even now most physicians would affirm that there was deficiency of vital power in a case of low pneumonia; and yet what evidence is there of such deficiency? It is true, the patient is weak and cannot move; he may be delirious; all his muscles may be relaxed; his heart's action may be weak; and he may be dying of exhaustion; but has it been shown that weakness, or inability to move, or delirium, or relaxed muscles, or weak heart's action, or what we call "exhaustion," are due to diminished vitality, to depression of *vital power*? It is very well to say that in this particular morbid change there is "excess of action," and in that one there is "deficiency," or in all disease there is deficiency of action; in this condition "the vital powers are depressed, and we must give support," and in another "the vital powers are too active, and must be restrained;" but these are, after all, but arbitrary phrases, and the same words are used in very different senses.

Surely, then, it will be more correct to say that a patient is low or weak than to say that he is suffering from a depressed state of the *vital powers*. The former phrase asserts a fact; the latter expresses a theory. We talk of excess of action, and diminished action, before we have agreed as to what we mean by the terms. If we attribute rapid growth, rapid change, to increased vital activity, then most unquestionably do many diseases which have been accounted for by some supposed diminution of vital power really depend upon an undue manifestation of vital action.

Conclusions.—It will be observed that in these conclusions I differ materially, and in fundamental principles, from the views generally entertained. Men may agree as regards practice, although they differ materially in opinion as to why certain measures ought to be employed in a given case. But when good practice rests upon unsound theory there is always great danger of the practice being abandoned when the theory is overthrown. This in part explains why we vacillate from one extreme of practice to the other, and why, to some extent,

This fact is conclusive against the notion that red blood-corpuscles are in an active state of vitality. Living matter does not crystallise.

(d) This view concerning stimuli, excitants, and irritants, is discussed in a short paper published in the *Lancet* for December 6, 1872, and was a year or two afterwards more fully considered in papers published in the *Medical Times and Gazette*.

we seem to work in recurring circles. Earnest men not unfrequently are found to be sceptics upon the question of the proper management of disease; and, in the course of years, most valuable practical conclusions, arrived at from actual experience, are forgotten, because the theory upon which these conclusions were based has been overthrown and proved to be unsound. But why, for example, may we not retain in practice the depleting process in those cases in which it has been proved to be of service, although the principles upon which depletion was carried to foolish extremes have been proved to be erroneous? And, on the other hand, why may we not continue to carry on the system of stimulation in cases in which stimulants are known to be useful, although it may be quite true that stimulants neither support life, nor give life, nor nourish tissues, nor supply the place of food, nor directly affect the disintegration of tissues?

So far from the abstraction of blood diminishing the nutrition of bioplasm, the process may actually be increased by violent bleeding. The blood that remains becomes weaker, and the watery parts necessarily permeate tissues more readily. Thus rapidly-growing cells, such as exist in the air-cells in pneumonia, grow still faster, because they are supplied more freely with nutrient pabulum. On the other hand, alcohol in several ways interferes with the growth of these bioplasts, and thus tends to put a stop to the "inflammatory process." The results of practice, in fact, support *this* theory: that in low conditions of the system, and by profuse bleedings, the growth of adventitious products is *accelerated;* and that such growth is retarded by alcohol, acids, and some other substances.

Of Support.—Further, as regards the meaning of the term "support," it is necessary to make a few observations. In cases of exhausting disease, we all talk very freely in these days of the importance of *support;* and many physicians would regard alcohol as the most valuable of all kinds of support given. Nevertheless, in these very cases the patient, in spite of all the support, loses many pounds in weight, and in the course of a few weeks or even days; nor is it possible by any known means to prevent this result. And it is a fact that, in many of the worst cases I have seen, although the stomach seemed to do its work perfectly, and the quantities of supporting matter consumed by the patient were very great, the emaciation was extreme. The patient under these circumstances has been kept alive long enough to become extremely emaciated. Such emaciation would not exist if the patient were left to nature, because death would have occurred before matters had proceeded to this extremity. But it does not follow that he has been kept alive by food or by matters that support like food. In these cases, I feel confident that the stimulant is really the agent which has kept the patient alive; for it sometimes happens that patients will not take any form of nutriment, and not unfrequently the stomach will bear whisky or brandy, and in large quantity, where it instantly rejects beef-tea, milk, and other "nutritious substances." From what I have observed, I think it possible that a patient suffering from low pneumonia, or from a very severe form of continued fever, or acute rheumatism complicated with pericarditis and pneumonia, might be kept alive until the disease subsided by alcohol alone, but not because the alcohol acts like food and supports him and nourishes his tissues. It is certain that the alcohol does not nourish the tissues in the ordinary sense of the word; and if it diminishes the waste of the tissues in these cases, it must be admitted that it is difficult to conceive waste more extreme than that which has taken place while the patient has been taking large quantities of alcohol. But the patient lives; and so many account for the result by concluding at once that the alcohol must be a "*supporter of life*," although they are aware that this same alcohol, administered in the very same quantities in the healthy state, might destroy life.

There is not a more important question in Medicine to be determined than the action of alcohol in disease; for, while it has been conclusively proved that it is not a food and does not directly nourish the tissues, there cannot be the slightest difference of opinion among practical men concerning its value as a remedy. We differ widely in our views as to the extent to which alcoholic treatment should be carried in a given case, but almost all agree that in some cases alcohol ought to be prescribed, and in considerable quantities.

UNIVERSITY COLLEGE, LONDON.—The Atkinson-Morley Scholarship for proficiency in Surgery has been awarded to Mr. R. J. Godlee, and Mr. Walter Rigden has been appointed Resident Medical Officer of the Hospital.

ON THE TREATMENT OF ANEURISM.

By THOMAS BRYANT, F.R.C.S.,
Surgeon to Guy's Hospital.

LECTURE I.—*Continued.*(a)

THE treatment by ligature now claims attention; but before proceeding to consider under what circumstances the ligature should be tried, I will just relate one or two cases in which the ligature was employed. I will say this, however, that in simple aneurisms that are slowly developing, the treatment by pressure and flexion, separately or combined, ought to be first employed; and we are not justified in resorting to the more severe operation of ligature if these minor measures are at all applicable. There are certain cases, however, where these means cannot be used—where they are inapplicable or have failed: these we shall consider presently.

I will now read you a case of aneurism of the right femoral artery, treated by compression and the subsequent ligature of the artery, pyæmia and death being the result. The case is one that too well illustrates the dangers of surgical treatment.

Aneurism of Right Femoral Artery—Compression—Ligature of Artery—Pyæmia—Death.

[Reported by Mr. BARNARD.]

Charles P., aged 33, a labourer, was admitted into Guy's Hospital, under Mr. Bryant's care, on October 7, 1871, with an aneurism of the right femoral artery. He was apparently a healthy man in all other respects, and had never been ill.

Five weeks ago, when carrying two planks, 13 feet long by 3 inches thick, against his right side, close to his hip, one of them slipped and fell against the upper part of his thigh, which he raised to save it. He felt a sharp pain in the spot, and a feeling as if something had given way. He was able, however, to go on with his work for an hour and a half. He walked home although in pain—the pain shooting down the inner side of the calf of the leg and thigh. He laid up all next day. On the night of the accident, however, he noticed a lump the size of a chestnut at the seat of injury. On the third day he went to work, and the swelling increased to double its size at the end of the day; it did not, however, pain him much.

He kept at home the next day, when the swelling diminished, and pain decreased. He then went to work again, and for two or three weeks worked and rested alternately, according to the amount of pain in the limb. For the last two weeks, however, he has kept completely at rest. He walked, or rather limped, to the Hospital from Deptford.

On Admission.—The middle third of the right thigh is occupied by a globular pulsating swelling, four inches and a half in the long diameter, and six inches transversely. It is very elastic and pulsatile, and by pressure it can be completely emptied. The slightest pressure upon the femoral artery above arrests all pulsation in the swelling. The vessels below are indistinctly perceptible. He complains of much pain down the inner side of the leg and foot, also in the seat of the tumour. The semi-flexed position of the leg is the only easy one. He has not slept for four nights from the pain. The tumour clearly occupies the upper part of Hunter's canal.

Compression of the artery was at once commenced (3.45 p.m.), as it was evident, Mr. Bryant said, the aneurism was likely to become diffused very soon if some consolidation in it did not take place. The pressure was applied by means of Bellingham's weight in the groin (10 lbs.) This was suspended across the bed from an iron bar, the patient adjusting it with facility. The case was watched by the dresser. After four hours, however, the pain so increased that the weight was removed for five minutes. It was readjusted as before, and removed at 11.30, eight hours after its first application. The tumour was then hard and free from pulsation. A morphia subcutaneous injection was given.

On October 10, two days after the tumour had apparently consolidated, slight pulsation was felt in it. Right leg feels hotter than left. Temperature only 95·2°.

October 12.—The pulsation in the tumour still being perceptible, Mr. Bryant ordered the weight to be readjusted. It was kept on for three hours and then removed, the dresser thinking all pulsation had ceased.

16th.—Last evening the man gradually stretched out his leg. Directly he had done so he felt a sharp pain down its whole length, and strong pulsation reappeared in the tumour, with great increase in its size. Mr. Bryant was sent for (10.30), and the weight was at once readjusted, and by it all pulsation was

(a) Delivered in March, 1872.

effectually arrested. The tumour again rapidly contracted and consolidated, all pulsation ceasing. The weight was kept on for twenty-two hours and then removed, the tumour having recovered its former size and character.

19th.—Slight pulsation again appeared, but it was so slight that Mr. Bryant thought it might be due simply to the contact of a vessel.

24th.—The weight was reapplied, as it was thought more pulsation existed; indeed, the sphygmograph indicated the fact very clearly. It was kept on for some hours. The tumour consolidated, and a cure was thought to have been effected, when the swelling gradually became soft, and fluctuating, and pulsatile. Mr. Bryant consequently determined to tie the femoral artery.

This he did on November 1. For some days everything went on well, when rigors appeared, and it became evident the aneurism was softening down.

On November 15 Mr. Bryant cut into it, and turned out some ounces of loose coagulated blood, not laminated. On this day the ligature came away; no bleeding following. Pyæmia unhappily followed all these operative proceedings, and death occurred on November 21.

Pneumonia existed, and pus in shoulder-joints. An aneurism of the aorta from its transverse portion was found, three inches in diameter, with a laminated clot within. The femoral aneurism was a false one, evidently from a ruptured artery, the rupture having taken place in the upper part of Hunter's canal.

Now, such a case as this has many important lessons. At first good success appeared to have attended the treatment by compression, and it is possible that if the man had kept his limb perfectly quiet a complete cure might have been effected; for it is certain that the simple stretching of the limb on the fourth day after pulsation had ceased was enough to dislodge the clot that had occluded the mouth of the aneurism or the vessel itself, and thus give rise to fresh pulsation. The pyæmia that followed the operation was probably caused by absorption of some of the fluid blood in the sac, that had failed to organise, and was breaking down. Whether such a consequence is to be attributed to the operation or not is an open question; the probabilities are that some connexion existed between the two, although, with a mass of blood disintegrating and breaking up, septicæmia is as likely to take place as from a wound.

I will now give you the brief history of another fatal case, to illustrate a second cause of death after the arrest of the circulation through the artery leading to the aneurism. In this case it followed the application of a ligature, but it is as liable to occur after any other form of practice; indeed, in the case last quoted, such a consequence might probably have taken place had the man lived long enough. I mean the sloughing of the aneurismal sac with its contents. The case is as follows:—

Aneurism of the Carotid (Left) Artery—Ligature—Death from Sloughing of the Sac thirty-six days after the Operation.

[Reported by Mr. M. Reid.]

Henry E., aged 29, a painter, was admitted into Guy's Hospital, under Mr. Bryant's care, on August 14, 1871, having been sent up to Mr. Bryant by Dr. Duke, of Dover. He had never had syphilis or rheumatism.

He had had good health up to October, 1868, when one day, while he was working on a gasometer in the open air from 1 p.m. to 6 p.m., he suddenly felt stiff and cold. He got down with difficulty, and went home to bed, feeling very ill. He remained in bed for three days, and returned to work. He then noticed a small lump on the left side of his neck, which he thought was "the glands coming down." Since then the lump has gradually increased. It has never, however, given him any pain. Ten days ago he went to the Dover Hospital and saw Dr. Duke, who at once, recognising its nature, sent him up to Mr. Bryant.

On admission a large, round, pulsating aneurism of the left carotid was at once made out, occupying nearly the whole space from the clavicle to the angle of the jaw. It presses the thyroid cartilage nearly one inch out of the median line. The tumour is soft and pulsating; it can readily be emptied on pressure. There is a distinct bruit in the tumour. The patient has no difficulty in swallowing. There is no apparent difference between the radial arteries as indicated by the sphygmograph.

August 18.—Mr. Bryant applied a ligature to the carotid artery, just as it emerges from the thorax. The vessel was very deep. A whipcord ligature was employed, and it was cut off close. No difficulties were met with to record. The incision employed was a long one, along the anterior border of the sterno-mastoid muscle. Morphia suppositories were ordered to be used twice a day.

19th.—Patient had a quiet night; complained of pain in the right side of his chest. 10 a.m.: Temperature of left external ear, 98·6°; of right, 100·8°. Iced milk and beef-tea ordered. 10 p.m.: Temperature of left ear, 101·2°; right, 102°.

20th.—Passed a good night.

21st.—Is slightly restless. Hiccough from 1.30 to 3. At 4 a.m. began to doze, and slept till morning. Temperature: Right external ear, 99°; left, 98·8°. A subcutaneous injection of morphia ordered.

23rd.—Wound dressed; nearly whole line of wound washed; stitches removed. Aneurismal swelling greatly decreased; no pulsation; tumour hard. Temperature: Left ear, 100°; right, 101°.

24th.—Had occasional fits of coughing during last night, which disturbed him.

30th.—Wound open at lower angle, discharging pus; cough still troublesome.

September 1.—4 p.m.: Bleeding suddenly took place to-day, and again at 7 and 4 a.m. on September 2. It was readily arrested by the application of ice.

6th.—Complains of sorethroat and difficulty in swallowing; the whole throat on left side is swollen and inflamed inside and out. Mr. Bryant said he feared there was some suppuration of the aneurismal sac, although there might be quinsy.

9th.—Patient is easier; he can take food; wound discharging freely.

14th.—Fluctuation over tumour distinct; a free incision made into it; pus alone escaped. Can drink freely.

18th.—Neck discharges profusely; swelling much smaller; granulations healthy; sleeps fairly, and takes food well; pulse 130.

20th.—8 a.m.: Bleeding took place from wound; mostly of "thick black coagulated blood."

21st.—Some bleeding occurred of fresh blood, which was arrested by pressure and ice; but his power gradually failed, and he died at 1.45 a.m.—thirty-six days after the operation.

After Death.—The heart and valves were healthy; large vessels atheromatous. The aneurismal sac had sloughed away, and the artery at the seat of the ligature was completely divided; the vessel below was thickened. The aneurism had clearly involved the upper half of the common carotid, and the origin of both external and internal.

In this case, as in many others, you should notice that the patient was young—only 29,—for you should know that aneurism is not a disease of old age; half the cases at least occur between the ages of 30 and 40, during the period of young adult life.

I propose now to pass on to consider the different circumstances in which the three forms of treatment are respectively applicable. But before doing so I will give you a successful case of ligature of a large vessel; for you must not run away with the notion that a bad result is the usual one. The facts I shall give you presently will show the contrary. In the case I am about to relate also the treatment by flexion was impossible, and that by pressure inexpedient.

Aneurism of the Right Iliq-Femoral Artery—Ligature of External Iliac—Recovery.

[Reported by Mr. Paramore.]

Charles T., aged 29, a lithographic printer, was admitted into Guy's Hospital on August 4, 1868, under Mr. Bryant's care, with a large aneurism occupying the right groin. He had been sent in to Mr. Bryant by Mr. Waring, of Walworth.

He stated that six months before, without any known injury, strain, or other cause, he observed a pulsating tumour in the right groin; but it gave him no pain for some weeks, nor any inconvenience. At the end of a month, however, when the swelling had increased, he found that his right leg used to swell towards night, and some pain appeared in the back of his thigh and calf of his leg. He, however, kept at work up to one week before his admission. He had been attending at a metropolitan hospital for some time, and had been poulticing the swelling. He applied to Mr. Waring only a few days before his admission. Mr. Waring, on making out the nature of the case, at once sent him to Mr. Bryant.

On admission a large pulsating tumour, as large as a hen's egg, occupied the right groin, its centre being about the line of Poupart's ligament; its long axis was downwards and inwards. It could readily be emptied by pressure, and evidently contained no clot. Pressure upon the artery above it arrested all pulsation in the tumour. The whole limb was

œdematous, the tumour clearly pressing upon the iliac vein. Ice was applied to the tumour and the limb raised.

On August 21 Mr. Bryant applied a ligature to the external iliac artery above the aneurism. Making an incision above, but parallel to, Poupart's ligament, he used a whipcord ligature that had been steeped in carbolic acid, cut off the ends, and closed the wound. Everything went on most favourably after the operation: the wound healed kindly, and the aneurism gradually consolidated and contracted.

On September 16 the wound had closed, all but one small orifice, and the aneurism was solid. In a week or so, however, the wound reopened, fresh suppuration appeared, and, on October 27, the ligature, or rather the loop, appeared in the wound and was discharged.

On November 20 the man left the Hospital well, and a month later he was at his work as well as ever.

In this case you will at once see that the treatment by flexion was quite inapplicable; it would have been impossible from the position of the aneurism to have occluded the afferent artery by any position of the limb, and any forcible flexion of the thigh upon the pelvis would have acted on the sac itself, and probably caused its rupture; for I must remind you that such a consequence is not rarely a result of this practice, even in cases more favourable for the treatment than the one I have just described. You will thus see, therefore, that there are certain examples of aneurism of the extremities, etc., in which the two forms of treatment—that of flexion and pressure, separately or combined—are inapplicable; and in such the application of the ligature to the afferent artery, where it can be performed, is the right operation. But I should like you to bear in mind, and to have it as your guiding rule in practice, that in all cases of aneurism of the extremities in which a cure can reasonably be looked for without a cutting operation, the surgeon is bound to employ the milder and less severe measures before he entertains the more severe; that in most small and slowly developing aneurisms of the extremities, in which the large venous trunks are not involved, the treatment by flexion or pressure—alone or combined—may be expected to succeed; that in all such cases the attempt to cure them by such means should always be made before recourse is had to the application of the ligature. In popliteal aneurism I have already shown to you that in a large number of cases treated by flexion one-fourth were successfully treated by it alone, one-fourth by it and other means, and that in half it failed. I can also tell you that at Guy's Hospital, during the fourteen years ended in 1870, in the same class of cases, pressure was applied in seventeen cases, and in eleven with success; in six it failed, and the vessel had to be ligatured. You will thus see that in at least two-thirds of the cases of popliteal aneurism a cure by pressure may be expected; that in one-third some other means will have to be employed. How to carry out the treatment by flexion has been already dwelt upon, and how to apply pressure has been indicated by the case I read to you. I think digital pressure is certainly far preferable to any other mode when it can be employed; for with the point of the finger or thumb you isolate the artery, and need not press either on the vein or the nerve. You thus prevent the pain nerve-pressure would excite, and prevent the chance of occlusion of the vein, which in the case of such a vein as the femoral would be fatal to the limb. In some cases there may be a difficulty in getting the requisite assistance, for one man alone cannot keep it up for any length of time. But of course in such a large hospital as this there ought never to be any difficulty on such a score, and the practice ought always to be primarily employed. When, however, digital compression cannot be employed, then instrumental pressure must be used; and of all instrumental pressure, I have no hesitation in saying that called "elastic" pressure is the right. The instrument I refer to is the one invented by Mr. G. Coles, consisting, as I dare say you know, of three telescopic tubes containing a spiral spring fixed to a firm handle. With such an instrument pressure can be steadily applied. I know it can be done for several hours together. When digital pressure cannot be employed, then I think that is the next best thing to use. We can have Cole's appliance fixed to any instrument; to Bellingham's tourniquet it seems to be well adapted. Messrs. Weiss have made two pads fixed to an iron bar, so as to alternate the pressure on different parts of the artery; with the elastic pressure this instrument promises well. So far, then, for flexion and pressure. We now come to cases in which they are not applicable. Of course in cases where these methods have failed, ligature must be had recourse to. But there is a certain class of cases in which I think such treatment is inapplicable—in which it would be best at once to apply the ligature. I mean in cases in which the aneurism is clearly due to an injury (traumatic aneurism), in which you may fairly say there is laceration and rupture of the artery—in which none of its coats or sheath form the sac of the aneurism; in which the aneurism is in a measure diffused, the blood being merely limited and confined by the expanded muscles or cellular tissue around; and in which the aneurism is rapidly developing. In all these cases I maintain that pressure is inapplicable, and you should at once tie, and for this reason: there is the fear that if we allow much time to elapse, and the complete cure of the aneurism does not take place, we shall have rupture; and then we know from experience that in popliteal aneurism there is nothing but amputation. I would sum all up briefly, therefore, in these words:—In all slowly forming aneurisms, and those not rapidly developing, in which the large veins of the extremity are not involved, pressure and flexion are the forms of treatment that should be first tried. In all cases that are rapidly developing, in which the veins are involved, as shown by the œdematous condition of the limb, especially if following an injury, ligature must be had recourse to. And I must tell you that the ligature of the femoral is not a bad operation. Syme used to think so well of it that he repudiated the treatment by pressure altogether; but in this he was wrong. At Guy's in the fourteen years ending in 1870 the femoral artery had been tied twenty-four times, with only one death, and that was from pyæmia. But this success must not lead you to do it for aneurism till other means have failed.

With these remarks I must close this lecture, having given you most of the leading points connected with the treatment of aneurism through the afferent artery.

At our next meeting I hope to be able to consider the treatment of aneurism in which the afferent artery is beyond the reach of the surgeon's means, and to consider with you the value of the treatment through the efferent vessel.

ORIGINAL COMMUNICATIONS.

LITHOTOMY IN SMYRNA.

By JAMES McCRAITH, M.D., F.R.C.S.,
Surgeon B.S. Hospital, Smyrna.

To the thirty-six cases of which a table is given, with details and observations thereon, in the *Medical Times and Gazette* of July 2 and 9, 1864, and April 14, 1866, I have now to add twelve cases operated on since then, with observations thereon. And first for encysted cases, of which very few instances are given in special treatises, and no observations or explanation generally offered. I have seen now five cases of encysted stone, and in every instance the cyst existed at the neck of the bladder, and could be reached and diagnosed as such by the finger passed into the rectum, as stated in my communication of April 14, 1866. I believe that when the stone is the cause of the cyst, this latter must invariably be found at the neck of the bladder, and for the reasons there given. When I last wrote I had seen three cases, having operated on two myself. Since then I have seen two more cases in which the cyst existed at the neck of the bladder. I was engaged to operate on one of these, but it passed into the hands of another surgeon, who found great difficulty in the operation, as I understand, and the patient succumbed in a few days. The second was brought to me a few weeks since; he had been a sufferer for some years from symptoms of stone, but the symptoms—or rather suffering—were much aggravated for the last few weeks, greater difficulty in making water, which only passed dribbling, keeping the patient wetted and in constant pain. On examining with the finger by the rectum I found an oblong stone of moderate size fixed in the neck of the bladder. On making pressure, to diagnose more clearly its shape and size, etc., it suddenly slipped away into the general cavity of the bladder beyond my reach. The patient felt greatly relieved, passed water more freely, went away with the understanding of returning in a few days, when he had made arrangements for being operated on. I have not seen him since. Now, it is evident that I have here fallen on the commencement of the process by which a stone becomes encysted; and I venture to give an explanation of such process. It consists essentially of ulceration. The mucous or any other coat of the bladder does

not protrude between the muscular fibres of the muscular coat, as is universally taught and stated in the schools and in treatises; but the stone, getting impacted in the neck of the bladder, by its pressure ulcerates through. It is the only means left by which a natural cure could be effected—an effort, in fact, of Nature to cure the disease; and the proof of what I advance is as follows:—The cyst, as it is called (cavity, more properly), is not lined by a smooth membrane, nor is the surface of the stone smooth or even. The surface of the stone (all I have seen) is most irregular, with anfractuosities—processes of the stone thrown out, and turning on themselves in a most irregular manner, leaving crevices and holes; and these crevices and holes correspond to processes, or rather granulations (many of them like long worms), which are inserted, as it were, into the depressions and crevices in the stone, by which this latter is actually attached to the surface of the cavity in which it is lodged. Once the offending body has ulcerated through the coats of the bladder, Nature makes an effort at closing the opening, and, under favourable circumstances, is perfectly competent to do so, shutting out the offending body and curing the disease. She very nearly effected this in my case No. 36, on which I made some remarks in the *Medical Times and Gazette* of April 14, 1866. I believe this to be the history, and the above to be the true explanation of encysted stone in the bladder. Should a cyst exist anywhere else except in the neck of the bladder—I do not see how it could exist, if the stone be found in a bladder otherwise healthy—but if a cyst exist from stricture or diseased prostate, a cyst may be formed in the bladder by the straining to expel the urine, in which case the mucous coat may be forced between the bands of muscular fibres, hypertrophied by the strain to which they are subjected. In this case the urine is retained in the cyst, or in the pouch formed behind an enlarged prostate, and, some urine always remaining in the bladder, the cyst or pouch is the cause of the formation of the stone. This case I have not yet met with in my experience; I believe such to be rare. The facts, then, are as follows:—If any difficulty of passing urine exist for some time, it is possible that a stone may be formed in a cyst at any part of the general cavity of the bladder. A stone in such circumstances will probably give no inconvenience; but if a stone be formed in an otherwise healthy bladder, no stricture or diseased prostate pre-existing, then the cyst will necessarily exist at the neck of the bladder, and the process of its formation will be as above stated—viz., impaction first and ulceration succeeding. It is evident that the median operation is alone applicable to these cases. Fortunately for those who prefer the "lateral," these cases can be very easily diagnosed beforehand. They also, I believe, take place generally, if not exclusively, in young subjects. So much for encysted stone in my limited experience.

I have had a case of union by first intention—the second in my practice. It is No. 49 in annexed table. This was a patient of Dr. Natali, Surgeon-Major in the Turkish Army, who begged of me to operate, as he had not any experience of such operations in his practice. Dr. Natali took charge of the after treatment of the patient. Dr. Borg, Physician to the Turkish Civil Hospital, gave chloroform. On the third day after operation Dr. Natali got uneasy, as no urine passed by the wound, and the patient complained of scalding in the urethra. Upon examining the wound I found it united perfectly in the deep parts, and the superficial wound slightly grooved at its edges. The following day he was quite at ease. No suppuration or granulation. This is the second case of such a result in my experience.

The calculus in No. 51 calls for some observations. It is all pure oxalate, except the nucleus, which is urate, and very small—about the size of a grain of rice. It (the nucleus) is not round and smooth, but irregular, and formed, as it were, of soft material; but its peculiarity is that this nucleus communicates by a canal with the surface, the opening of this canal being marked by a slight depression, just as takes place after the healing of an abscess in the soft parts. The surface of the calculus does not consist of large tubercles with smaller tubercles thereon, like a collection of mulberries, but is formed of small tubercles, with a deposit of sparkling crystals filling up the interstices and sprinkled over the general surface. If it had remained in the bladder, it would have got most likely an outer coating of triple phosphates. The cut surfaces have somewhat the appearance of the divided kidney. The centre nucleus, urate, communicates with the

Case, No.	Weight of stone.	Dimensions, in inches.	Shape.	Composition.	General appearance.	Age.	Duration of disease.	Result.
37..	℥v.	$2\frac{1}{4} \times 1\frac{1}{8}$	Longish, oval	Phosphates	Dark colour, rough surface from small crystals	8	..	Death from tetanus
38..	℥j.	$2 \times 1\frac{1}{2}$	Long oval, flattish	Urates	Rough surface, spongy texture, a patch at one end very rough	35	Some years	Death from exhaustion
39..	℥ss. gr. v.	$\frac{5}{8} \times \frac{1}{2}$	Triangular, flattish	Oxalate and phosphate	Surface covered by whitish small tubercles, oxalate	6	..	Death from peritonitis on 8th day
40..	℥vss.	$3\frac{5}{8} \times 2$	Triangular, flattish	Nucleus and centre oxalate, $1\frac{1}{2}$ inches phosphate layer, then $\frac{1}{4}$ inch oxalate crust, $\frac{1}{2}$ inch phosphate	Smooth white surface	34	..	Death 1 month after, from exhaustion
41..	℥v.	$1\frac{5}{8} \times 1\frac{1}{4}$	Long, flattish	Oxalate and phosphate in thin alternate layers	The flat surfaces are worn away in centre, making the ends enlarged	18	..	Cure
42..	℈j. gr. ij.	$\frac{5}{8} \times \frac{1}{2}$	Round, oval	Oxalate	Smooth polished surface	2	..	Cure
43..	℥ivss.	$1\frac{1}{2} \times 1\frac{1}{2}$	Round	Pure oxalate	Dark mahogany polished surface, with large tubercles	8	5 years	Cure
44..	℥jss.	$2 \times 1\frac{1}{2}$	Square, roundish	Phosphate	Rough, with perpendicular crystals standing on end	24	2 years	Cure
45..	℈iv.	$\frac{7}{8} \times \frac{3}{4}$	Egg-shaped	Oxalate	Dark, dirty tubercular surface	10	5 years	Cure
46..	℥j. gr. xv.	$\frac{3}{4} \times \frac{3}{4}$	Round	Nucleus urate, oxalate, & superficial layer phosphate	The tubercular surface covered by a superficial white phosphate deposit	7	1 year	Cure
47..	℈iv.	$1 \times \frac{3}{4} \times \frac{3}{4}$	Round, flattish	Urate	Smooth darkish surface	3	2 years	Cure
48..	℥ivss.	$1\frac{1}{8} \times 1 \times 1$	Roundish	Nucleus oxalate, crust phosphate	Part of surface smooth, part made up of crumbling calculi, phosphate, like small shot	14	10 years	Cure
49..	℥iv.	$2 \times 1\frac{1}{2} \times \frac{1}{2}$	Flattish, squarish, ends nearly equal	Nucleus urate, crust phosphate	Rough whitish surface, one half very rough	6	4 years	Cure on 3rd day
50..	℥ij. ℈ij. gr. ij.	$1\frac{3}{8} \times 1 \times 1$	Oval, flattish	Compacturate, darkish	Surface darkish, sprinkled over with shining very small crystals	15	6 years	Cure
51..	℥iv. ℈j.	$1\frac{1}{8} \times 1 \times \frac{3}{4}$	Roundish	Nucleus small, urate, oxalate	Dark surface, tubercular	19	4 years	Cure

exterior by a canal; the opening of this canal is marked by a depression on the surface. This calculus, when small, evidently had its surface marked by large tubers, these latter covered by tubercles, as in the generality of oxalate calculi; this surface becoming coated by a layer of small tubercles, being the outer layer. By accident I divided it through the depression, and so the canal was exposed. (I cut through calculi with a very fine dentist's file.) As I put the cut surfaces under a stream of water from a small cock, I am not certain but that the narrow canal may have been filled with the same material as the nucleus. If so, it has been washed away; but the nucleus, as described, remains. Can any of your readers explain this nucleus and canal? Chemistry acting in our living body is evidently very different from that we study, and whose powers we can put in action in the inorganic world.

Of these fifteen patients I operated on twelve, of which one (No. 38) succumbed on the fifth day of colliquative diarrhœa, the result of his long suffering. Another surgeon attempted the operation one year previously, and after long and painful attempts at extraction the patient was put to bed with the stone unextracted. The poor fellow continued to suffer for an entire year, and then I was applied to. I found him in such a state from colliquative diarrhœa that I told his friends no hope remained; but they called a consultation at which Dr. Wood, Dr. Narick, and another medical man decided that I should operate, "*perdu pour perdu*," to give him the chance. I accordingly operated, and in two minutes the stone was extracted, weighing one ounce. The patient was relieved, passed at least the last few days without suffering, but sank of exhaustion on the fifth day. This death not counting, I could say that I lost no patient in the last twelve cases.

The other three fatal cases (Nos. 37, 39, and 40) were operated on by another surgeon, I assisting and holding the staff for him. In No. 37 the opening into the bladder was very well done; the stone was at once seized, but broke in halves, and one part was brought away; but the operator could not seize the other part, though feeling it distinctly with the forceps. After various ineffectual attempts, he passed me the forceps, requesting me to try. At the very first attempt I brought away the remaining part. I suspect that one branch only of the forceps was passed into the bladder, the other slipping up between the coat of the bladder and the rectum, an accident very likely to happen, and one which should be carefully guarded against by all inexperienced operators. The operator in this case agreed with me that such was the case here. The little patient succumbed of tetanus on the eighth or ninth day. This may happen after the most careful and best-performed operations.

In case No. 40 the calculus was enormous, weighing five ounces and a half, and from its shape requiring a very large opening for its extraction. Ten years previously I extracted a stone of moderate size from this patient, with quick cure; suffering for last four or five years. The extraction here was extremely difficult, and more force unavoidably used than was at all safe; still the patient would have survived had he not been in such a miserable state of health. He survived a month, and died of colliquative diarrhœa. The wound had not entirely healed, and a recto-vesical fistula existed. This was not, however, the cause of death. This calculus was judged to be large by the procedure to which I ventured to call attention in my last communication—viz., finding the sound pass behind it when sounding; and only finding it with certainty by jerking the sound towards the operator, and catching it (the stone) in the concavity of the instrument.

The same manœuvre proved the stone a very large one in another case in which I was consulted, and in which the extraction proved difficult. The median is, I believe, the only operation practised here; and, as I was the first who regularly operated here, it would appear that the example was followed. The late Dr. Wood, in his latter cases, always performed it, I believe from my reasonings on the matter, for he used the lateral operation in his first cases, as I did myself.

Smyrna.

EXTRAORDINARY MORTALITY.—The mortality for the quarter ending June 30 in Sowerby Bridge was 130. This is the greatest return of deaths for any quarter for many years back, and shows an increase of 72. For the corresponding quarter in last year the deaths were only 58.

ON A CASE OF DEATH BY RUPTURE OF A CEREBRAL ABSCESS.

By TALFOURD JONES, M.B. Lond.,
University Medical Scholar;
Physician to the Brecknock County and Borough General Infirmary; formerly Medical Registrar to the Hospital for Sick Children.

CASES of cerebral abscess are not very rare, but it is not often that we have the opportunity of watching a case from its very beginning, or rather from the beginning of the changes in bone (here the petrous bone) on which it depends. Moreover, the mode of death—by rupture of the abscess—is unusual, and is of great clinical interest. The following is the order of events in this case:—(1) scarlet fever, (2) discharge from ears, (3) abscess connected with disease of the right petrous bone and projecting into the brain, (4) rupture of abscess, (5) death—autopsy. The first indications of brain mischief were epileptiform seizures twenty-eight days before death, and as she fell down the day before she died, it was considered that the fall in all probability caused rupture of the abscess, for, as will be seen by the autopsy, some of its contents were found in one lateral ventricle. The site of the headache is not mentioned in my notes.

E. S., aged 11, a well-made and healthy-looking girl, was admitted into the Hospital for Sick Children, under Dr. West's care, on February 7, 1863, for scarlet fever. She had had measles and hooping-cough. Had always enjoyed good health, and was a sharp, quick child. Never had any fits or convulsions. She was taken ill with scarlet fever on February 6, and the rash came out on the 7th, the day of her admission. She continued under treatment for some time; the attack was a rather sharp one. There was some, but not much, swelling of the glands of the neck.

On March 17 a discharge of muco-purulent matter began to ooze from each ear. The ears were syringed with water, and a drop of glycerine was dropped in after each injection. From this time more or less deafness gradually crept on. Patient was given cod-liver oil and iron wine, and was allowed to run about the ward, and on March 24 was sent home. She was then very deaf; there was a slight discharge from both ears, and she complained of earache. In other respects she appeared to be doing well, and to be gaining in weight. No albumen was at any time detected in her urine.

While at home the following events happened:—March 30, at 4.30 p.m., she suddenly clenched her hands, then pressed her forehead, and grasped her throat; soon rallied, but then almost directly after "went into convulsions." The limbs were stretched out and twitched, the teeth clenched, face drawn on one side; she squinted, and was perfectly unconscious. No lividity of face observed. She made a gurgling noise in her throat. This state, the mother said, lasted for about ten minutes. During the evening and up to about 12 p.m. the fits continued, and altogether she had about a dozen, each one lasting from five to ten minutes, or longer. In the intervals the girl was quiet, but appeared to be insensible.

When the fits ceased, at 12 p.m., she went into a sort of doze until 6 a.m., when "she awoke, and appeared all right"—sharp and intelligent, but somewhat exhausted. She continued in bed all day, and it was observed that her hearing seemed very considerably better than it had been for some time. Towards evening she became very irritable, and the mother thought it advisable to bring her child back to the Hospital. She was accordingly readmitted on April 2.

On readmission the patient was found to be rather deaf, and there was a yellowish muco-purulent discharge from each ear. There was no glandular swelling; no albumen in urine. Ordered to take quinine, meat, and wine.

April 10.—Tincture of iodine was ordered to be applied behind the ears; and the ears to be syringed and to have glycerine dropped into them. Bowels regular; appetite good.

26th, 10 a.m.—Patient fell down on the floor, and cut the back of her head. The wound was insignificant. When she was picked up she was quite sensible. Nurse then put her to bed; nurse thought that she did not slip down or stumble against anything, but that "she fell down from giddiness."

From this date patient continued rather irritable, but made no special complaint, nor was anything further noticed until 3 a.m next day—April 27—when she frequently cried out to nurse, and seemed very irritable. At 5.30 a.m. she moaned, screamed, and appeared "to be getting into a strong convulsion." Soon she became insensible; the features were pallid; breathing stertorous and noisy; respiration irregular, occasionally sighing; the pulse feeble, about 120, irregular in force and rhythm; no distortion of features; left pupil normal in

size, but insensible to light; right pupil widely dilated and fixed; arms suddenly dropped on being raised; surface cold.

She continued insensible, and died at 8 a.m. on April 27.

During this her second stay in the Hospital she was not confined to bed. She took her food well. For some time before her death the nurse had observed a queer manner about the child and a slight unsteadiness in her gait, and for this latter reason the nurse did not like to let her go about alone. For a week or ten days before death the mother noticed that the child "had a very heavy look and was very dull." Some headache and earache were complained of for ten days or so preceding death. For the last four or five days the discharge from the left ear almost entirely ceased, and that from the right ear lessened considerably in quantity. No albumen was ever detected in the urine. It was intended just before the patient was taken suddenly worse that she should be sent away to the country for change of air.

Sectio Cadaveris, April 28, *Thirty-one Hours after Death.*—Weight, 36½ lbs. Rigidity well marked generally. A small insignificant-looking wound, partly healed, half an inch in length, on scalp, a little above and about an inch to right of occipital protuberance. No subjacent extravasation of blood. Pericranium completely removed; no extravasation of blood. Surface of calvaria normal in every respect; calvaria thin; no trace of fracture; dura mater not adherent to calvaria. Surface of brain—Convexity: Arachnoid rather dry and sticky; surface generally has an opaque straw colour; convolutions flattened; sulci obliterated; superficial veins generally congested; no subarachnoid fluid. On section of the cerebral hemispheres, no excess of red spots was seen; consistence of brain fairly good. Lateral ventricles: Roofs slightly raised. Right ventricle filled with an opaque yellowish-green puriform fluid of a thin creamy consistence. Left ventricle filled with a turbid serosity, presenting no puriform appearance. Walls of left ventricle of good consistence; no injection of any of the tissues. Not so right ventricle; here the right optic thalamus and the greater portion of the corpus striatum very red and studded with minute punctiform injections. There was, however, no appreciable softening of any of the tissues. Foramen of Monro not enlarged. Veins of Galen rather congested. On removing the brain from the calvaria, it was found that the portion of the right hemisphere immediately resting on the petrous portion of the right temporal bone and on the adjacent (middle) fossa of the base of the skull was very considerably softened, almost creamy. Whilst carefully dragging the brain out from the base of the skull this softened tissue gave way, and left behind it, attached to the dura mater, a pear-shaped cyst about an inch and a half in length. The cyst was not unlike a full-grown virgin uterus both in size and shape. It seemed to spring from the petrous portion of the temporal bone at a point half an inch to the outside of the eminentia semicircularis. On removing the dura mater from the whole of the right middle fossa at the base of the skull, the apex of the cyst was detached from its point of attachment to the bone, though it continued to adhere by its apex to the dura mater. At the extreme apex of the cyst, where it adhered to the bone, a small round opening existed, one-twelfth of an inch in diameter, and the portion of the petrous bone from which the apex of the cyst was separated was rough, irregular, and, as it were, riddled with minute holes—pin-holes. This roughened surface, about one-eighth of an inch in diameter, was of a yellowish-green colour, from the presence of puriform matter. The apex of the cyst was intimately adherent to the dura mater—so much so that it was almost impossible to make out the relationship between them. The whole of the cyst except the apex projected into, and was embedded in, the brain-substance of that part of the right cerebral hemisphere that immediately overlies the posterior half of the middle fossa at base and the right petrous bone. At the extremity of the broad end of the cyst was an opening looking like an irregular cut through its wall, a quarter of an inch long, and just the sort of opening one would expect to find had the cyst been ruptured. The walls of the cyst varied in thickness from one-sixteenth to one-tenth of an inch, thickest at the broad extremity except at the opening just referred to, where the wall for a short distance around was thinner than elsewhere. The exterior of the cyst was covered with brain-substance softened and diffluent. The wall of the cyst was of some consistence—about that of the tough wash-leathery variety of diphtheritic lymph. The cyst was filled with a greenish-yellow thick puriform matter, semi-coagulated in places. The interior of the cyst was rough and irregular, but looked as if lined with a pyogenic membrane. The whole of the brain-substance for a radius of an inch or so immediately around the cyst was soft and creamy, and in places studded with numerous red punctæ. This softening also extended into the right posterior cornu of the lateral ventricle. The brain-substance immediately in contact with the broad end of the cyst was seen to have patches of puriform matter about it like that found in the cyst, and it appeared to have escaped from the cyst through the opening in the wall of the latter. A tract of similar puriform matter was with ease traced from the site of the opening in the cyst to the posterior cornu of the right lateral ventricle, and therefore, since the matter in the ventricle and in the cyst were similar in colour, etc., it was considered most probable that the contents of the latter had made their way into the former. On examining the right external ear, the whole of the meatus was found thickened, injected, and lined with puriform matter. No trace of membrana tympani. Small specks of bone-tissue about the petrous bone looked partially decayed. No direct communication could be traced between the external ear and the orifice in the apex of the cyst. In the left ear the membrana tympani was likewise wanting, and the meatus and other parts looked just like those of the right ear. The puriform matter from the cyst, under the microscope, is composed of—(1) medium-sized granular cells, most of the cells containing fat globules; (2) free granules, protein and olein, the latter in abundance; no distinct pus-cells. Matter from right ventricle presented microscopically the same appearance. Base of brain free from lymph or injection. Heart, four ounces; healthy. Right lung, eight ounces; left lung, six ounces. Posterior lobes congested, but crepitate well, and float in water. The greater part of middle lobe of right lung is consolidated, heavy, and sinks in water. On section numerous small grey specks are seen, the intervening tissue having a faint dingy-greenish tint. The tissue is airless and rather brittle. Spleen, three ounces and a half; of fair consistence. Liver, thirty ounces; uniform dark red; congested; consistence fairly good. Kidneys: Right, two ounces and three-quarters; left, three ounces. They present a generally congested but healthy appearance. Under the microscope the cortical tubules are seen to contain a rather large number of very fine granules. Bladder filled with urine; no trace of albumen; no casts of tubes; no blood discs; no renal nuclei. Intestines healthy; stomach healthy; no injection. No tubercle in any part of body.

ON THE INFLUENCE OF ERGOT OF RYE IN A CASE OF EPILEPSY WITH MANIA.

By WILLIAM YEATS, M.B., C.M. Aberd.,
Assistant Medical Officer to the Coton-hill Institution, Stafford.

J. C., MALE, aged 38, has been subject to epileptic and maniacal attacks upwards of twenty years. When admitted to Coton-hill Institution in November, 1860, his condition was as follows:—He was very excited and violent, had a decided aversion to enter into conversation, entertained delusions such as "that invisible people talked to him," "that he had swallowed some cherry-stones which found their way into his head and made him queer," etc. He was subject to epileptic attacks, which, however, were not at all frequent or regular in their occurrence—sometimes an interval of six months, sometimes only three or four months, intervening between the fits—occasionally becoming dull and depressed after the excitement following a fit had worn off. His general health was good, although his appearance indicated feebleness.

Since his admission up to the present time his condition has varied but little; the excitement has kept up all along, with alternate but brief periods of depression, the excitement being especially marked a short time prior and a considerable time subsequent to an epileptic attack. The interval between the attacks has gradually lessened.

On many different occasions remedies reckoned the best for such cases had been tried, for the purpose of mitigating the symptoms and of restoring the patient to a state of comfortable calmness, but no decided benefit had been observed. About the beginning of November, 1871, the condition of the patient was as follows:—He was subject to an epileptic attack at an interval of every ten or twelve weeks, which occurred generally during the night time; and subsequent to such attack he became most excited, violent, and mischievous, broke glass and crockery, tore his clothes to shreds, struck or bit anyone near him, ran up and down the galleries as if it were for his life, and kept muttering to himself continually with the variation of lustily vociferating that he was "death,"

"a man," or "the devil"; he was most filthy in his habits, incapable of dressing himself, required to be assisted in taking his food, and to be closely watched through the whole day. As regarded his physical condition, he was thin and spare, pale and haggard-looking; his general health was very fair; he took his food tolerably and slept well, except a few nights following each fit. While excited his pulse was about 110 per minute, and temperature 99·3°. While he was so excited, about November 5, bromide of ammonium was administered in twenty-grain doses three times a day (which, I would here remark, has proved particularly useful in many cases of epilepsy in diminishing the frequeney of the attacks, and in lessening the excitement which sometimes follows); but, after having given it a fair trial, no beneficial result was obtained as far as his mental condition was concerned, whilst his circulation became much enfeebled, and his hands and feet became unusually cold and elammy. The symptoms having somewhat abated towards the end of November, again showed themselves in full force about December 6, the patient having had a fit some two nights previous. Having resolved to try the effects of ergot in this case, drachm doses of the liquid extract were administered three times a day. After the third dose had been given, a visible alteration took place: instead of being violent and turbulent, he became quiet and temperate in his actions, and slept well, which was quite unusual for him so soon after a fit. On the following day he was still calm and quiet, his pulse having fallen from 108 to 88 per minute, his temperature from 99° to 98°; the ergot was then administered in half-drachm doses twice daily, and after two days, the patient remaining orderly and tractable as before, and having become sensible of and obedient to what was said to him, the dose was reduced to forty minims in the twenty-four hours, and entirely discontinued two days later. His appetite kept good all the time, and the secretions were natural. He remained very tractable for about three weeks, when symptoms of excitement began to show themselves, and again the ergot was administered. The excitement wore off after the second dose, and the medicine was discontinued two days afterwards. He then remained quiet and was easily managed until the middle of January, 1872, when symptoms of excitement again were observed, though in a much less degree than formerly. They again readily yielded to the liquid extract. After four half-drachm doses had been given the medicine was discontinued, and the patient remained peaceable and tractable; but a still further improvement was observed, for he answered questions most correctly and politely, and behaved himself rationally; he did not seem inclined to enter into conversation, and he slept at times during the day. This state continued only for a couple of days; still, it is remarkable that he has not been observed to have been so rational, collected, and obedient for several years. Since then up to the present time (January 29) he has been quiet and orderly, easily managed, perfectly harmless, and cleaner in his habits; but he has begun to talk to himself, and to utter several of his former expressions.

On the whole his condition has been much improved, and although it would not be reasonable to expect that he will ever be so well as to be tolerated in society, still, knowing a remedy which speedily controls his excitement and maniacal fury, without in the least interfering with his physical health, we may expect that the poor man's condition may at least be ameliorated; which, in many eases, the Physician can only wish for, without being able to accomplish.

A CASE OF LIGHTNING-STROKE.

By VINCENT RICHARDS,
Civil Medical Officer, Balasore, Orissa.

On the afternoon of May 6, Podi, an Uruja woman, while sitting near a eactus hedge, was suddenly struck down by lightning. The moment she was struck she became senseless. I was not informed of the matter until the 7th at 10 a.m., when I visited her. I found her lying down, apparently very drowsy, though not entirely insensible. The pulse was beating 80, though soft and weak; the breathing was natural; the pupils slightly contracted, and the conjunctiva of the left eye somewhat congested. The hair on the left side of the head was burnt, and there was a discoloration, as if caused by fire, on the left temple. There were several patches of the same nature, about the size of shilling-pieces, extending from the left side of the neck, between the breasts, to the lower part of the abdomen, from whence, I presume, the electric fluid escaped into the earth. On my calling very loudly to her she tried to open her eyes, but without avail. When interrogated she made a sign with her right hand signifying that she was speechless. The bowels were constipated.

May 8.—I found her still speechless. The skin felt cold, and the pulse was small and weak.

9th.—She was considerably better; perfectly sensible, and could speak, though with difficulty.

11th.—She had perfectly recovered.

The cactus hedge, near which the woman was sitting at the time she was struek, presented a curious appearance: in parts it was withered and blanched, in others quite carbonised, and again in others perfectly *riddled*, as if by bullets.

The treatment simply consisted in the administration of a dose of castor oil, followed by quinine and ether, and warm baths.

Balasore, Orissa, India.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

REMARKS ON AFFECTIONS OF HEARING IN CASES OF DISEASE OF THE NERVOUS SYSTEM.

(By Dr. HUGHLINGS-JACKSON.)

Part of the following remarks were made in a clinical lecture delivered last month at the London Hospital:—

It is now evident enough that there are many nervous diseases which we cannot study methodically unless we examine the deep parts of the eye. Amaurosis, when its nature is revealed by the ophthalmoscope, is one of the most important of all nervous symptoms. It is to be regretted that in spite of the careful work of Wilde, Toynbee, Hinton, Politzer, Von Tröltsch, Moos, and others, we know so little of the symptomatic value of deafness in cases of cerebral disease. There are two reasons for this—(1) There are difficulties in defining the nature and exact seat of the changes on which deafness depends. When a patient becomes blind, we can determine at any rate whether his blindness depends on changes in the optic nerve and retina, or on changes in the apparatus accessory to these percipient parts. But in cases of deafness it is very difficult to tell whether the pathological change is in the auditory nervous(a) system or in the accessory apparatus of hearing. Tröltsch (I quote from St. John Roosa's translation) says (there are no italics in the original)—"The diagnosis of nervous deafness will be the oftener made the *less* the surgeon is able to distinguish the different affections, the *less* he understands how to examine the affected portions, and the *less* knowledge he has of the pathological changes of the external and internal ear." And again, "Let us confess, gentlemen, that we are apt to call those affections 'nervous' which we can neither diagnosticate nor improve by treatment." This is a very unfortunate state of things, but it is due to difficulties inherent in the subject, and not to want of work or skill on the part of those who have especially studied diseases of the ear. From our inability to decide in a case of disease of the nervous system whether the patient is deaf from disease of some part of the auditory nervous system or from disease of the accessory apparatus of hearing, the statement that he is deaf is one of little point in the list of symptoms of his case. (2) In those cases where the deafness is a subordinate symptom (for example, in a case in which there is deafness with palsies of cranial motor nerves), there is not enough precise work done either in establishing the nature of the deafness during life or in noting the appearances in the ear and its nerves found post-mortem. Thus many valuable facts are lost. I now write because I wish to urge that in physicians' practice a good field will be found for the precise study of the various causes of deafness.

Physicians see cases in which deafness is associated with other and more easily understood nervous symptoms. Again, in physicians' practice, from the greater gravity of the cases, post-mortem verification or disproof of the conclusions which our examinations of the ear have led us to is to be more

(a) I use the expression "auditory nervous system" to include the auditory nucleus, the auditory nerve, and its peripheral expansions in this labyrinth. The expression "optic nervous system" includes the corpora quadrigemina, optic tracts, optic nerves, and retinæ.

often obtained.(b) There is one thing which can be safely stated—namely, that deafness, presumably of nervous origin, is rarely met with in cases of intracranial disease of any kind; but since it is, as we have seen, very difficult to tell whether a patient's deafness is of nervous origin or not, this statement is not definite. We can, however, make the wider statement that deafness of any kind (excluding cases *manifestly* due to disease of the apparatus of hearing, cases with discharge from the meatus, or cases with severe pain) is a rare complication of intracranial disease. It is very much less common than amaurosis (from optic neuritis). This fact, whatever its explanation may be, is evidently one of importance. To take a particular illustration:—In cases of adventitious products in the cerebral hemisphere we nearly always find blindness,(c) partial or total, from optic neuritis. But in no case have I ever seen deafness the result of adventitious products, nor of any other sort of disease in any part of either cerebral hemisphere. (*I speak only from cases completed by autopsy.*) I have, however, seen one case recorded (Royal London Ophthalmic Hospital Reports, vol. iv., part iv., p. 420) in which, with tumour of the left cerebral hemisphere, there was complete deafness of both ears. But this case was not exceptional, as there was also a tumour the size of a hazel-nut at the point of junction of the pons and medulla oblongata on the left side. In the Royal London Ophthalmic Hospital Reports, vol. v., part iv., I published a case (there numbered xxi.) of a woman, 18 years of age, who was blind and deaf. She had also a reeling gait. I remarked of her case (p. 281, *op. cit.*)—"I think the disease must be chiefly of the left cerebral hemisphere, and probably of its anterior lobe; but I equally think there must be disease lower down, and away from the cerebral hemisphere, to produce the deafness—for, so far as I know, deafness to any considerable extent (I now say to no obvious extent) does not occur from disease of the cerebral hemisphere." This woman died about five years later, under the care of Dr. Claye Shaw, in the Metropolitan Asylum, Leavesden. He was so kind as to show me the tumour. It did not, as I had supposed, actually involve the cerebral hemisphere, but it grew from the floor of the sphenoidal fossa, and thus must have interfered with the hemisphere by pressure at least; moreover, the disease was on the right side. The only reason I had for thinking it to be on the left was that I had been told that the girl had had a *right*-side seizure, doubtfully epileptiform. But the point of importance for my present subject is as to the deafness. There was but one tumour; not two, as I imagined. But *in effect* there were two lesions, as the tumour extended so far back as the seventh pair of nerves. There was affection of the hemisphere (the patient had become insane) by the tumour, and the auditory nerve was *reached by it*. But it must be remarked that Dr. Claye Shaw found no palsy of the parts supplied by the portio dura, which nerve also must have been in the way of pressure.

My impression is that deafness does not result from intracranial tumour (or other kind of adventitious product) unless the auditory nerve is actually involved or directly pressed on. If so, its significance is altogether different from that of amaurosis from optic neuritis—as in optic neuritis the adventitious product scarcely ever directly involves any part of the optic nervous system. Again, if the fact be as I suppose, deafness is a localising symptom, whereas, so far as is yet shown, amaurosis from double optic neuritis is of no value whatever in localisation. Optic neuritis occurs from tumour in many parts, probably in any part, of the encephalon.

In both the above-mentioned cases the tumour could have affected—affected directly, that is—but one of the auditory nerves, and yet the deafness was double. I cannot explain the occurrence of *double* deafness in these cases. Transmitted pressure seems at first glance to offer an explanation, especially as the auditory nerves are soft; but this explanation is not satisfactory. And I have (*Medical Times and Gazette*, June 17, 1865) recorded a case of tumour(d) the size of a walnut, which grew from the front part of the left lobe of the cerebellum, in which case there was deafness of that side only.

To discover how it is that disease of the hemisphere so often causes amaurosis, whilst it never causes deafness, we must consider how the word "cause" is here used. We cannot suppose that whilst the optic nerves have connexions with the cerebral hemisphere the auditory have not. Probably the auditory nerves have very indirect connexions; but connexions of some kind they must have, or we must assume that speaking and singing are not dependent on action of the cerebral hemisphere.

The disease of the cerebral hemisphere, so far as it destroys, may cause no obvious symptoms of any kind; but if the destroying agent be tumour or other kind of adventitious product, it leads to secondary changes and optic neuritis in one part(e) of the secondary changes, and fortunately a visible part. How these secondary changes are produced is at present unknown. In the meantime there are several speculations. It would be foreign to my subject to go into these speculations here; I will only mention that I believe the distribution of arteries will be some help to the solution of the difficulty. Whatever the explanation may be, the facts that while blindness often occurs by some process from adventitious products in the cerebral hemisphere, deafness never results from disease of any kind of any part of either hemisphere, are of great importance.

That there may be an auditory neuritis analogous to optic neuritis, it is scarcely worth while in the present state of things either to affirm or to deny. If there is, it may be supposed to depend on disease of the cerebellum. But what we have said of the cerebrum applies to the cerebellum. Vulpian remarks that nothing is rarer than trouble of hearing in alterations of the cerebellum. I have never seen a case of double deafness from tumour of the cerebellum, and yet in nearly every ease there is amaurosis (from optic neuritis). In some of these cases, when the tumour is of the middle lobe, there is manifestly increased pressure, not only under the tentorium, but above it; for a tumour here placed will lead to hydrocephalus by interfering with the free return of blood from the lateral ventricles of the cerebral hemispheres. Yet in such cases—I have seen four—there was no deafness.

In cases where there is disease of the tympanum we frequently have nervous symptoms; but these are the result of the ear disease—obviously so in cases of cerebral or cerebellar abscess. I have elsewhere (*British Medical Journal*, June 26, 1869) remarked on the association of epilepsy or epileptiform seizure with discharge from the ear. It is manifestly difficult to say that there is more than a coincidence. But in diseases so painfully obscure as epilepsy or epileptiform seizure we cannot afford to overlook any realistic condition. We should inquire for earache and discharge from the ear in all cases. At any rate, it is as important to do this as to inquire for worms and other excentric irritating causes. In all cases of recurring epileptiform seizure we are sure that there is an irritable condition of nerve-tissue somewhere. This is certain, whatever else is doubtful. The great difficulty is to learn by what *pathological* process that irritability results. The irritability may result from different kinds of pathological processes. I imagine that embolism and thrombosis occasionally lead to it, and thus in epilepsies I inquire for heart disease, rheumatism, and scarlet fever; and, since I imagine it may result from *venous* thrombosis, I inquire also for discharge from the ear. Since I have had no post-mortem examinations, I do not pretend to *know* that there is such a relation.(f)

I do not suppose that the ear disease leads to the epileptiform seizure by reflex action, but as seen by the gross process of thrombosis. I mention this expressly, as Knapp (who has only seen extracts from my paper in the *British Medical Journal*) quotes me, along with Köppe and Schwartze, as having published observations "which seem to demonstate that reflex epilepsy may be occasioned by inflammatory disease of the middle and inner ear." This may be the connexion—if connexion there really is—betwixt the ear disease and epileptiform seizure; but I do not think it is. However, as I say, I have had no autopsies, and I can therefore only urge that discharge from the ear should be one of the things to be investigated in cases of epilepsy and epileptiform seizure.

(b) In the "Archives of Ophthalmology and Otology," vol. ii., No. I., appear two papers on affections of the ear, which have as much interest to physicians as to aural surgeons. One is, "A Clinical Analysis of the Inflammatory Affections of the Inner Ear," by H. Knapp; the other is. "On Vertigo occurring in Affections of the Ear," by Gustav Brunner, of Zurich, translated by Emil Gruening, of New York. A perusal of these papers will, I think, convince anyone that careful investigations of aural symptoms are of very great value in the elucidation of some obscure nervous affections.

(c) As is well known, there may be optic neuritis without obvious defect of sight, but blindness, partial or total, occurs nearly always before death.

(d) The tumour had flattened the fifth nerve; the portio dura nerve ran into the tumour, or was lost on it. The strange point of the case is that the fifth and portio dura nerves were not paralysed. My last examination of the case was on December 1, 1864. The patient died February 23, 1865; but Mr. Stephenson, under whose care the patient was, noted no change in the symptoms, except that the patient passed urine and fæces in bed. The deafness was present when (September, 1864) I first saw him. We know that nerves will bear slowly exerted pressure very well, but probably this does not apply to the soft auditory nerves.

(e) Other secondary changes are in grey matter of convolutions, on which convulsions are dependent.

(f) I have, however, published a case which seems to me to lend support to that view. There was in that case no discharge from the ear, but the lateral sinus contained purulent matter.

It will, however, be of comparatively little value to note the connexion unless we note also the *kind of seizure* with which the discharge occurs. By "kind" I mean the region affected; whether, for example, the convulsion is sudden and universal, or begins deliberately in one side of the body—viz., in the face or hand—and may or may not become universal. In many of these cases the convulsion begins suddenly, and we learn from the patient little more than that he has had a severe fit. But in some cases it begins deliberately on one side, and occasionally there is after the seizure weakness of that side. (I have recorded such a case—St. Andrew's Reports, vol. iii., 1870, "Study of Convulsions," Case 6.) An autopsy on such a case would be very important; for it is certain that in such cases there is *local* disease, and indeed, I think, certain that there is disease in the region of the corpus striatum on the side opposite the side of the body in which the fit begins. And of course it is a truism to say that the fit depends on irritability of nerve-tissue. There is irritability of nerve-tissue in the region of the corpus striatum. The missing link is the *pathological process* by which that local irritability results. When we find that the aural discharge is only of the ear on the side opposite the side of the body in which the fit began—that is on the side of the brain—the possibility of the relation need not be lost sight of, with a view to post-mortem verification or disproof.

I have mentioned that occasionally after convulsions beginning unilaterally (hand or face, and probably in foot) there is hemiplegia; that hemiplegia after a convulsive seizure is often slight, and nearly always transitory. In some cases of discharge from the ear—I speak only of children—there is persistent hemiplegia. St. John Roosa has recorded an important case of this kind. I have seen a good many cases, but as I have had no autopsy I will content myself with urging that in all cases of hemiplegia in children the ear should be examined, and with asking that in cases of autopsy on hemiplegic children the possibility of venous thrombosis from ear disease be borne in mind.

GUY'S HOSPITAL.

CASES UNDER THE CARE OF MR. BRYANT.

Congenital Syphilitic Disease of Testes.

Frederick F., aged 4 months, came under my care on June 25, 1866, for congenital syphilis. Snuffles, mucous tubercles in lips, and enlargement of both testicles. Each gland was about one inch and a half long. There was also a congenital hernia in the right side. He was the third child of syphilitic parents. The first child had been born alive, and died at 1½ year of age. The second died, aged 4, of diphtheria. Under the grey powder (one grain twice a day) all symptoms disappeared, and the testes became much smaller. The parents then ceased to bring the child to me.

Acute Gonorrhœa and Epididymitis in a Child aged 6.

Edward H., aged 6, was brought to me at Guy's Hospital on July 30, 1866, with an acute gonorrhœa of eleven days' duration, and inflammation of epididymis of both testicles of five days' standing. No history of contagion could be obtained. Under saline medicines and fomentation the symptoms disappeared, and in one month he was well.

Specific Tubercular Eruption in Boy aged 7, apparently contracted from his uncle, who had the same disease.

David G., aged 7, came under my care on March 15, 1866, for a well-marked syphilitic tubercular eruption covering his neck and body, with moist tubercles about his scrotum. He had had them for six months. His penis was quite healthy. His parents were quite healthy, and had never had syphilis. He had, however, been sleeping with his "Uncle John," who was similarly affected. A rapid recovery followed the administration of the iodide of potassium and bark. In this case it appeared probable that some of the secretion from the uncle had been transferred to the nephew, both being dirty fellows, and this syphilitic inoculation produced.

Hereditary Syphilis.

Catherine M., aged 31, brought to me at Guy's, October 15, 1866, her child, aged one month, who was the subject of hereditary syphilis. The mother had been married eleven years, and soon after marriage suffered from discharge and skin eruption. Under treatment, however, these symptoms subsided, and she has been free from all symptoms since. She had had eight still-born children at the full time, and four born alive; three of those dying at three weeks, one month, and two years respectively. The fourth infant, the present patient, recovered under the use of hyd. c. cret. gr. j. ter die and cod-liver oil. In this patient the poison appeared to have gradually been eliminated. The last child living.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JULY 13, 1872.

THE VACCINATION LAWS OF EUROPE.

No. I.—Germany.

The debate of Wednesday on the question of the limitation of fines for neglect or infringement of the compulsory vaccination law will again draw public attention to the question of the propriety of the infliction of actual fine and imprisonment for neglect of vaccination. It will be remembered that in this journal the principle of compulsory vaccination has always been upheld, but we have thought it our duty to support the system of compelling vaccination rather by affixing disabilities on the unvaccinated than by the coarser machinery of penal infliction. The former mode of inducing vaccination bears no resemblance to persecution; the latter does. The latter affords a theme for agitators and demagogues; whereas no one can complain that individuals who possess no immunity themselves from small-pox, and who may give it to others, are not allowed in schools, in the public services, or in professions, factories, or workshops. The neglect of the system of affixing political and social disabilities to unvaccinated persons throws on the Government and Legislature the necessity of having resort to the penal system, and accordingly, as will be seen from the accounts we shall publish from time to time of the vaccination laws in other civilised countries, the present laws in England equal if they do not surpass in stringency any of the foreign codes. Of course, the test of any system of legislation is its practical effects; and if the penal system be found eventually to be the one which confers most immunity from small-pox, there can be no doubt all mere theory of a political character should be set aside, and it should be adopted. But if an equal immunity can be obtained by a system of disabilities, or by a mixed system as in Prussia, where the disabilities are the prime coercive engine, and penalties are but rarely resorted to, and never except in the case of the occurrence of small-pox in an unvaccinated child, we say, both on political and medical grounds, the penal

system should be made either entirely or in part to give way to one of indirect compulsion by disabilities. There can be no doubt that in England the way to foster a sect is to pursue a plan with regard to it which may be stigmatised as persecution; and it is because we believe that vaccination is a great boon to humanity, and should be universal, that we fear the effect of too much zeal in the way of punishment.

In order to place before our readers a reliable account of the state of the vaccination laws abroad, we have placed ourselves in communication with the representatives of most of the European Governments, and from them we have obtained the information contained in these papers. The information has been accorded to a series of questions transmitted to the Governments through their respective Embassies.

We have much pleasure in acknowledging the receipt of very full information respecting the vaccination laws of Germany, from Dr. Müller, Director-General of Vaccination, Berlin, and we will now proceed to reproduce the substance of his communication.

According to the law of Prussia, children are to be vaccinated in their first year. The penalty in case of contravention only follows the law when children who have not been vaccinated in their first year are attacked with small-pox.

Directors of schools, master tradesmen, manufacturers, and other employers are required to obtain proof that persons coming to them for education or instruction, or entering their service, have been vaccinated.

Persons who seek for their children, or for those committed to their care, admission into any public Government institution or other benefice, meet with a refusal if they cannot show proof that the said young people have been vaccinated.

Vaccination is under the care and control of the police authorities, and none but Physicians and Surgeons licensed as General Practitioners are allowed to vaccinate, and they only on condition that they follow strictly the published directions, whereby they are especially bound to take vaccine matter from none but thoroughly healthy persons. Doctors are bound to furnish to the police, each quarter, an accurate list of the names of those whom they may have vaccinated in their private practice.

To provide for the vaccination of individuals who have been shown not to have been vaccinated, a public general vaccination takes place every year, or oftener if circumstances require it, in the several provincial districts, and especially where vaccination is not performed continually. If, notwithstanding this, children remain unvaccinated up to the end of their first year without reasonable cause, and are afterwards attacked with small-pox, their parents and guardians, in consequence of the danger of infection thus caused, are subjected to a penalty at the hands of the police for their neglect. The penalty consists of fines, the amount depending on the judgment of the police authorities.

Should small-pox break out in a house, careful inquiry is made whether there are any other persons there who are liable to infection, and if there are, they are vaccinated as quickly as possible.

In the event of further spread of small-pox, all the remaining inhabitants are made aware of the imminent danger, and required to have such of their dependents as may still be liable to infection vaccinated as quickly as possible, to which end the necessary arrangements are made by the Medical department of the police; and when requisite, compulsory vaccination is effected.

Opposition to vaccination is, upon the whole, rare, and only offered by adherents to homœopathy. When vaccination is neglected, it is due, as a rule, to carelessness on the part of the parents.

The vaccination laws differ slightly in different States, but, for the most part, they are throughout Germany substantially the same as in Prussia, above explained. In Bavaria only is the law more severe.(a)

Revaccination is not prescribed by law, but the Government regulations recommend revaccination, and order that, in boarding institutions which are connected with public educational establishments, such pupils only shall be admitted as have been vaccinated within the last two years. The revaccination of soldiers on entering the army is compulsory.

No case of a child being vaccinated forcibly against the wish of its parents has occurred to the knowledge of the Director-General of Vaccination; and Dr. Müller says it is scarcely possible that there can be any adults in Prussia who have not been vaccinated. On the other hand, it often happens that children remain unvaccinated up to the age when they must be sent to school. Hence, for the most part, one-half of those who die in small-pox epidemics consists of children who have not been vaccinated.

DUBLIN SANITARY ASSOCIATION.

It may be in the recollection of our readers that in the autumn of last year, when cholera was threatening to invade these countries, and when small-pox was beginning to assume epidemical proportions in Dublin, Mr. Benson Baker visited that city for the purpose of inquiring into its sanitary condition. He found things in a very bad state indeed, and a lengthened newspaper war which followed his visit was attended by one good result at all events—the attraction of public opinion to the subject. Later in the year a very remarkable communication was made to the Medical Society of the King and Queen's College of Physicians on the prevalence of fever in Dublin. The author was Dr. Grimshaw, who perhaps had fuller opportunities of investigating the question thoroughly, and in all its bearings, than any other member of the Profession. Then came the terrible outbreak of small-pox, which has not yet ceased its ravages, and which has already numbered its 1500 or 1600 victims in a population of but little more than 300,000.

Meanwhile, as we have had occasion to show in these pages, the sanitary authorities of Dublin—the Public Health (bless the mark!) Committee of the Corporation—adopted a timid and vacillating policy. When the epidemic had been raging in the midst of their city for six months, forced into action by the pressure of public opinion, they at last attempted to stir in the matter of opening a convalescent home. Technical difficulties, however, arose one after the other, like phantoms, and so scared the conservators of the public health of the chief city of Ireland that three months later—in this present month of July—not one stone or piece of timber has been prepared for the building of a convalescent home.

We cannot wonder that the citizens have resolved to do *their duty*, and have accordingly set about forming a body which is intended to give expression to public opinion on sanitary matters, without at all assuming or attempting to assume the legal powers of the existing authorities.

The following excerpts from the prospectus of the Association will fully explain the objects for which it has been founded:—

"Feeling that there is urgent necessity for united effort some gentlemen interested in the welfare of the community have resolved to form an association for the following purposes:—

"First. To create an educated public opinion with regard to sanitary matters in general.

"Secondly. To direct attention to those points in which the existing powers for the maintenance of the sanitary condition of the city are either not duly exercised or are inadequate, or in which the machinery at the disposal of the sanitary authorities is insufficient.

"Thirdly. To watch the course of sanitary legislation on behalf of the public; and

(a) Further information as to the Bavarian vaccination laws may be had from a book by Bulmering, entitled "Das Gesetz der Schutzpocken Impfung in Bayern." (Leipzig, 1862.) A full account of Prussian legislation as to vaccination is given in Harns' work, "Das Preussische Medicinal Wesen." (Berlin, published by Hirschwald.)

"Fourthly. To form a body in which the public may have confidence, and through which they may, if necessary, act.

"While it is intended that the proposed Association shall co-operate with existing sanitary authorities as far as practicable, it is to be understood that it will be altogether independent of all other bodies in its constitution.

"The effects of bad sanitary arrangements cannot be estimated solely by the statistics of epidemics, or even of disease in general, important as these undoubtedly are. To say nothing of the interests of social morality, which are closely connected with the hygienic conditions of the population, it is obvious that we suffer pecuniarily in no small degree from the prevalence of preventible disease. The present epidemic of small-pox in this city, for example, has already cost the public about £30,000.

"It is a disgrace to us that our hospitals should be crowded with a never-failing supply of patients from the fever dens which we allow to remain in our midst year after year. It is, moreover, as impolitic as it is culpable to permit the dwellings of the poor to remain such manufactories of contagion as they have become.

"It will thus be seen that the objects for which it is proposed that this Association shall exist are of supreme importance from every point of view; and it is hoped that the citizens of Dublin will not only heartily co-operate for its formation, but give it their strenuous support when formed.

"Now that it is a recognised scientific fact that many of the most prevalent and fatal diseases are, *to a great extent*, preventible, it becomes the imperative duty of everyone to assist in the effort to confine them within the narrowest possible limits."

We are glad to observe many influential names on the list of the Provisional Committee of the Association—names not merely of the leading medical men of Dublin, but also of barristers, of magistrates, and of heads of eminent firms and commercial establishments. In fact, the movement is to a great extent one on the part of the laity, and is likely to be supported very generally by merchants and others who have a large stake in the preservation of the public health. We cordially wish the Dublin Sanitary Association every success.

CASE OF BEST *v.* STAPP.—INFECTION OF SCARLET FEVER.

A case was tried last week which is of much professional as well as public interest. The facts relating to it are briefly these. A lady of the name of Stapp, residing in the neighbourhood of London, was desirous of removing her children to the seaside, two or more of them being "convalescent from scarlet fever." Accordingly, she took lodgings at Eastbourne, at the house of Mr. Best, who is a blacksmith, and his wife a lodging-house keeper. On September 1, last year, Mrs. Stapp, with her governess, nurse, and five children, entered into possession. One of these children was said to have "a cold," and was at once put to bed. Suspicions, however, were aroused as to the nature of the complaint under which the child laboured, more particularly as another of Mrs. Staff's children sickened; and the doctor being called in, pronounced that both children were suffering from scarlet fever. One of them died. Mrs. Best's four children all contracted the disease, which in two cases proved fatal. These facts were not disputed, and the question put to the jury was, whether Mrs. Stapp had obtained possession of the lodgings, having concealed the facts that some of her children were just recovering from scarlet fever, and that others had the premonitory symptoms of the disease.

It was admitted by Mr. Stapp that his children had scarlet fever before going to Eastbourne, and it came out in evidence that Mrs. Stapp had endeavoured to conceal that fact from Mrs. Best, and declared the child put to bed on his arrival at Eastbourne was suffering only from a "cold." Mrs. Stapp has since the trial written to the *Daily Telegraph* to say "that she did not take her children to Eastbourne until her medical adviser considered them convalescent." It should be stated, also, that Mrs. Stapp denied generally the evidence for the prosecution. It is now reported that leave has been given for a new trial. The case is one of the greatest importance in every sense of the word, and it is to be hoped the law on the subject may be definitively settled.

The verdict was arrived at mainly, we conceive, on the ground of the alleged "concealment" by Mrs. Stapp. However this may be, the case will be re-argued, and evidence probably adduced as to the period required for convalescence from scarlet fever—or, in other words, when that disease ceases to be infectious. It is on this point that the case is most important in its medical aspects. *Is* it possible to determine when scarlet fever ceases to be infectious? We believe not. At all events, it is a *quæstio vexata*, the answer often depending on the experience of the individual giving it rather than on a more extended knowledge of facts referring to infection. It behoves the medical practitioner in all cases of the kind to act with the utmost caution, and to give no "guarantee" of safety, even after a considerable interval. But every means should be taken to disinfect all articles of clothing of whatever kind that the patient has come into contact with. This and a course of hygiene is all that can be done. If the sources of infection are not then removed, no blame can be attached to those who give a somewhat decided opinion that the patient can safely mix with others.

THE WEEK.

TOPICS OF THE DAY.

It appears from the remarks made by the President of the Royal College of Surgeons at the Fellows' Dinner, that the Governing Body of that institution are beginning to be aware of the injury they are doing to the College by their premature acceptance of the Conjoint Board scheme. Mr. Busk told his hearers that the College was about to make a great sacrifice of income. We have no doubt about it, and probably the sacrifice will prove greater than Mr. Busk supposes. All we can say is, *Cui bono?* What earthly reason can there be for half ruining the College of Surgeons and injuring the Hunterian Museum and Library for the sake of setting up a partial Conjoint Board, which satisfies nobody except, perhaps, those who have nothing to lose by any change, and which will have the effect of sending a large proportion of the medical students of England to be examined in Scotland?

By the time the present Ministry have terminated their career the First Commissioner of the Board of Works will have achieved a unique reputation. Mr. Ayrton has already made himself universally disliked by artists and men of literature. He has insulted the oldest historical society in the kingdom—the Society of Antiquaries—and, not content with these embellishments of his tenure of office, he has now attacked science, in the person of Dr. Joseph Hooker, at Kew Gardens. Dr. Hooker has appealed to Mr. Ayrton's colleagues against Mr. Ayrton, whom, in a letter to Mr. Gladstone, he charges with "evasion, misrepresentation, and misstatement." A committee of the Ministry have so far endorsed Dr. Hooker's case that they have told Mr. Ayrton that Dr. Hooker is to be treated as the head of the local establishment at Kew, in subordination to the First Commissioner of Works—a position from which Mr. Ayrton had tyrannically endeavoured to depose him. One of the first things Mr. Ayrton did on coming into power was to reprimand Dr. Hooker, and he then gave orders to supersede him in the control of the heating apparatus employed in the gardens. Now, considering Mr. Ayrton's only excuse is some cheeseparing economy, and remembering the services rendered to the country by Dr. Hooker and his father during the greater part of the present century in giving us probably the finest botanical gardens and herbarium in the world, it is no wonder that Dr. Hooker has considered himself bound to threaten retirement. It is to be hoped that Mr. Ayrton, having ascertained the feeling of the public and of his colleagues on the matter, may feel himself bound to retire from a position of

insult to a man of science, alike disgraceful to the Ministry and to himself.

Mr. Henry Wilson, Surgeon to St. Mark's Ophthalmic Hospital, and Examiner in Ophthalmic Surgery in the Dublin University, has been appointed to the Professorship of Ophthalmic and Aural Surgery in the Royal College of Surgeons in Ireland. This Professorship is the first of the kind instituted in Ireland, and its foundation will no doubt give a fresh impetus to the study of branches of Surgery which have already zealous and successful cultivators in the sister metropolis.

Mr. George Sanger, who is the manager of a circus at Manchester, has written to the *Times* a very clever and amusing criticism on Lord Buckhurst's Acrobat Bill. He tells the House of Lords that to enact that no child under 16 shall be trained as an acrobat, is equivalent to saying that no acrobat shall be trained at all, for it is impossible to learn the business after that age. He moreover says that the force of public opinion prevents any severities being used in the training of young tumblers, and that it would not be worth while to train any child who had not a taste for the profession. He also asserts that the training is healthy, and that to say the contrary is monstrous, and devoid of truth; and he prophesies that the Bill, if it pass, will simply stop the education of acrobats in this country, and produce an importation of acrobats trained abroad. He invites inspection of the processes by which acrobats are made. Over-legislation is threatening to be an incubus on this country, and we think that if acrobat performances are permitted at all, the training of the acrobats may be left to be dealt with by the ordinary laws of the country, and to be influenced by public opinion. It is not yet proved that any injury to health is due to an acrobat's education. Whilst public taste can not only tolerate, but pay largely for the result, we may be sure that the process by which acrobats are produced will be carried on somewhere. If anything cruel or injurious can be proved to take place in training, let the schools be subject to inspection by the nearest public medical officer.

By an error, into which we were led by a Glasgow paper, we announced that the Chair of Medical Jurisprudence in the University of Glasgow had been filled by the appointment of Dr. Pierce Adolphus Simpson. At all events the announcement was premature. The election is in the hands of the Crown. One candidate is Dr. Arthur Gamgee, F.R.S., Lecturer on Physiology at Surgeons' Hall, Edinburgh; Dr. Pierce Adolphus Simpson, Lecturer on Medical Jurisprudence at Anderson's University, Glasgow; and Dr. St. Clair Gray, Assistant to Professor Rainey. Of these Dr. Gamgee is undoubtedly best known to the scientific world.

THE WIMBLEDON CAMP.

Our correspondent at Wimbledon writes that the health of the camp is excellent. There is very little diarrhœa there, and assertions to the contrary are gross exaggerations. Moule's earth-closet system works well, and no doubt conduces much to the health of the camp. One marker is reported to have been splashed with lead. This is the only accident of which we hear.

THE CONTAGIOUS DISEASES ACT.

On the motion of Sir John Pakington, and by order of the House of Commons, copies were issued on Tuesday of memorials presented to the Secretary of State for the Home Department from 2500 medical gentlemen, praying that the principles of the Contagious Diseases Act may be maintained, together with the signatures and other particulars attached thereto, and including any similar memorials on the same subject since presented.

THE EARL OF MORLEY'S BILL TO AMEND THE REGISTRATION OF BIRTHS AND DEATHS.

Lord Morley's Bill proposes to make registration of births and deaths compulsory. The parents or relations, or occupiers of the house, or the principal of any institution in which a child has been born alive, *must give notice in writing* to the registrar, who then proceeds to procure information and register the birth. After two months power is given to the registrar to require the attendance at his office of the persons who ought to give information of any unregistered birth. Registration of a death is to be made similarly compulsory on relations, occupiers, etc. The position of the medical attendant with regard to certificates is thus defined:—

"In case of the death of any person who has been attended during his last illness by a registered medical practitioner, such practitioner shall furnish to some person required by this Act to give notice of such death a certificate to be delivered to the registrar, stating truly the cause of death, and signed by such medical practitioner; and the cause of death as stated therein shall be entered in the register, together with the name of the certifying medical practitioner."

It will be seen that the practitioner *shall* furnish a certificate, and that his name is to be entered on the register. With regard to still-born children, the proposed enactments run thus:—

"The body of any still-born child, or of any child alleged to have been still-born, shall not be buried without such an order as in this Act mentioned from the registrar, or an order from the coroner for the burial; and if any child is buried in contravention of this section, the person bringing or causing the same to be buried, and also the person burying the same, shall be liable to a penalty not exceeding five pounds. With respect to the issue of such order by the registrar, the following provisions shall have effect:—1. Any person requiring the same shall produce to the registrar either—(*a.*) A certificate in writing signed by a registered medical practitioner who has been in attendance on the mother of such child, to the effect that the child was not born alive; or, (*b.*) In default of such certificate from such medical practitioner, a declaration in writing that such child was not born alive, made in the presence of and attested by a witness, who is the occupier of a house, and signed by one of the persons who, if the child were born alive, would be required to give notice of the birth of such child. 2. The registrar, on the delivery to him of such certificate or declaration, and payment of the prescribed fee, shall (unless he has good reason to doubt the truth of the statements made in such certificate or declaration) grant an order authorising the burial of the body of such still-born child, and such order shall, before such body is buried, be delivered to the person burying the same."

HARVEY TERCENTENARY MEMORIAL.

The London General Committee which is being formed has within the last few days been joined by the Duke of Devonshire, the Marquis of Ripon (Lord President of the Council), the Bishop of Ripon, the Bishop of Exeter, Mr. R. Lowe (the Chancellor of the Exchequer), Mr. Philip Cazenove, Drs. Bennett, Sibson, and Munk (Censors of the Royal College of Physicians), Mr. Cæsar Hawkins, Dr. Sharpey (Secretary to the Royal Society), Dr. Carpenter (Registrar of the University of London), Dr. Billing, Mr. Bowman, Dr. Chambers, Mr. Curling, Sir Ranald Martin, Mr. Hancock, Mr. Hilton, Mr. Barnard Holt, Mr. G. Pollock, Mr. Cooper Forster, Dr. Arthur Farre, Dr. Fuller, Dr. Gream, Dr. Hare, Dr. Graily Hewitt, Mr. Prescott Hewett, Mr. M. Montefiore, Mr. Savory, Dr. Oldham, Dr. Pavy, Dr. Priestley, Mr. Quain, Dr. Russell Reynolds, Dr. Radcliffe, Dr. Sieveking, Dr. Tyler Smith, Dr. C. J. B. Williams, Mr. W. Fuller, Mr. Sibley, and others; and a meeting of the Committee will be convened at the Royal College of Physicians, Pall-mall, during the present month. The sum of £3000 is required for the erection of a suitable national monument at Folkestone, the birthplace of Harvey; £480 has been already subscribed. Further donations are requested, and they may be paid to the account of the "Harvey Ter-

centenary Memorial Fund," at the Western Branch of the Bank of England, Burlington-gardens, W.

We may once more state that the cards and circular which are being forwarded to members of the medical profession by the vicar of Folkestone, asking for donations to a window in the parish church, are not sent by the authority of the Harvey Tercentenary Memorial Committee.

INFANT LIFE PROTECTION.

The Infant Life Protection Bill has passed the Lords, and will probably soon become law. The substance of the Bill is contained in the second clause :—

"From and after the commencement of this Act it shall not be lawful for any person to retain or receive for hire or reward in that behalf more than one infant, and in case of twins more than two infants, under the age of 1 year, for the purpose of nursing or maintaining such infants apart from their parents for a longer period than twenty-four hours, except in a house which has been registered as herein provided."

The house to be registered must be sanctioned by the local authority, who must satisfy themselves of the good character and qualifications of the housekeeper, who, again, must keep a register of the infants she receives, and give notice to the coroner in case of death, who must hold an inquest, unless the death is certified by a duly registered medical practitioner. Fines not exceeding £5, or six months' imprisonment with or without hard labour, are the penalties for violation of the law.

THE JURIES BILL.

This Bill, brought in by the Attorney- and Solicitor-General, and amended in committee, repeals the following words of the Medical Act, section 35—"from serving on all juries and inquests and"—and gives the exemption in the following terms :—

"Coroners, gaolers, and keepers of houses of correction, and all subordinate officers of the same, keepers in public lunatic asylums, members and licentiates of the Royal College of Physicians in London, if actually practising as physicians, members of the Royal College of Surgeons in London, Edinburgh, and Dublin, if actually practising as surgeons ; apothecaries certificated by the Court of Examiners of the Apothecaries' Company, dental surgeons certificated by the Board of Examiners in Dental Surgery of the Royal College of Surgeons in England, and all registered medical practitioners and registered chemists, if actually practising as apothecaries, dental surgeons, medical practitioners, and registered chemists respectively."

It will be seen that the exemption is limited to persons *actually practising*, and that some members of our Profession under 65 years may be subjected to possible annoyance.

VACCINATION IN THE ARMY.

If ever small-pox is to be stamped out, it will be by the universal practice of vaccination, or, at all events, in all those cases in which it may be deemed necessary. That this proceeding could easily be carried out in the public services, the public schools, and other public bodies is undeniable. The War Office has just issued a useful order, which requires that the surgeon of each militia regiment shall inspect and examine the non-commissioned officers and men on their assembling for training, and in all cases in which he considers it necessary he is authorised to vaccinate the men.

THE INDIAN MEDICAL SERVICE.

The Indian Government propose certain important changes in the medical administration of India. As at present constituted there is a double medical staff for the army—one for the British army, one for the native army—each complete in itself ; whilst the Indian medical military staff owes a divided allegiance to the civil government. It is now determined, if possible, to substitute for this system a single military medical staff and a single civil medical staff with undivided responsibility.

THE LONDON MORTUARIES.

How often tyranny works with the machinery of freedom! How frequently means which are resorted to for the protection of the public health under bad management degenerate into foci of contagion and disease. This is most strikingly the case in some of the mortuaries of the metropolis, as recent events have proved. When these places are properly regulated and superintended they are most useful and convenient ; otherwise, they become an intolerable nuisance. At an inquest held a few days since by Dr. Lankester at the "Castle," Holloway, he complained of the disgraceful state of the Islington mortuary at the chapel of ease. He had previously termed the place "a disgrace to a nation of savages," and he now stated that a medical gentleman who had gone into the place to hold a post-mortem examination had been compelled to leave it, so intolerable was the stench from two bodies which were there. The Coroner added, the medical gentleman was a source of danger to any patient he might visit.

IMPROVED HEALTH FROM IMPROVED DWELLINGS.

That the health of the working classes in large towns can be materially improved by improved dwellings is strongly confirmed by the last report of the Society for the Improvement of the Dwellings of the Working Classes. From this document it appears that the houses owned by the Society are well occupied. The mortality throughout the houses, with an average population of 1588, had been only about 12·6 per 1000, making the lowest death-rate the Society had been enabled to record.

FROM ABROAD.—M. FAUVEL ON CHOLERA PROSPECTS—M. DIDAY TURNED TERRORIST—THE PROPOSED NEW FRENCH FACULTIES OF MEDICINE.

M. Fauvel seems to have given himself the useful office of reporter-general of the progress of the cholera ; and in a communication to the Academy of Medicine, on July 2, posts us up with the latest information on the subject. His laudable aim is to allay unnecessary fear and to suggest preventive procedures. There is nothing, he says, to be feared on the side of Constantinople and the Mediterranean, where the epidemic has remained extinguished since January 11. The same statement may be made with regard to Arabia and Egypt, where the last Mussulman pilgrimages had given rise to the most serious apprehension. During February, March, and April the deaths were very numerous ; these amounted to 1800 at Medina between March 20 and 28, while at the beginning of March there were fifteen daily at Mecca. Of 25,000 pilgrims assembling at the Kadina station, the cholera carried off 4000 ; and of 16,000 who left Suez, only 11,687 returned. It is remarkable that at the port of Djeddah on the Red Sea, where thousands embark and disembark, there was an absolute immunity during the whole duration of the pilgrimage, while there was not a single case of cholera on board the ships bringing the returning pilgrims. Upon the whole the cholera epidemic of the Hedjaz has been far less fatal than in former years, and has become much more rapidly and completely extinguished. This result M. Fauvel believes to be due to the sanitary measures adopted by the Egyptian Government, and the indefatigable zeal of the French sanitary officers. He especially alludes to the advantages received from the quarantine established under tents at El Nedi, a port on the Arabian coast 300 miles from Suez. The only cloud M. Fauvel can discern in the horizon is a small one on the Austro-Russian frontier, the disease prevailing in the regions watered by the Dneiper and the Dneister, menacing Gallicia, the Danubian Principalities, and, by the valley of the Danube, Central Europe. Still, this epidemic puts on a much less redoubtable appearance than that of last year at the same period. He therefore entertains the hope that the cholera, having up to the present time exhibited little violence or expansibility, will be confined

within the regions in which it has prevailed permanently during the last four years.

During a recent discussion at the Lyons Society of Medicine (*Medical Times and Gazette*, June 22, p. 716) upon the relative danger of chloroform and ether, M. Diday declared that there would never be any proper security for patients until the strong arm of the law intervened in order to arrest the chloroformists in their mistaken career. This somewhat staggered even an audience accustomed to the most fanatical language in all that relates to chloroform; and at the next meeting M. Diday felt called upon to explain more in detail what he meant. He says that he would never recommend the direct denunciation of a *confrère* who had a death from chloroform in his practice; but still, supposing that he was already before a court of justice on this account, the Society might, if consulted, declare its opinion as to the amount of culpability which attached to the surgeon.

"Some might hesitate here, but for my part the line of duty seems to me clearly traced out. Far from imitating those who, under similar circumstances, would sacrifice everything in order to screen a *confrère*, I should, remembering that I am a man first and then a doctor, declare to the court what I believed to be the truth, even at the risk of this proving prejudicial to the accused operator."

Another mode of proceeding would be, M. Diday went on to say, to publish certain conclusions adopted by this Society, which, without reference to any particular case, might prove of great general utility to both the bar and the court in conducting their arguments and announcing their decisions.

"And especially it would possess that salutary power, at once efficacious and inoffensive, appertaining to every law which prevents criminal actions by the very fact of its existence, thanks to the terror that it inspires. If you vote my conclusions, then they would act, I hope, without ever serving as a basis for any judicial pursuit, simply by the moral effect they would exert upon surgeons, henceforth made aware of the responsibility they would expose themselves to in such or such a determinate case."

The resolutions in question are seven in number. The first six we need not quote, merely stating that they insist in the most absolute manner on the vast superiority and infinitesimal danger of ether. The seventh is as follows:—

"In face of these undeniable facts, this Society, appealing to the reason and the loyalty of heart of those of its *confrères* who continue to employ chloroform, entreats of them to decide for themselves whether a surgeon who, able to attain his ends as well, if not better, by means of a less dangerous agent, voluntarily resorts to the more dangerous one, does not assume the same moral responsibility as would a practitioner who, in reference to protection from small-pox, practised at the present day inoculation in preference to vaccination."

We owe some apology to our readers for occupying space with nonsense such as this; but without doing so we could convey no idea of this attempt to set up medical terrorism in so large and enlightened a city. It is nothing less; for who, in face of such an anticipatory denunciation as this, would venture to resort to an agent, mishap during the employment of which might ruin his professional reputation and bring him under the tender mercies of French law. Fortunately, the orator's audience was not carried away by his declamation, and referred his damnatory conclusions to a committee, wherein we hope common sense and impartiality may not be without their advocates.

Almost every French city of importance is now applying for the establishment of its medical Faculty. A committee of thirty of the National Assembly has just been appointed for the purpose of investigating the present condition of the laws relating to the medical profession, and the various plans for its reorganisation which have been proposed; and the question of additional Faculties will no doubt come under its consideration. In the meantime, under the supposition that at least seven Faculties—Paris, Nancy, Lyons, Montpellier, Bordeaux, Nantes, and Lille—are about to be established, "A Professor of a Faculty of Medicine" has addressed to the *Révue Scientifique* (June 22) an able communication, in which he adduces powerful arguments against any such exaggerated procedure. The Ministers of Public Instruction, one after another, the writer says, have seemed much more anxious to create new Faculties in place of improving those which exist; and if this view is carried out, a number of ill-provided establishments will be set on foot wholly devoid of the power of useful action. The professors will be too ill-paid, the appliances for teaching too scanty, and the number of students too restricted to admit of efficiency or to give rise to emulation. He does not think the choice of large cities for these foundations a happy one, as the temptations to idleness and dissipation abound in such, and the pursuits of industry and commerce override those of science. Far better would it be to imitate the practice of Germany, in establishing large universities in small towns. The objection that such cannot furnish large enough hospitals is contradicted by the fact of the existence of such at Bonn, Heidelberg, Würzburg, etc., officered by the ablest physicians and surgeons, whose renown, indeed, attracts patients from all parts.

Of these projected Faculties a few will thrive while the rest will languish, as is already the case with the too numerous Faculties of science and *écoles de droit*. These last, indeed, are established and kept up at little cost; while the numerous subsidiary establishments and large staff of professors necessary for setting on foot in true working order a Faculty of Medicine would entail an amount of expenditure not likely to be incurred. So little alive has the Government been to the real bearings and necessities of the case, that the profits which have accrued from the Paris Faculty have always been hitherto appropriated by the State in place of being utilised for supplying the numerous deficiencies of that institution. In the proposed multiplication of Faculties, the Minister has overlooked the difficulty he will have in filling the professorial chairs. If he selects as their occupants the most famous and best-employed practitioners in the respective cities, he will only command incomplete and perfunctory services; for the examples in which great teachers have at the same time been much-employed practitioners are quite exceptional. The professors, too, will, with the exception of Paris, have to be recruited from the resources of the towns in which the schools are situate. When these even contain 100,000 inhabitants they will not be equal to supplying eighteen professors and as many *agrégés* really capable of fulfilling their functions; and sometimes both at Strasburg and Montpellier there has been a lack of efficient candidates. This difficulty becomes exceedingly great as regards the chairs for the accessory sciences, the teaching of which does not lead to the acquisition of patients, such as physics, chemistry, natural history, anatomy, and physiology. It would be far preferable to create a few complete and well-endowed universities, which may become centres of attraction, not only to future advocates and doctors, but also for all those who have any pretensions to receive a complete education. Their having such institutions to resort to is a principal cause why instruction is so much more diffused among the Germans.

PARLIAMENTARY.—ACROBATS BILL—COAL AND METALLIFEROUS MINES REGULATION BILLS—THE NATURAL HISTORY MUSEUM AT SOUTH KENSINGTON—ARMY MEDICAL OFFICERS—COMPULSORY REGISTRATION OF BIRTHS AND DEATHS—THE VACCINATION AMENDMENT BILL.

On Thursday, July 4, in the House of Lords,

The Bill introduced by Lord Buckhurst to prohibit the employment of children under 16 years of age in acrobatic performances dangerous to life or injurious to health was read a second time.

The House of Commons went into Committee on the Coal Mines Regulation Bill. The stringency of the clauses providing

for due ventilation, etc., was mitigated by the insertion of the words "as far as is reasonably practicable."

On Friday,

The Coal Mines Regulation Bill was farther advanced in Committee, and progress was also made with the Metalliferous Mines Regulation Bill.

In Committee of Supply the vote for the new Natural History Museum at Kensington was carried by 85 to 45.

On Monday, in the House of Commons,

Mr. Torrens asked the Secretary of State for War whether, notwithstanding the assurance given in this House by his predecessor, the member for Droitwich, it was intended to give retrospective effect to the medical regulations for the army issued in 1866 and 1867, so as to deprive medical officers who had volunteered under the regulations of 1859 for service on the West Coast of Africa of the pay and promotion guaranteed to them by those regulations as the inducement to volunteer for that unhealthy and disagreeable service.

Mr. Cardwell: I am informed by the Director-General of the Army Medical Department that there has been no change of practice in dealing with the African medical officers since 1859. The system has always been to allow each year on the Coast to count as two years towards the five years required as a qualification for the rank of surgeon and towards retirement, but not towards increase of pay or the rank of surgeon-major.

On Tuesday, in the House of Lords,

Lord Morley explained the provisions of the Registration of Births and Deaths Bill. The Bill renders compulsory the registration which is now permissive. He stated that at present a vast number of births were entirely unregistered, and two Select Committees of the other House had recommended that the registration of both births and deaths should be enforced under penalties. Such a law was in operation both in Scotland and Ireland. The Bill was then read a second time.

The Infant Life Protection Bill was read a third time and passed.

In the House of Commons, the Metalliferous Mines Bill was completed in Committee.

The Coal Mines Bill was considered as amended. New clauses for establishing a board of examiners to grant certificates of competency to managers were agreed to.

On Wednesday,

Mr. Pease moved the second reading of the Vaccination Acts Amendment Bill, the object of which is to repeal the cumulative penalties on parents who refuse to have their children vaccinated.

Mr. Monk, supported by Mr. C. S. Read, moved the rejection of the Bill, which, they contended, invited disobedience to the law, and would render compulsory vaccination useless.

Dr. Playfair, who was a member of the committee which last year unanimously recommended the limitation of penalties, recanted his opinion, and declared himself now irreconcilably opposed to it. Mr. S. Cave, also a member of the committee, now opposed it, and Mr. H. Lewis spoke against it.

Mr. W. E. Forster argued the question entirely as a matter of expediency. Penalties had no effect on those who were conscientiously opposed to vaccination, as long as the State was not prepared to take the child by force from the parent to vaccinate it. Repeated penalties created a feeling which rather impeded the spread of vaccination. At the same time, as the feeling of the House appeared decidedly against the Bill, he recommended its withdrawal for the present.

Mr. Candlish, however, avoided a hostile division against the Bill by talking it out, and the debate stood adjourned.

SÉDILLOT'S PILLS IN SYPHILIS.—M. Revillout observes that, having had full opportunity as clinical reporter at the hospitals of observing the practice both of the partisans and the opponents of mercury, he feels convinced that mercurial preparations, suitably administered, greatly abridge the duration not only of secondary, but even of tertiary symptoms, which resist iodide of potassium when given alone. As to the choice among these, he is of opinion that Sédillot's pills are quite as efficacious, and much more readily tolerated, than the bichlorides or the iodised mercurials. Each of these contains ten centigrammes (three grains) of strong (*onguent mercuriel double*) mercurial ointment, medicinal soap, and mallow or other inert powder. They are in daily use by MM. Hardy, Richet, and others. Giving them concurrently with iodide of potassium, and suspending them from time to time in favour of a mixture containing chlorate and nitrate of potass, they may be continued for months without producing salivation or irritation of the digestive organs.—*Gaz. des Hôp.*, June 15.

HEAT AND THIRST, AND SOME OF THEIR POPULAR ANTIDOTES.

(*By the Author of a "Report on Cheap Wines."*)

HEAT and thirst have mighty effects on health and morals. Hot and thirsty people drink, and the effects of temperature on health are largely modified by the quality of the liquids consumed. So long as the choice lies between a gulp of lukewarm Thames water from the cistern of a lodging-house and a cool half-pint of beer, who can blame the man who has a penny in his pocket if he spend it on the beer? Thirst is overwhelming, and if it be a "vicious indulgence" to quench it with beer, we ought not to blame the thirsty man till we can show him the way to something better.

Thirst, as I showed the world when I wrote on cheap wines, is of three kinds. There is, first, the real thirst, from want of liquid, especially when a copious sweat exhales from the skin during honest labour in the heat; and this cannot be relieved without water in some shape. Then, secondly, there is that dreadfully painful clammy state of the tongue—the dry mouth caused by mental anguish, or bodily pain, as of wounds; that which occurs, too, in fevers and other diseases. This is not caused by mere lack of water, but by a defective or depraved and nauseous state of the secretions of the tongue and fauces under the influence of a worried nervous system. This is not relieved by water alone; on the contrary, water may excite loathing and disgust. This kind of thirst is relieved by those readily acting and comforting varieties of food which are known as "stimulants" of various kinds. And inasmuch as there is seldom much thirst without some exhaustion, so the addition of some stimulant to common drink is expedient. The last kind of thirst is the craving for mental stimulation—the desire of a torpid brain to have its imagination roused, its feelings of benevolence, sociality, and self-esteem excited and gratified. This is what men drink for in company *in convivio*—at the times when each man shares with his neighbour the true delights of life; *convivium*—a word sacred by association, and immeasurably superior in moral force to the Greek *symposium*: a remark which, whether borrowed from Marcus Tullius Cicero or from the judicious Hooker slips my present memory.

A true "thirst extinguisher," then, as we may deduce from the foregoing principles, must be something more than the mere tepid water which is accessible to the population of our towns.

The most obvious "potential" stimulant is cold; "potential" because, whilst adding no material, it alters the distribution of the blood, and allays the restlessness arising from heat that cannot pass off. Whoever desires to convert our population to water-drinking should supplement those great boons, the street fountains, with some contrivance for cooling the water. A small glass of really *cold* water will quench thirst better than six times the quantity of lukewarm. But *iced* water and ice in its various forms sometimes create heat and dryness of the tongue.

With cold ranks carbonic acid as the most grateful and wholesome of stimulants—pungent to the tongue, grateful to the stomach, and felt with a grateful coolness as it escapes from every pore of the skin. How soon it was used in medicine I cannot tell; nor whether the delicious sparkle of natural aërated waters, or the briskness of a fermenting drink, or the effervescence with acids was in any degree known to the ancients. During the seventeenth and eighteenth centuries the effervescing draught was known by the name "cordial julep of Riverius," and, so far as I know, this great physician was the inventor of the draught, and the discoverer of its efficacy in allaying sickness. He thus describes it in one of his volumes of "Observations":—

"That excellent man, Laurence Bosch, apothecary, of Montpellier, was ill with that epidemic which they call purple fever, in the month of December, 1622. Amongst other symptoms was obstinate sickness, so that he rejected water, wine, medicine, everything but weak broth; his inside was burnt up and his tongue dry. This so grave symptom was relieved by the following slight remedy:—℞. Of salt of wormwood a scruple; of fresh lemon-juice one tablespoonful. These were mixed at once in the spoon and administered. The vomiting at once ceased, and from that moment the patient took what he liked and kept it down."(a)

(a) Lazari Riverii, "Observationes Hagæ Comitum," 1656.

The draught of Riverius soon became, and has ever since continued, one of the most popular and useful of medicines. No matter whether soda be substituted for the "salt of wormwood," alias carbonate of potass; no matter whether citric or tartaric acid be substituted for the lime-juice, nor whether the nicety of modern pharmaceutists enables the ingredients to be mixed in a powder, or a granular salt, cheap, portable, and nicely flavoured—the principle is that of Riverius, and to him belongs the honour. About the time when our native Scottish royal family made their last desperate effort to eject the house of Hanover, Sir John Pringle, in his work on the "Diseases of the Army," speaks in high tones of the efficacy of the effervescing draught of Riverius, but regrets that it is too expensive for common soldiers. How he would bless modern applied chemistry if he saw the powder of soda, tartaric acid, and sugar, flavoured with essence of lemons, now sold in all the *low* neighbourhoods, and called Persian sherbet, one penny the glass!

ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.

The sixth anniversary session of this Association was held at Willis's Rooms on Saturday, July 6. From the report of the Council, it appears that the Association numbers 463 members, 25 associates, and 45 honorary members. The Council express a deep sense of the great loss which has been sustained in the death of Professor George Day, and sincere sympathy with his family. They take the opportunity of thanking Sir Thomas Watson, Sir James Paget, Professor Bell, Professor Erichsen, Dr. Matthews Duncan, and Dr. Sieveking for consenting to give their valuable services in conjunction with a committee of the Council in raising the Mrs. Day Fund, which already amounts to £630, with good promise of further increase.

The following were elected officers of the Association for 1873:—*President:* C. A. Lockhart Robertson, M.D. St. And., M.D. Cantab., F.R.C.P. Lond., 9, Hanover-square, London. *Vice-Presidents:* W. Cholmeley, M.D., F.R.C.P. Lond., 63, Grosvenor-street, London; A. Wynn Williams, M.D., 1, Montagu-square, London; G. W. Balfour, M.D., F.R.C.P. Edin., 21, Alva-street, Edinburgh; J. A. Lusb, M.D., M.R.C.P. Lond., M.P., Fisherton House, Salisbury; Thomas Ballard, M.D., 10, Southwick-place, Hyde-park, London; Leonard W. Sedgwick, M.D., 2, Gloucester-terrace, Hyde-park, London. *President of Council:* Benjamin W. Richardson, M.D., M.A., F.R.C.P. Lond., F.R.S., 12, Hinde-street, London. *Council:* T. O. Dudfield, M.D., 8, Upper Phillimore-place, Kensington, London; S. Day-Goss, M.D., 111, Kennington-park-road, London; W. F. Cleveland, M.D., 199, Maida-vale, London; G. Buchanan, M.D., A.M., 193, Bath-street, Glasgow; J. T. Griffith, M.D., F.R.C.S. Eng., Camberwell, London; A. Wiltshire M.D., M.R.C.P. Lond., 57, Wimpole-street, London; George Ross, M.D., 11, Hart-street, Bloomsbury, London; C. Royston, M.D., 1, St. Stephen's-crescent, Westbourne-park, London; W. Brewer, M.D., M.R.C.P. Lond., M.P., 21, George-street, Hanover-square, London; J. Lockhart Clarke, M.D., M.R.C.P. Lond., F.R.S., 64, Harley-street, London; Wharton P. Hood, M.D., 65, Upper Berkeley-street, London; J. Murray Lindsay, M.C., Mickleover, Derby; R. H. Semple, M.D., M.R.C.P. Lond., 8, Torrington-square, London; Thos. B. Christie, M.D., M.R.C.P. Lond., Ealing; J. Bower Harrison, M.D., M.R.C.P. Lond., Higher Broughton, Manchester; Samuel Hill, M.D., 22, Mecklenburgh-square, London; Edwin Humby, M.D., 83, Hamilton-terrace, London; J. T. R. Lipscomb, M.D., F.R.C.S. Eng., St. Albans; John D. Macdonald, M.D., F.R.S., Netley; Henry Moon, M.D., M.R.C.P. Lond., 9, Old Steyne, Brighton; R. Norris, M.D., Birchfields, Birmingham; R. Budd Painter, M.D., F.R.C.S. Eng., 4, Beaufort-gardens, London; E. J. Waring, M.D., M.R.C.P. Lond., 39, Portsdown-gardens, London; W. F. Coles, M.D., Croydon; George Cordwent, M.D., F.R.C.S. Eng., Taunton; Edwards-Crisp, M.D., Chelsea; Henry Davis, M.D., F.R.C.S., Eng., Putney; R. Hassall, M.D., Richmond; C. Holman, M.D., Reigate; S. Lawrence, M.D., Montrose; E. F. Watkins, M.D., 61, Guildford-street, London; W. Rhys Williams, M.D., Bethlem Hospital, London. *Hon. Treasurer:* J. H. Paul, M.D., M.R.C.P. Lond., Camberwell, London. *Hon. Secretary:* W. Bathurst Woodman, M.D., M.R.C.P. Lond., 6, Christopher-street, Finsbury-square, London. *Editor of Transactions:* Leonard W. Sedgwick, M.D., 2, Gloucester-terrace, Hyde-park, London.

The address of the President, Deputy Inspector-General Gordon, C.B., on "The Army Surgeon, his Work and Works," was an admirable and interesting discourse. He said—

"My first duty is most gratefully to acknowledge the high distinction the members of the St. Andrews Medical Graduates' Association have been pleased to confer upon me, in selecting me as the medium though whom they desire to manifest their goodwill towards their professional brethren in the army, for in this light only can I look upon the circumstance to which I owe the honour of now addressing you.

"It is not often that a member of the military body is favoured as I am on this occasion. Our sphere of action is usually far removed from this great capital, our vocation very different from that of preparing addresses to read before learned and scientific associations, yet it is pleasant and flattering to us as a body to find that we are not altogether forgotten, that if out of sight we are not completely 'out of mind.'

"It is true that novelists and popular writers have on some occasions been so good as to give, for the edification of their readers, a portraiture of the army surgeon. Thus, who has not laughed over the fussiness and irascibility of Slammer? Who has not been amused at the vagaries of Maurice Quill, who entered the 31st Regiment to be near his brother in the 32nd, who, as surgeon of his distinguished corps, 'was at the head of his profession,' and being so, had 'nothing more to look forward to or expect'? Or do you accept as correct the picture conveyed in that very charming fairy tale, 'The Water Babies,' where the talented author tells us, that when Mrs. Be-done-by-as-you-did determines to call up before her all who have ill-used little children, and serve them as they served the children, 'first she called up all the doctors who give little children so much physic, and set them all in a row, and most miserable they looked, for they knew what was coming; and first she pulled their teeth out, and then she bled them all round, and then she dosed them with calomel and jalap, and salts and senna, and brimstone and treacle,' and so on? But then it is explained within parentheses that those so treated were for the most part old ones; for the young ones have learnt better, all but a few army surgeons who still fancy that 'a baby's inside is much like a Scotch grenadier's.' Well! perhaps we have to wait until the baby developes into the man, 'the soldier,' now no longer 'bearded like the pard;' 'full of strange oaths perhaps,' yet who wins our battles and maintains England's honour, before we fully appreciate his 'economy,' interior and general. Babies, too, I may observe, like the red man who disappears before the march of civilisation, are threatened with utter abolition, under the 'latest thing out' in army reorganisation, so that in regard to them our occupation will soon be gone—it may be to their advantage, only the test cannot be applied; certainly to our comfort and peace of mind."

He then described the work of the army surgeon—

"From the time and even before a young man joins the ranks of the army, until the moment he quits them, he is looked after and watched over, alike in health, in sickness, or when wounded, by the surgeon. It is the surgeon who tests his physical fitness for the arduous duties of military life, when as a recruit he comes before him, picking him as it were from the less sound of his fellows. During the irksome ordeal of training, the surgeon sees him from time to time, coming when necessary between him and the young man's instructors. When capable of taking his position among the effectives he is still watched over by his surgeon, who sees that his accommodation, his clothing, his food, are not only sufficient, but suitable, and that the recurrence of night duties on guard and otherwise is not such as to impair health. When ordered on foreign service, the ship in which he embarks has been carefully examined by the surgeon, who has satisfied himself, in respect to space, ventilation, water, and food, that everything has been done for his comfort. During the voyage, the surgeon is present watching over him, and obliged by regulations to personally examine every soldier once a day, as also to see that all conditions calculated to preserve health are rigidly fulfilled. On reaching his destination, in whatever country or condition, the surgeon is present with him; and it is under such circumstances that the great responsibility of the medical man takes place, for now, whether it be service against an enemy or exposure to the more subtle and deadly spell of epidemic influence, the surgeon not only runs the same risks of exposure as do those of whom he has charge, but has, in addition, when fatigued and often exhausted, to exert himself while they rest, and minister to the pressing needs of his stricken patients.

Now also comes the real struggle between professional knowledge and death. Take, for example, such diseases as heat-apoplexy and cholera in India. Decision on the part of the medical officer at the first onslaught, and they are readily combated. Pusillanimity and indecision for but a few minutes, and the affections bid defiance to any after skill.

"In battle, a bullet drills its way through a limb, perhaps severs an artery, perhaps splinters a bone. The soldier drops confounded and panic-stricken. Still the surgeon is beside him, to stem the flowing life-stream it may be, to bind up the shattered member and see him sent to a place of safety, there to bestow upon him further care after the combat is over. And, may I ask, have you ever seen a stalwart soldier in the wild excitement of battle fall like a clod to earth as I have related? If so, you doubtless appreciate my picture. If, as is more likely, your lot has led you to more peaceful spheres, your memory will probably recall the fear and anguish with which a woman in the throes of childbirth clings to her medical attendant. In no other conditions than those of the battle-field have I seen the counterpart, and yet men who know no better would fain believe that the surgeon is not needed while the fight rages. Not on the field of battle indeed! Who so instantly and loudly called for by the wounded man, soldier or officer, as the surgeon? What would be the effect upon those engaged, let me ask, were they without the knowledge that immediate aid was available? They would become demoralised were they but to suspect that, once struck down, they should be left for an indefinite time untended and bleeding on the field. And it is our proud boast that never in this respect do we shirk our duty. That such is the case is demonstrated by the number of those among us who have earned the proud distinction of the Victoria Cross for valour in the field—a number at least equal in proportion to that among our combatant brother officers. It is not indeed by one set of men, or by one class of arrangements, that battles are won, but rather by the harmonious and efficient working of all pieces of the mighty military machine. As each in its own sphere conduces to the general result, so let it in all justice have its due meed of credit; and certainly that branch of which I am myself a pinion is by no means the least important.

"Then comes the terrible and anxious work of war hospitals. These establishments are selected, arranged, and provided with *personnel* and *matériel* under the orders and superintendence of the senior medical officer, their position being determined with reference to the nature of the service on which the army is engaged, and the position of the force with reference to its base of operations. Often also suitable means of transport for the wounded have to be procured or improvised; and who so fitted as the surgeon to make the selection with reference to the nature of injuries, the description of roads over which the wounded have to be transported, and distance to which they have to be conveyed? Intermediate posts have to be selected *en route*, means being provided at each for supplying the wounded with temporary accommodation, assistance, and food; or, as now practicable, railway trains can be fitted up. The duty of selecting suitable cases for removal, and providing professional attendance, rests with the medical department. Other duties, no less important, occupy the attention of the medical department on active service. Individual sick and wounded have to be treated; such means as are practicable devised for protecting the health and consequent military efficiency of the troops; the general in command kept informed as far as possible of the number of those in hospital whose restoration to health may be anticipated after a certain time, of those who are permanently unfit, and, with reference to climate and other conditions of the country or district where hostilities are being carried on, the casualties that may be expected to arise by sickness, to enable the commander to estimate the numerical strength of reinforcements required to fill up the inevitable losses."

Describing the soldier's life in olden times, and speaking of the sleeping apartments, he proceeded—

"On each such shelf two, and in emergencies, three men, lay side by side; the recruit just joined, filthy and often diseased as he was, was accommodated in the first berth that happened to be vacant; when a soldier went on guard, his place was taken by the next who happened to need a bed; and he on his return from his turn of duty was similarly disposed of. Truly the soldier of those days had many strange bedfellows; nor were they of his own seeking.

"Need we wonder that typhus and eruptive fevers were rampant in the army, and cutaneous affections all but universal among the soldiers? This system, injurious alike to the *physique* and *morale* of the soldier, was abandoned in consequence of the loud and long-continued protests of the army surgeons; and the paragraph in their regulations, as those stood prior to 1859, now read strangely—that every man should have a separate bed. Will you believe it? what has long since been banished from the army still lingers in the militia—one *billet* is even now taken for two militia men! Means of personal ablution were perhaps upon a par with the sleeping accommodation; so much so that satirical writers were wont to describe the process by which the British grenadier performed his morning toilet—taking a mouthful of water, then squirting it into his hands, he thus washed his face. How he dried his manly countenance is not recorded in history, but as to his dandriff-covered person, his gorgeous uniform compensated for and concealed all that. See now the ablution and the bath-rooms erected in every barrack for the soldier. Recollect that, while all that has been effected in both respects has been so on the urgent recommendation of army surgeons, very much more would have been done, in these and other respects, had more than a tithe of their recommendations been carried out.

"In regard to food, the abolition of the old system, whereby soldiers on foreign stations were restricted to salted provisions almost as completely as if they were on board ship, was abrogated after years of protest on the part of army surgeons; and good as the present fresh ration is, it would have been still better had full scope been given to their recommendations. As regards appropriate diet for the sick, even so lately as the end of last century a soldier while under medical treatment—let us say on account of dysentery or yellow fever in the West Indies—received, as diet and support, his regular ration of salted pork and rum, for in those days spirit-drinking was compulsory on his part. Our present improved system is due to the representations of army surgeons, some of whom, notably Dr. Robert Jackson, had introduced suitable scales of diet into their hospitals before the system was sanctioned by regulations. It was an army surgeon—namely, Dr. Hamilton—who first protested against the extent to which, in bygone days, the barbarous and degrading punishment of the lash was carried in the army. He did even more than this. He pointed out that many offences are committed by soldiers from sheer ignorance of the code of laws under which they serve, and condemned the nomenclature according to which crimes and offences are enumerated in establishing what is called a *regimental* character—offences merely against military usages and rules being to a certain extent placed upon the same footing as those against person or property.

"With reference to other matters of general hygiene, we need but refer to the works of such men as Pringle, Monro, Jackson, Bell, and Ballingall, to read in their pages the very principles in regard to barrack and hospital construction, the proper size of rooms, and appropriate sites for these buildings, which we find of late years paraded, with all the aspect of originality, in works by so-called sanitary reformers; the opinions, if not the very words, of the army surgeons being given, but not a syllable as to the source from whence the plagiarism had been made. I have indicated the principal old army writers, so that you have it in your own power to test the correctness of my statement, and prove for yourselves whether or not the labours of my military brethren have received in these respects the recognition justly due to them.

"Some diseases have, it may be said, been abolished in the army, through the exertions of military medical men. Typhus fever, for example, which, even so lately as the days of the Peninsular war was literally *the* army disease, to such an extent did it prevail, is now next to unknown; dysentery of a severe type is never now met with except in the tropics; and scurvy is all but unknown, except under very unusual circumstances. So also with small-pox; the care with which vaccination and revaccination are performed, and other hygienic measures adopted, has brought cases of this disease to their minimum among the troops. The efficiency with which protective measures are employed have rendered such a thing as a general epidemic of infectious disease—scarlatina, for instance—unknown; and although, unhappily, means have not yet been discovered to similarly exclude cholera, when that dire malady sweeps over a military station as it does in India, nevertheless by removing the troops away from the locality to a more healthy district, a great deal has been achieved to diminish its ravages. This measure, adopted first with regard to yellow fever in the West Indies, was practised in India so long ago as 1825, and yet, to judge from recent printed statements, the measure would seem as but of yesterday. In both cases its authors were army surgeons. Many other sanitary improve-

ments of the greatest importance to the soldier have been introduced by army medical officers; many more would have been so had their recommendations been fully acted upon. Yet, what is by no means encouraging, is the fact, that in comparatively few cases are the names of their actual originators mentioned in connexion with them. You hear that such and such improvements were introduced by Lord this or Lord that; but who ever hears a word about the pertinacity with which the necessity for them had been urged by Doctor So-and-so?"

Passing on, then, to matters more purely connected with curative Medicine and Surgery, he described some of the improvements introduced by army surgeons, and concluded his graphic narrative by a rapid consideration of the lessons taught by the great wars of modern times.

Dr. Richardson, F.R.S., proposed, and Dr. Lyon Playfair, M.P., seconded a vote of thanks to Dr. Gordon for his most excellent and instructive address.

The anniversary dinner was held in the evening at Willis's Rooms, the President in the Chair. Admiral Sir E. Belcher, K.C.B.; Sir A. Armstrong, K.C.B., Director-General of the Navy Medical Department; Dr. Lyon Playfair, M.P.; Dr. Halley, Treasurer of the Edinburgh University Club, were among those present.

A genial chairman and a good dinner combined to secure a very pleasant evening.

ROYAL COLLEGE OF SURGEONS.

The annual festival of the Fellows of the College was held on Thursday, the 4th inst., at the Albion Tavern, under the chairmanship of Sir William Fergusson, Bart., F.R.S. There was an unusually large number of metropolitan and provincial surgeons, showing the well-deserved popularity of the Chairman.

The usual loyal and patriotic toasts were responded to with the utmost enthusiasm, the "Army and Navy" being acknowledged respectively by Sir Galbraith Logan and Sir Alexander Armstrong, K.C.B.; Mr. Walter Coulson returning thanks for the Auxiliary Forces. The "Medical Council," proposed by Mr. Dalrymple, M.P., was acknowledged in graceful terms by Dr. Paget, who spoke of the general unanimity which now prevailed among the medical corporations respecting the scheme of conjoint examination—one college only in Ireland, and that a junior institution, still held aloof; but in Scotland the feeling seems at present not altogether co-operative.

The Right Rev. Bishop McDougal, a Fellow of the College, in proposing the "Medical Corporations," associated them with the representative names of Dr. Burrows, Mr. Busk, and Mr. Kelson, Professor Gross, of Philadelphia, being specially named on the occasion as the representative of American medical institutions.

Dr. Burrows, in his usual felicitous terms, congratulated the Fellows on the great unanimity at present prevailing in the Council of the two Colleges, adding that the result would be satisfactory, not only to the Profession, but to the public generally.

Mr. Busk took occasion to advert to the promptitude with which the Royal College of Surgeons had come forward, in consideration of the public good, to co-operate in the conjoint scheme—an act of self-denial, it might be termed, when the distinguished services of the College in the cause of Surgery and the great sacrifice of income which would be entailed by the contemplated change were considered by the Profession and the public generally.

Professor Gross, of Philadelphia, who, on rising, was greeted with repeated rounds of applause, paid a high eulogium to the merits of the medical profession in this country, and traced the rise and progress of medical institutions in America. They were gradually forming a medical literature of their own on the other side of the Atlantic, whereby they hoped in time to repay not only the "direct" but also the "indirect claims" for that for which they were so much indebted to England. The learned Professor only wished that his professional brethren could be present to witness and fully appreciate the most cordial greeting which, in his name, they had accorded to them.

"The Provincial Medical Schools," proposed by Mr. Savory, a member of the Court of Examiners of the College of Surgeons, was eloquently acknowledged by Mr. E. Lund, Surgeon to, and Lecturer in, the Manchester Royal Infirmary, who expressed the great pleasure experienced by the provincial Fellows at the annual festival in finding themselves associated with those great teachers who had won for British Surgery a world-wide reputation; adding, how difficult it was for provincial teachers to compete with those who were connected with the metropolitan schools in their vast resources and great experience, yet hoping to be able in some degree to contribute to the common good of the Profession, by urging onward that great movement to which the Royal College of Surgeons of England had contributed so largely, and by which it was hoped the future progress of the Profession would be characterised by a combination of science in principles with practice in details.

"The Metropolitan Schools," by Mr. Bartleet, jun., of Birmingham, was coupled with the name of Professor Erichsen, who happily alluded to the unnecessary multiplicity of medical schools. He threw out the suggestion that the scientific might advantageously be divided from the practical portions of medical education. The former might well be taught in certain preliminary institutions, while practical knowledge could then be obtained at each and all of the various hospitals, without the present waste of teaching power, and with more time on the part of students to acquire such knowledge.

"The Health of the Stewards," was proposed by Mr. Henry Harris, of Redruth; and in doing so he took occasion to allude to the great changes which had taken place in the College of Surgeons since the palmy days when the Hunters, Clines, Coopers, Brodie, and others shed lustre on it by their talents; and, in conclusion, paid a tribute to the talents and abilities of the permanent officers of the College, in the management of the affairs connected with it, which had never been equalled, as it was not likely to be surpassed. Whereupon, in an amusing speech, Mr. MacCormac, of St. Thomas's Hospital, said that himself and brother stewards did not require their health to be toasted, since the nature of the duties they had to perform had in no respect impaired it. The duty, as far as he could understand it, was to do nothing oneself, but shove the responsibility on the shoulders of somebody else, who, in this instance, was his friend Mr. T. Carr Jackson, to whom, and not to the stewards—an ornamental, but certainly useless body—was due all merit in respect of this successful and agreeable dinner; and, carried away by the enthusiasm of the moment, he would only say that the English Fellows were nearly as good as the Irish Fellows.

The Chairman's (Sir William Fergusson) health was warmly proposed in his usual eloquent terms by Sir James Paget, who aptly designated him as one who, if we regarded his happy combination of qualities in respect to head, heart, and hand, would enable us to say of him with truth that we should never see a greater surgeon.

Sir William Fergusson, on rising, was received with cheers again and again repeated, and, in reply, contrasted the quiet election of that day with the rather more than exciting scene when he was first elected a member of the Council, and was happy indeed to feel, after the turmoil of active competition in the course of a long career, that it might perhaps be said of him hereafter "His end was peace."

The "Honorary Secretary" was proposed by Sir William Fergusson.

In responding to the toast, the Honorary Secretary (Mr. T. Carr Jackson), who was received with a round of applause, expressed himself repaid for any trouble he might have had in the matter, and considered he was amply rewarded, in the large and brilliant company of Fellows who had attended the festival, and had supported him as stewards.

Amongst those who supported the Chairman were the Directors-General of the Army and Navy Medical Departments, the Presidents of the Colleges of Physicians and Surgeons, the Master of the Society of Apothecaries, the Right Rev. Bishop McDougal, Mr. Dalrymple, M.P., Dr. Wiblin (Her Majesty's Quarantine Officer at Southampton), Mr. Lund (of Manchester), Dr. Harris (of Redruth, Cornwall), Cattlin and Rugg (of Brighton), Paget (of Leicester), Colgate (of Eastbourne), etc. The Council of the College was represented by Sir James Paget, Messrs. Busk, Hancock, Curling, Gay, Erichsen, Hawkins, Hilton, Holden, Lee, Spencer Smith, Wells, Wilson, etc. Owing to the number and length of speeches the company did not separate until a late hour.

PROFESSOR HUMPHRY'S LECTURES ON HUMAN MYOLOGY

AT THE

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Lecture II.

The Professor began by observing that the upper and lower limbs are the produce of similar morphological impulses acting upon serially homological elements; yet that the one limb is not a modification of the other, nor are we certain that both are modifications of a simple common form, though there may be much probability in such a view. After reminding his audience of the statement made in the first lecture, that the several muscles of the trunk are derivatives from the same elements as the lateral muscles of the fish, he proceeded to show that the muscles of the limbs are also to a considerable extent derivations from the lateral muscle. The limb-girdles are ossifications in the transverse septa of the ventral part of that muscle; and as the limbs grow out from the girdles they carry before them ventro-appendicular expansions, which become developed into skin, cellular tissue, muscle, etc. The muscular stratum envelopes the limbs to a variable extent, and at the base of each limb spreads out, in a funnel-like manner, upon the trunk. It is divisible into a superficial and a deep layer. The superficial layer in the upper limb is in three sectors—the pectoralis, the latissimus dorsi, and the trapezius and deltoid. These converge upon the humerus; and each, in its course, is connected with the girdle. The connexion of the trapezius and deltoid is effected by the spine of the scapula and the clavicle growing into the septum between these two muscles. This septum is the serial continuation of the septa of the lateral muscle, and the clavicle corresponds serially with the costal and epicostal bones which form in the abdominal parts of the septa in some animals. The connexion of the pectoral sector with the girdle is formed by the pectoralis minor, and that of the latissimus dorsi by the scapular attachment of that muscle. Parts segmented from the trapezius form the rhomboids. The superficial ventro-appendicular sheet in the lower limb is still more intimately conuected with the pelvis than that in the upper limb is with the shoulder-girdle, and it extends further upon the limb. It is divided into three sectors—the gracilis corresponding with the pectoralis, the gluteus corresponding with the latissimus dorsi, and the tensor vagini femoris and the sartorius corresponding with the scapular part of the deltoid. The external oblique fibres passing to the ilium correspond with the trapezius; the crural arch corresponds with the brachial arch; and an ossification in Poupart's ligament would correspond with the clavicle. The aponeurosis of the external oblique, above Poupart's ligament, corresponds with trapezius and cleido-mastoid above the clavicle; and the femoral fascia, below Poupart's ligament, corresponds with the parts of the deltoid and of the pectoral below the clavicle. With regard to the deep ventro-appendicular stratum, it forms a sheath covering the shoulder- and hip-joints respectively, and is in each instance divided into four sectors. The dorsal sector forms the infra-spinatus and the teres minor in the upper limb, and the gluteus medius and minimus in the lower; the palmar sector is the coraco-brachialis and the subscapularis, answering to the adductors and the obturators in the lower limb; the anterior sector is the iliacus in the upper limb, the supra-spinatus in the lower; and the posterior sector is the teres major in the upper limb, and the pyriformis in the lower. In making a comparison of the muscles in the upper and lower limbs, and in the limbs of different animals, a very close correspondence must not be sought; for the developmental processes in each are freely modified to suit the respective requirements. Thus, the attachment of corresponding muscles are often found to vary, the points of insertion varying as much as those of origin; so the former are no surer guides to homological comparison than the latter. Lastly, the Professor spoke of the deep muscles passing from the trunk to the girdles. These are the costo-clavicular, or subclavius; the costo-scapular, or serratus, which is continued forward as the levator scapulæ; and the omo-hyoid, which is a representative of a much more extended connexion of the hyoidean muscles with the scapulæ in fishes and *Urodelans*. In the lower limb the levator scapulæ is represented by the quadratus lumborum, the omo-hyoid by some fibres of the internal oblique, and the subclavius and serratus by the ischio-coccygeus and the ilio-caudalis. The chief nerves and vessels to the limb pass between the two muscles last mentioned in tailed animals; as those of the upper limb pass between the costo-clavicular and the costo-coracoid on the one side, and the costo-scapulæ on the other.

THE RIGHT OF SCOTCH PHYSICIANS TO PRACTISE PHARMACY IN ENGLAND.

A case of some considerable importance to the Medical Profession recently came before Mr. Macnamara, the judge of the Marylebone County Court. The question, divested of all technicality, was whether a member of the College of Surgeons in England, authorised to practise as a Physician by a diploma from the University of Edinburgh, but not qualified as a member of the Society of Apothecaries in London, could recover for medicines supplied without advice or visits. Mr. Macnamara decided that such a Practitioner could not recover for medicine supplied which was not auxiliary to a surgical case, although registered both as a Surgeon and a Scotch Physician. Indeed, according to this decision, such a person is liable to penalties under the Apothecaries' Act. Should this judgment be upheld by the superior court, it will make sad havoc of those who, practising under Scotch or Irish degrees, affect the right to add the practice of pharmacy to their other qualifications, although possessing no licence from the Society of Apothecaries in England. The Medical graduates of the old universities practically lay no claim to the practice of pharmacy; the Fellows and Members of the College of Physicians in England are expressly forbidden it by their by-laws; the Medical graduates of the London University are excluded such practice by statute (the Medical Graduates Act, 1854); the Licentiates of the College of Physicians, who have the privilege of compounding and dispensing medicines for patients under their own care, being the single exception among English Medical men to the otherwise exclusive privileges of the Society of Apothecaries. Should this decision of the Marylebone County Court judge have the effect of closing many of the present open surgeries maintained by other than those duly licensed to practise pharmacy, it would add greatly to the respectability of the Profession, and save much confusion in the public mind as to the relative qualifications of the different orders of the Profession.

The case referred to by Mr. Macnamara—viz., the Apothecaries' Company *v.* Collins, reported in 4 Barnewall and Adolphus, 604—was decided so far back as 1833.

In giving judgment Lord Denman (Chief Justice) said—"Even English Physicians would be included within the 20th section of the Apothecaries Act if there were not a special exception in their favour in the 29th section." And Mr. Justice Littledale remarked—"The words would include all persons who have taken Medical degrees, were it not for the 29th section, which saves the rights of the two Universities of Oxford and Cambridge, the Royal College of Physicians, and the Royal College of Surgeons. But the statute, by expressly exempting the two English Universities, does not exempt those of Scotland also. The Act applies to England and Wales only—Scotland is not in contemplation."

Mr. Justice Parke observed—"The duty of an apothecary as defined by Section 5 is 'to prepare with exactness and dispense such medicines as may be directed for the sick by any Physician lawfully licensed to practise physic by the President and Commonalty of the Faculty of Physic in London, or by either of the two Universities of Oxford or Cambridge.' A Scotch Physician," continued his Lordship, "is certainly not enabled by the Act to perform this duty." The whole contention now is whether a Scotch Physician can recover the price of medicines supplied by him *quâ* medicines; in other words, can he practise pharmacy, pure and simple, by furnishing medicines unconnected with Medical attendance? If not, he certainly exposes himself to penalties under the Apothecaries Act for affecting so to do; and even though, as in the case before us, a Member of the Royal College of Surgeons of England, he can only recover for Medical attendance as auxiliary to a Surgical case.

Such a complication of conflicting interests, especially if the decision of the Marylebone County Court judge should be affirmed by the superior court, seems at all events to demand

further legislation, if only by way of simplifying and amalgamating the licensing bodies throughout the United Kingdom.

REVIEWS.

Fistula, Hæmorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum: their Diagnosis and Treatment. By William Allingham, F.R.C.S., Surgeon to St. Mark's Hospital for Fistula, etc. London: J. and A. Churchill. Pp. 239.

We must apologise for the delay in noticing this very unpretending and good practical book. Mr. Allingham's experience is very extensive, and he has tried here to give it as plainly and unpretendingly as possible. It contains an analysis of 4000 cases observed consecutively, of which the majority are cases of fistula. Next in order come piles, apparently the rarest form of disease being vicarious menstruation by the rectum.

In his introduction Mr. Allingham insists on the great importance of examining the rectum properly in cases which demand it; and it is to be confessed that in the minds of a great number of the members of our Profession there is a repugnance to such an examination, just as there is a repugnance to vaginal examination by the speculum. In the interests of the patient, however, we are constrained to say that such examinations ought to be made when the symptoms point to rectal disease. The rules here given for examining such a patient seem to us fairly good and certainly very practical, the most important means of obtaining evidence as to the nature of the disease being, in the opinion of Mr. Allingham and most other surgeons who have studied the subject, examination by the finger.

The first chapter deals with fistula in ano. Out of the 4000 cases given 1200 were of this disease, which is a very common and very painful one. If there seems to be apparently a little too much, here and elsewhere, of St. Mark's Hospital and Mr. Allingham in the text, it must not be forgotten that the volume is one of purely personal experience, and is the outcome of this experience rather than of book-lore.

Mr. Allingham devotes an interesting chapter to the subject of fistula and phthisis. The question as to the advisability of an operation in such cases has been often raised, and frequently negatived, but, as it seems to us, on bad grounds. True there is a risk that the wound will not heal; but in a certain number of cases it does, and if it does the patient is relieved from great pain and an important drain from the system. Of course operation in all cases would be absurd; but in properly selected cases there is every reason for performing the operation; and this is the view taken by Mr. Allingham.

Piles are the next subject discussed. As to operating, Mr. Allingham, though accepting the clamp and cautery plan of treatment, is opposed to the unreasoning support this mode has received in certain quarters. The plan adopted at St. Mark's is to tie the piles, but not in the usual way. The pile is pulled out, and, with a pair of sharp short scissors, it is separated from its attachments to the muscular and sub-mucous tissues. This cut is made where the skin meets the mucous membrane, and is then continued up on either side the pile, and parallel to it, till only an isthmus of mucous membrane is left connecting it with the gut above; but as this contains all the vessels there is no risk of bleeding. The ligature is then applied in the line of this sulcus, and firmly tied; an injection of opium is given, and a pad applied tightly. This plan answers very well.

Fissure of the rectum is a still more painful affection than piles. In a certain number of cases, Mr. Allingham says, it is curable without operation. Zinc ointment, with opium and belladonna, are the local means, the bowels being kept open. Sometimes a touch with acid nitrate of mercury does all that is required; but in other cases an operation is absolutely necessary. Mr. Allingham is not greatly in favour of the French plan of rending the gut; he prefers, in most cases, a cut right through the sphincter.

Polypus of the rectum is the malady next referred to. It is rather a rare one: in all, twenty-nine cases had occurred to Mr. Allingham at the date of writing. The treatment recommended is removal; and this is best done by ligature. Torsion or the actual cautery may be used, but ligation is best. The operation should always be followed by rest.

Ulceration of the rectum—meaning thereby extensive ulceration—is next considered. This is a serious malady, and unfortunately its earlier symptoms are not marked; this is the worse as an early diagnosis is important. Often it is confounded with dysentery. Early interference is called for, or the ultimate condition becomes terrible—a large ulcerated hole appearing where an anus ought to be. This chapter is one of the most interesting in Mr. Allingham's book.

Stricture of the rectum, procidentia of the rectum, pruritus ani, impaction of fæces, cancer of the rectum, rodent ulcer of the rectum, and one or two forms of miscellaneous diseases of the same part, supply the material for the rest of the book.

As to the merits of the work, we have already expressed ourselves freely; that it has faults we presume no one would be more ready to admit than the author. But if it has blemishes, it has also virtues. There is not a tinge of book-making about it; and we heartily wish, with all its demerits, we had more books of the same kind.

Practical Notes on New American Remedies. By R. Tuthill Massy, M.D. London: E. Gould and Son. Pp. 196.

This small homœopathic treatise has, we are bound to confess, amused us if it has not instructed. One of the first subjects treated which met our eye was sleeplessness. Two remedies are given—senecio aureus and gelseminum—in neither of which we advise our readers to trust. On what immediately follows under the heading "Accessory Means," they may as a rule safely rely. These so-called accessory means are—"a Turkish bath, a hop pillow, driving in an open carriage, walking in the fresh air, having the bedroom well ventilated, head of bedstead directed due north, sitz-bath at bedtime about 98° Fahr., cold on rising, our old remedy stramonium for sleeplessness with delirium, hyoscyamus in over-active brain, coffea crud. for old people with restlessness. Flannel should not as a rule be worn next the skin in bed." With such "accessory means" we have no doubt a nightly dose of either senecio or gelseminum—say of the 30th potency—would in a goodly number of cases get rid of sleeplessness—only so would so much sugar.

In this little treatise we are bound to say, however, the author seems disposed to go in for low dilutions or no dilution at all. Once or twice, or more, we notice that the mother tincture of some powerful remedy is ordered in two- or three-drop doses, to be repeated every hour. Seeing that these mother tinctures are considerably more powerful than the great majority of our tinctures, such doses would make many of our so-called "allopathic" friends stare. Aconite given this way would undoubtedly have some effect. In point of fact, this question of dose is attracting considerable attention among homœopathic practitioners, and not a few of them incline to deal with drugs in rational doses; whilst some few madmen, chiefly Yankees, rave about the virtues of the 1000th dilution, suggestive to our mind of a speck of mud on the surface of the sun.

Botany for Beginners: an Introduction to the Study of Plants. By Maxwell T. Masters, M.D., F.R.S., late Lecturer on Botany at St. George's Hospital. London: Bradbury, Evans, and Co. Pp. 185.

We gladly hail this little book as one more step in the right direction, though it is in our eyes far from perfect. Nevertheless, we are glad to see that it at all events advocates the right system of dealing with botany. It is a very extraordinary fact, but we believe it to be a fact, that botany is rarely studied, by those called upon to study it, from plants; books are preferred. The whole subject has been so overlaid by badly educated pedants with a horrible jargon of bad Greek and Latin that many men have come to accept the shadow for the substance—the name for the reality. To the present day botany remains a monument of word-science, and once indoctrinated in the accursed system it is hard for anyone to escape from its thraldom. That is exactly the fault of Dr. Masters's book: it is not written in English, but in what to the uninitiated is an unknown tongue. Dr. Masters is well known as a first-rate botanist—no better—and, speaking to other botanists, he would be intelligible; but when people have to learn a new language and a new subject at the same time, the process is apt to pall both on the senses and the intellect.

It is our confident belief that of all natural-science studies botany is best adapted for school training. No apparatus is required; the material is to be found everywhere, and costs nothing. A bit of chalk and a blackboard may constitute all the diagrams requisite; but let not the teacher attempt to teach

names merely—new things children can easily master, new names they cannot remember. But to succeed in this the teacher must be taught, and meanwhile we have no botany in English. Then, too, there is abroad the notion that botany does not pay so well as chemistry and physics, for science scholarships and the instincts of the shop are, we fear, paramount—*sed meliora speramus.*

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, July 2.

New Hospitals in Paris—Erysipelas—New and old ways of treating Hydrocele—Diagnosis of Death from Cerebral Disease—Cure of the Itch—M.. Chas. Pierre Denonvilliers.

In my last I mentioned that it had been decided upon to complete the new Hôtel-Dieu, and to raise another new hospital in the Ménilmontant quarter of Paris. I have since learned that the former will be so modified that the objections that had been made against it in a hygienic point of view will in a great measure be removed, and that, judging from the plan, the latter is to be a perfect model of a hospital. It is to be built on the pavilion system, each block being isolated. The wards are to be spacious, and not to contain more than twenty-two beds each. In addition to these are several rooms which will be available for from one to four beds. Each ward is to have its own staircase, but bedridden patients will be hoisted up by machinery to the upper stories. At the first story each pavilion is to be surrounded by a terrace, which in the hot season will be covered over by canvas so as to protect those who can move about from the direct rays of the sun. There are to be separate buildings for variolous and lying-in patients, each to be surrounded by a garden, and to have no communication with the other wards. The whole of the building will be warmed by steam, and proper ventilation will be secured by a system of pumping air through the wards. This hospital will be a great acquisition to that quarter, as it is peopled chiefly by the working-classes; and it will be a relief to the other hospitals, as it will furnish 550 additional beds.

Erysipelas is occupying a good deal of the attention of the learned bodies in Paris, and, after a long discussion on the subject at the Société de Chirurgie, they have come to the conclusion that the disease is epidemic and contagious, and I would add that in the Paris hospitals at least it is also endemic. It is curious to observe the different forms of treatment that are employed in this affection, each being dictated by particular theories, though all seem to be more or less influenced by the eliminative process. Many practitioners, and M. Maisonneuve among the number, ignore the distinction made in books, of idiopathic and traumatic erysipelas. They say there is no such a thing as idiopathic erysipelas, as the disease is always the result of some lesion or traumatism visible or invisible to the naked eye, through which the specific poison enters the blood, and produces the phenomena so characteristic of the affection. M. Maisonneuve was so imbued with this idea, that, while Surgeon at the Hôtel-Dieu, he not only taught, but put it to practice. Accordingly he applied a blister to the part affected with the disease, wherever its seat, with the view of eliminating the poison; and he went so far as to say that, by proper tests, which he would recommend to the consideration of physicists or chemists, the poison will some day be detected in substance in the serum of the blister, which is nothing else than the serum of the blood itself. Emetics and purgatives, he said, are given with the same end—viz., to effect the elimination of the poison; but as the latter, when once in the blood, is beyond the reach of these remedies, local measures are to be employed. Some practitioners applied a blister around the affected region, or painted the surrounding skin with tincture of iodine or nitrate of silver, with the view of checking the extension of the inflammation, while others protect the part affected with a coating of collodion; but blisters directly applied, he added, were, for the reasons mentioned above, to be preferred. Professor Broca, however, at the Hôpital des Cliniques, has been trying to limit the extension of the erysipelas by encircling it with a layer of collodion of two or three inches wide, and with a certain amount of success. He prefers the pure collodion to that mixed with oil; but, as the former is liable to crack, the fissures ought to be filled up as soon as they are detected.

The various plans of treating hydrocele in Paris are also worthy of notice. Most of the old surgeons keep to the iodine treatment after tapping, but it is objectionable on account of the irritation it sets up, and, from its being a dirty preparation, it stains the linen and spoils everything it touches. M. Maisonneuve preferred the introduction of a probe tipped with melted nitrate of silver into the vaginal sac, which he said fulfilled the same end, and was a much cleaner method than the above. It was, moreover, less dangerous than any injection, as the fluid employed has been known to escape into the peritoneal cavity. Some surgeons inject wine and water, and Professor Dolbeau, of the Hôpital Beaujon, told me that he has for a long time practised this plan with great success. He thought it equal to the iodine treatment, but it also had the advantage of being cleaner. I lately witnessed an operation for hydrocele by M. Dolbeau, in which he employed equal parts of wine and water as an injection. The hydrocele was on the left side, and when the sac was emptied another elastic swelling was observed on the same side of the scrotum. As he thought upon the possibility of a hernia he tried the light test, and finding it transparent, pronounced it to be an encysted hydrocele of the epididymis, which he said is not unfrequently associated with ordinary hydrocele, and in operating for the latter the former has been sometimes overlooked, and having subsequently increased in size has been mistaken for a return of the original hydrocele operated on. Without removing the canula he pushed the trocar into the other hydrocele, and drew off a small quantity of clear liquid, after which he injected both the sacs at the same time with the wine and water as above described.

You are aware that M. Monod has been employing alcoholic injections in hydrocele and other local dropsies, but instead of emptying the cavity or sac he draws off a little of the liquid, and then with a small syringe injects a certain quantity of proof spirit (one gramme, or about twenty drops). This, he says, mixes with the rest of the fluid, and so modifies it that it becomes absorbable; whereas by the other modes of treatment that are in vogue the object is to modify the secreting membrane itself. The advantages of this new method are that it is cleaner, and attended with less danger and with little or no inconvenience to the patient; for, there being no inflammation, he can move about or follow his usual occupations without being obliged to lay up at all, which is an important point, particularly for working people. M. Monod used the injection at intervals of eight or ten days until the whole of the liquid is absorbed, but, as his experience as to the issue of this new mode of treatment is as yet somewhat limited, he recommends it to the notice of other practitioners for trial. In conversation with a gentleman in extensive practice in Paris on the above subject, he said that his experience was that repeated evacuations of the liquid as often as it is reproduced, followed by gentle compression, are far preferable in hydrocele to any of the other methods; he never had occasion to tap a hydrocele more than three times in the same subject, and, as in M. Monod's cases, the patients were not obliged to lie up. The same treatment is also applicable to hydrarthus, and to a certain extent to all dropsical affections, whether of large or small cavities; and it is only when these means failed that he would have recourse to irritating injections, which are very painful and not always free from danger.

While on a visit to the Hôpital La Charité a man was brought in dead, his body having been found early in the morning in one of the ponds in the Tuileries gardens, where it had probably lain all night and thus escaped observation. Professor Sée, one of the physicians to the Hospital, was directed to make a post-mortem to ascertain the cause of death, and the following is a summary of the case which he read before his clinical class:—The man (who was recognised) was a washerman, about 45 years of age, and of full habit of body. On opening the skull the brain and its membranes were found highly injected, and on cutting into the substance of the former, blood in a coagulated state was detected in both the ventricles, which, he said, was sufficient to account for death. The cerebral arteries were in an atheromatous condition, which would explain the rupture of the vessels and consequent effusion of blood. The heart was pale and flabby, and also the seat of atheromatous disease. This case, the Professor said, presented many points of interest, not only in a scientific, but in a medico-legal point of view; and he cautioned his hearers never to pronounce an opinion under such circumstances before making a post-mortem examination. In the present instance he had to decide whether the man had fallen accidentally into the water, or been thrown into it—if the former, whether it had been the result of intoxication or of an attack of apoplexy

or epilepsy. The first question was decided by the post-mortem appearances, but the second was not such an easy matter, at least as regards the nature of the attack. He was, however, disposed for apoplexy, as, although the tongue was protruded, which is always a sign of convulsions, it had not been injured, neither was there any froth at the mouth. These two latter signs, the Doctor added, were characteristic of epilepsy, and in this latter affection death rarely takes place during an attack unless complicated with cerebral hæmorrhage.

The following prescription for the cure of the itch having been recommended by a distinguished dermatologist of Paris, and as I have seen it employed with unfailing success, I take the liberty of transcribing it for the benefit of your readers and those whom it may more especially concern:—℞. Carbolic acid ʒj., water Oj.; or, what is still better, an ointment composed of carbolic acid ʒij., benzoated lard ʒiv. Three or four frictions in the twenty-four hours suffice to kill the acari, after which a bath of soap and water is to be taken, and the disease produced by these parasites is thus infallibly cured in twenty-four hours.

M. Sédillot is the successful candidate in the surgical department of the Academy of Sciences referred to in my last, and was elected by a great majority, much to the satisfaction of all parties—excepting, of course, his adversaries.

July 8.

The medical profession has just sustained a great loss in the death of M. Charles Pierre Denonvilliers, which took place at his residence in Paris on Friday, the 5th inst. Although he had been for a long time ailing, having been the subject of heart disease, his death occurred rather unexpectedly. The deceased gentleman was born at Paris, on February 4, 1808. He was appointed by *concours* Professor of Anatomy in 1846, in succession to Professor Breschet. In 1856 he succeeded Professor Gerdy to the chair of Surgical Pathology. In September, 1865, he was appointed to the Professorship of Operative Surgery, which became vacant by the death of the illustrious Malgaigne; and in 1867 he was promoted to the chair of Clinical Surgery at the Hôpital la Charité, which he held till the end of last year, when, having attained the age of 63, he had to retire, according to the rules recently established for hospital physicians and surgeons.

M. Denonvilliers, though a talented man and a practical surgeon, had not distinguished himself much as an author. He, however, contributed largely to the medical periodicals of the day, and wrote two very excellent works—one entitled "Compendium de Chirurgie," in conjunction with M. Gosselin; and the other "Rapports sur les Progrès de la Chirurgie," which appeared in 1867, and in which he was assisted by Nélaton, Velpeau, and others. He was for his services appointed in 1845 "Chevalier" of the Legion of Honour. In 1857 he was promoted to the rank of "Officier," and in August, 1865, to that of "Commandeur." He was, besides, Inspector-General of the medical branch of Public Instruction. His funeral, which has taken place to-day, was numerously attended by his friends both in and out of the Profession, and out of respect for the deceased the School of Medicine has been closed for the day.

AMERICA.

Philadelphia, June 1.

Sewage Nuisances in the New World.

Much greater attention has recently been paid in our larger cities to the deleterious influences at work in the causation of disease by the faulty sewerage arrangements, and the imperfect mode of construction in this respect of the dwellings of all classes of the people. Although, outwardly, there may be every visible sign of comfort and of the essentials of healthiness, yet there are thousands of sources of danger in defective building, which are constantly at work undermining the hygienic equilibrium of the community, although comparatively unappreciated and unrecognised until thoroughly investigated after the visit of sickness. I presume such defects prevail everywhere, abroad as well as at home; and, indeed, our own attention was not seriously called to it until aroused by the recent ever-memorable illness of the Prince of Wales. An elaborate report by Dr. Moreau Morris, the intelligent City Sanitary Inspector of New York City, recently awakened a general interest in the subject. He considers that several recent fatal cases of spotted fever could be traced directly to the inhalation of insidious and actively poisonous gases entering sleeping-rooms through defective sewer-pipes, uncovered traps in soil-pipes, defective watercloset water-pipes, etc. As a striking instance he mentions that in a private brown stone dwelling in Forty-third-street, where a little child died from spotted fever after a few hours' illness, were found in the cellar bottom two separate cesspools, having direct pipe connexion with the main sewers, without any traps whatever—being, in fact, a ventilating flue for the escape of sewer gases directly into the house. In the same house was found an open joint, where the soil-pipe from the watercloset entered the sewer-pipe, and in the four-inch sewer-pipe itself an open hole one inch and a half in diameter. The examination of another brown stone dwelling in Forty-eighth-street disclosed a four-inch iron sewer-pipe, having the main waste-pipe of one inch and a half diameter simply entering it without closing the joint. In this house a child died of spotted fever. In York-street the tenants fled the building, after two sudden deaths had taken place from the same disease, where the stench was intolerable from bad sewerage, filthy privies, and other equally poisonous conditions. At four other tenement-houses where cases of spotted fever were reported, like conditions of bad drainage and sewerage were found present, exhibiting much the same conditions—absence of traps in waste-pipes connected with the sewers being one of the direct causes of the disease. It is suggested as a remedy, that where it is possible (and it should be made possible in every dwelling) the soil-pipe should be carried through the roof, affording an open, unobstructed outlet for all sewer gases above and beyond direct inhalation. Diffused in the atmosphere and largely diluted, these gases become innocuous; confined in close rooms and concentrated they are poisonous in the highest degree.

The annual report of the New York Board of Health for 1871 contains a report on sanitary engineering, by General E. L. Viele, which dwells at some length on the same subject, and gives the following interesting facts by way of elucidation:—

"There is an institution located in the upper part of the city which is an example of the general want of information which exists on the important subjects of drainage and ventilation. The buildings have all the appearance externally of a correct architectural structure, spacious in extent, commanding in appearance, occupying an elevated site overlooking the Hudson, the grounds sloping towards the river, and fringed with a natural growth of forest trees. It is conducted by gentlemen of intelligence, cultivation, philanthropy, and zeal, and under the superintendence of a board of directors of the most estimable and worthy citizens of New York. Yet the entire institution, from attic to cellar, and the grounds in the whole extent of twenty-five or more acres, so far as regards ventilation and drainage, exhibit an absence of proper information remarkable in an institution of this kind. There is no general system of ventilation provided, and every room is deficient in this particular. The entire sewage has been suffered to flow in an open channel in a ravine, and to empty itself into a slough of about an acre in extent at the foot of the ravine, which, although occasionally overflowed by the tide, is every day exposed to the direct action of the rays of the sun, and a black, fetid mass of decomposing matter generates incessantly malarious gases, which have had the effect of prostrating a large number of the inmates with typhus fever. Even a public hygienic institution like the Lunatic Asylum, located at 170th-street, on high ground, near the Hudson River, and with a rapid descent directly to the river, instead of taking advantage of its favourable location, and constructing a drain to the river, has made use of a stream, originating near the institution, as a receptacle for all its liquid refuse. This stream runs from 120th to 125th-street, where it meets with low swampy ground, and empties itself into a pond. Thence it flows into another pond, and becomes a long stagnant deposit of water, extending from 124th to 122nd-street. Along the entire extent of this dirty and disgusting deposit the most sickening odours are perceptible, and fevers are constantly prevalent."

The publicity thus given to these almost criminal defects will doubtless, sooner or later, exert a good effect, and lead to the improvement of the general hygienic condition of all our cities.

Dr. Cameron's Lectures on Public Health.—Dr. Cameron gave his tenth lecture at the College of Surgeons, Dublin, on the 9th inst., before a large audience. He treated of indigestion, and gave his hearers more good advice than they are, we fear, likely to follow.

GENERAL CORRESPONDENCE.

REPORTS OF CASES.

LETTER FROM MR. JAMES DIXON.

[To the Editor of the Medical Times and Gazette.]

SIR,—It has of late become a practice with some medical men in reporting cases to quote the actual words made use of by their patients. The object of this no doubt is to impart a certain naturalness and vigour to the record of symptoms, and such would often be the effect of these *verbatim* reports if the patients were educated and careful observers, and endowed with sufficient powers of language to express clearly their own meaning. But "how to observe" is one of the most difficult of all arts, and "how to describe" is a harder task still. Were it only the tyros in case-taking who adopted this plan of allowing ignorant patients to give their own version of their symptoms, I should certainly not think it worth while to notice the subject, but some of our very best medical and surgical writers are now taking up the practice. At this moment I have before me some cases, reported by one who habitually writes the purest and clearest English, and whose powers of description are unrivalled, and yet I find every page studded with phrases which, having been used by ignorant people, are utterly worthless as guides to the interpretation of disease. Morbid conditions which we know to have been similar in a dozen patients are described by them in a dozen different ways. Anyone who has had much experience at a public hospital must have his memory stored with ludicrous accounts of complaints given by patients, a record of which would make up a jest-book. The experienced medical man knows that it is but waste of time to listen to the endless details of his hypochondriacal or hysterical patients. And, not to mention these extreme cases, what extraordinary accounts do people give us simply from confounding the objective and the subjective. A flatulent woman tells us that after dinner she "swells up to double her size" (this is the lowest estimate we ever have of such distension). Noises "like pistols" in their insides, something alive in their stomachs, heat and cold in every degree, such are the similes employed to make the doctor understand what the sufferers feel.

Of course I am not contending that all a patient tells us of his symptoms is to be excluded from a report of his case. Writers should discriminate between one description and another, and not lay before their readers the crude remarks of the patient just as they fall from his lips.

I offer these remarks in all friendliness, not in any captious or hypercritical spirit, for it is in the writings of some of my most valued friends that I meet with the practice I have ventured to condemn. I am, &c., JAMES DIXON.

Lower Seymour-street, June 28.

WOMEN-MIDWIVES.

LETTER FROM MR. FREDERICK W. LOWNDES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me, as an obstetric practitioner, to thank you for the outspoken, able, and judicious editorial statements published last Saturday in your journal under the above heading. The question is one of great importance in its social, sanitary, and scientific bearings, and the difficulties of its satisfactory solution have long and deeply exercised the minds of earnest and reflecting men in the obstetric department of the Profession. It therefore appears desirable that we should be informed how far the proceedings of a meeting (an abstract of which appeared in your columns on the 8th inst.) is really a fair reflex of the opinions of the Profession in so important a town as Birmingham. In the absence of any details as to how the meeting was summoned, the names or even the numbers of those present, to what extent the obstetric element was represented, the arguments upon which the resolutions were founded, I am disposed to credit a representation made to me upon good authority, that the meeting in question was the outcome of an agitation got up chiefly by one man, and that the cogent reason for the adoption of the resolutions was a fear lest midwives should interfere with the interests of general practitioners. I cannot believe that the Profession of Birmingham would lend their sanction to such an absurd proposition. It should be known that in Birmingham some six years ago there existed a Lying-in-Hospital with three resident qualified surgeons as accoucheurs, and at the General Dispensary there was also a resident accoucheur, who collectively attended from 1600 to 1700 labours yearly. These qualified medical officers have since been replaced by midwives, the result being, if I may judge from the numbers of patients given in the "Medical Directory," a considerable reduction in the number of patients—a tolerably significant indication of the view taken by those who are, after all, most deeply and immediately concerned in the question of Midwives *versus* Surgeons.

I hope we shall have further particulars of these proceedings in the Midland metropolis. It must, I think, be considered a reflection on it, and a very serious one, too—firstly, to deprive so large a number of poor women of the services of duly qualified men; and secondly, to resist a laudable attempt, on the part of a society consisting of the most eminent accoucheurs in these kingdoms, to afford the public some guarantee that those women who hold the Society's certificate are competent to attend natural labour, and not, as is too often the case now, shamefully ignorant both of what to do and what to avoid doing. I am, &c., FRED. W. LOWNDES,

Late Resident Surgeon, Birmingham and Midland Counties Lying-in-Hospital.

Liverpool, June 22.

LEGAL INTELLIGENCE.

WOMAN PAST CHILD-BEARING.—RE MILNER'S ESTATE.

AT Vice-Chancellor Malins' Court, on June 28, a petition was presented by Charlotte Whitmarsh and Frederick Miles and his wife, praying that certain trust money devised to Charlotte Whitmarsh for life, and after her decease to her children, might be paid to them upon their joint receipt. Eliza Miles, the wife of Frederick Miles, was the daughter of Charlotte Whitmarsh, and was married to her present husband on May 14, 1846. She had been married, therefore, twenty-six years, was 49 years of age, and has had no children. After the death of Charlotte Whitmarsh and Frederick Miles, Eliza Miles would be, according to the terms of her marriage settlement, absolutely entitled to this money, subject only to the contingency of having children by Frederick Miles. The Vice-Chancellor considered this contingency might be disregarded, and made the order accordingly.

OBITUARY.

ROBERT ELLIOTT, F.R.C.S.

THIS most worthy and amiable provincial surgeon died on the 20th ult., in his 69th year, at his residence, North-street, Chichester, to the Infirmary of which city he was long the senior surgeon. Mr. Elliott pursued his professional studies at Guy's Hospital, and was admitted a Licentiate of the Society of Apothecaries in 1829, and a Member of the Royal College of Surgeons in 1840, and obtained the Fellowship in 1857. As a lithotomist he had few equals, and to the pages of a contemporary he has contributed some interesting cases of this important operation. With the late Sir Astley Cooper he was an especial favourite, and often shared any valuable calculi he obtained, contributing also to the fine collection of the College of Surgeons. In the affairs of this institution he always took a great interest, and for many years was one of those who, like the De la Gardes and James (of Exeter), Turner, Southam, and Lund (of Manchester), Soden (of Bath), Wiblin and Osborn (of Southampton), Green (of Bristol), etc., regularly attended the annual election of Fellows into the Council, being always opposed to voting by proxy. As an ophthalmic surgeon he greatly distinguished himself. Mr. Elliott has left two sons, members of the College, and four daughters to lament his loss, and a large body of friends to mourn an excellent citizen and accomplished surgeon.

SURGEON-MAJOR JOSEPH S. RIMINGTON,

PRESIDENCY SURGEON at Baroda, died from fever on May 30, aged 47. He entered the service July, 1848, and became Surgeon-Major July, 1868. He served with the Bombay column of the army of the Punjaub in 1848 and 1849, and was present at the siege and surrender of Mooltan, the battle of Guzerat, and the pursuit and surrender of the Sikh army.

THOMAS COLCHESTER,
Surgeon, on half-pay, Royal Artillery, died at Bushey-heath, Herts, June 29, aged 70. He entered the service January, 1827, became Surgeon January, 1841, and retired on half-pay April, 1847.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 4, 1872:—

Ayling, Arthur Henry Williams, Great Portland-street, W.
Bracey, Herbert Richard, Birmingham.
Fairbank, William, Highbury-hill.
Maclean, Allan, Caistor, Lincolnshire.
Maybury, Aurelius Victor, Frimley, Surrey.
Payne, George Speke, St. Bartholomew's Hospital.
Williams, Benjamin Harvey, Haverfordwest.

The following gentleman also on the same day passed his Primary Professional Examination :—

Scott, Edward, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Covernton, Charles James, M.R.C.P., L.A.C.—Medical Officer for the Llanbister District of the Knighton Union, Radnorshire.

Dobson, Nelson C., F.R.C.S. Eng., L.S.A.—Lecturer on Anatomy in the Bristol School of Medicine, *vice* F. P. Lansdown, M.R.C.S.E., L.S.A., resigned.

Duke, Allen, M.D., M.R.C.S.—Medical Officer at the North Surrey District School, *vice* F. E. Wilkinson, M.D., L.R.C.P., M.R.C.S., L.S.A., resigned.

French, E. T., M.D., L.R.C.S.I.—Medical Officer for the Glasson Dispensary District, Athlone.

Howlett, W. H.—Dispenser to the Gloucester Dispensary.

Longworth, Peter, M.D., L.R.C.S.I.—Medical Officer for the Moate Dispensary District, Athlone.

Lowndes, F. W., M.R.C.S. Eng., L.S.A.—Transferred from No. 6 to No. 12 District of the Parish of Liverpool, *vice* J. H. Finegan, M.D., M.R.C.S., L.S.A., resigned.

Parke, Wm., L.R.C.P.E., L.R.C.S.I.—Medical Officer for the Ely Dispensary District.

Provis, Wilton, L.R.C.P.E., M.R.C.S. Eng.—Medical Officer for the Workhouse, Mere, Wilts, *vice* C. Rumsey, M.R.C.S. Eng., L.S.A.

Smith, Eustace, M.D., M.R.C.P. Lond., F.R.C.S. Eng.—Visiting Physician to the East London Hospital for Children, Ratcliff-cross, *vice* Alfred Pullar, M.D.

Storey, James A., L.R.C.S.I.—House-Surgeon (*pro tem.*) to the North Riding Infirmary, Middlesborough-on-Tees, *vice* Alfred E. Lloyd, L.R.C.P.E., M.R.C.S.E., resigned.

Woods, Robert A. H., M.R.C.S., L.A.C.—No. 6 District of the Parish of Liverpool, *vice* F. W. Lowndes, M.R.C.S. Eng., L.S.A., transferred to No. 12 District.

NAVAL APPOINTMENTS.

Admiralty.—Mr. John Jennings has been confirmed as an Assistant-Surgeon in her Majesty's Fleet, with seniority of November 12, 1870. Mr. Nicholas Fitzhenry Fitzmaurice has been confirmed as an Assistant-Surgeon in her Majesty's Fleet, with seniority of August 15, 1870. In accordance with the provisions of her Majesty's Order in Council of February 22, 1870, Staff Surgeon Arthur W. W. Babington has been placed on the retired list.

Medical Department.—Dr. William J. Rankin, Assistant-Surgeon to the *Lynx;* Arthur W. Babington, Staff Surgeon to the *Repulse;* Charles H. Slaughter, Surgeon to the *Tenedos;* George Curtis and Frederick A. Nixon, Assistant-Surgeons to the *Repulse;* W. C. Sandys, Assistant-Surgeon to the *Tenedos*.

BIRTHS.

Blaker.—On July 5, at The Grange, Robertsbridge, the wife of Walter Campbell Blaker, M.R.C.S., of a daughter.

Bogle.—On June 30, at Ventnor, Isle of Wight, the wife of Surgeon-Major A. L. Bogle, M.D., Bengal Army, prematurely of a daughter, stillborn.

Collins.—On July 2, at Claremont House, Windsor, the wife of W. Collins, M.D., Scots Fusilier Guards, of a son.

Dalzel.—On July 7, at 40, Kensington-park-gardens, Notting-hill, the wife of Surgeon W. F. B. Dalzel, M.D., Bengal Army, of a daughter.

Graham.—On July 7, at Weybridge, the wife of Dr. Graham, of a daughter.

De Lisle.—On July 7, at Panorama House, Guernsey, the wife of Frederick Irving De Lisle, L.R.C.P., of twins (male), stillborn.

Giraud.—On May 26, at the Sanitarium, Poorundher, Bombay, the wife of Dr. Byng Thomas Giraud, (Army Medical Staff in medical charge), of a daughter.

Sealy.—On June 27, at Oakhill House, Weybridge, the wife of George J. Sealy, M.D., of a daughter.

Smith.—On July 9, at Pershore, the wife of S. W. Smith, M.D., of a son.

Turle.—On July 5, at Cromwell Villa, Finchley-road, N.W., the wife of James Turle, M.D., of a daughter.

MARRIAGES.

Cade—Roberts.—On June 29, at the British Consulate of Catalonia, and at the British Chaplaincy in Barcelona, Absalom Henry Cade, of London, to Mary Elizabeth, eldest daughter of Robert Roberts, M.R.C.S.E., L.S.A. Lond., English Resident Medical Practitioner in Barcelona.

Caldwell—Somerville.—On July 3, at Fulshaw Independent Chapel, William Peter Preston, son of Francis Caldwell, Esq., Dublin, to Agnes Marion, daughter of Dr. Somerville, Hawthorne Hall, Wilmslow, Cheshire.

Ewart—Kane.—On July 4, at St. Mary's, Islington, by the Rev. Andrew H. Frost, M.A., Principal Church Missionary College, Islington, John Henry Ewart, M.R.C.S.E., L.R.C.P. Lond., of Cheetham-hill, Manchester, to Emily Matilda Christine, second daughter of Matthew Kane, M.D., Deputy Inspector-General of Hospitals, H.M. Madras Army (retired list), of Dinan, France.

Grove—Stewart.—On July 2, at St. Paul's Episcopal Church, Brin, near Inverness, Edward William Grove, Esq., late 71st Highland Light Infantry, son of the late Captain Francis Grove, R.N., to Ella, daughter of the late Dr. John Grant Stewart, R.N., C.B., Inspector-General of Hospitals and Fleets.

Hicks—Ibbotson.—On July 4, at the Church of St. Mary, Elland, Yorkshire, Herbert George, only surviving son of the late Richard Hicks, surgeon, of London, to Hannah Ellen, younger daughter of the late Joseph Ibbotson, Esq., of Goole.

Jones—Allen.—On July 3, at Little Stambridge Church, Essex, Herbert Taylor, third son of G. J. Jones, M.R.C.S. Eng., of Roots Hall, Prittlewell, to Charlotte, second surviving daughter of W. T. Allen, Esq., of Little Stambridge Hall.

Rew—Cooke.—On July 4, at Christ Church, Luton, James Rew, M.R.C.S., of Luton, to Margaret, youngest daughter of the late R. Cooke, Esq., of Stamford, Lincolnshire.

Tayler—Clark.—On July 3, at the parish church, Trowbridge, George Christopher Tayler, M.D., of Trowbridge, to Sarah Elizabeth, eldest daughter of Perkins Clark, Esq., of Wyke House, Trowbridge.

DEATHS.

Chapman, Ernest T., eldest son of Dr. J. Chapman, at Rübiland, by an explosion in the laboratory of the Harzer Werke, on June 25, aged 26.

Fitzpatrick, John, M.D., Surgeon-Major H.M.'s Indian Army (retired), at Lenham, Kent, on July 1, aged 54.

Isherwood, Felia William, M.D., at Hayes, Middlesex, on July 2, aged 36.

Jameson, Isedora Mary, only daughter of the late Dr. J. S. Jameson, of Cartrontroy House, Westmeath, and granddaughter of the late Dr. W. H. Holt, of Enfield, at her mother's residence, Shepherd's-bush, on June 19.

Maule, Arnold John, second son of John Templeman Maule, Inspector-General of Hospitals H.M.I.S., and of Cleveland House, Bath, suddenly, of heat-apoplexy, in India, on June 1, aged 36.

Philp, Gertrude, daughter of F. R. Philp, M.D. Camb., F.R.C.P., at Colby House, Kensington, on June 30.

Tomkins, Maria Hobbs, widow of the late Charles Tomkins, M.D., of Abingdon, Berks, and Weston-super-Mare, at 8, Haines-hill, Taunton, on July 3, aged 74.

Warwick, Anne, the beloved wife of William Rollinson Warwick, M.D., at Southend, Essex, on July 5, aged 50.

Wheeler, Alfred, son of the late Daniel Wheeler, surgeon, formerly of Reading, at 92, Wigmore-street, Cavendish-square, on July 6, aged 33.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bradford Infirmary.—Junior House-Surgeon. Applications, with testimonials, to C. Woodcock, 65, Market-street, Bradford.

Birmingham and Midland Hospital for Women.—Resident Medical Officer and Secretary. Candidates must be duly qualified. Applications, with testimonials, to Arthur Chamberlain, Esq., Hon. Secretary, 8, The Crescent, Birmingham, on or before July 15.

Board of Police, Glasgow.—Sanitary Medical Officer for the City. Applications, with testimonials, to John Lang, Clerk to the Board, Central Police-chambers, Glasgow, on or before July 19.

Brighton and Hove Dispensary.—Resident House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Committee of Management, Queen's-road, Brighton, on or before August 5.

Devonshire Hospital, Buxton, Derbyshire.—House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to Joseph Taylor, Secretary, on or before July 24.

Dorset County Hospital.—Honorary Physician. Candidates must have taken their regular professional degree in some University of the United Kingdom, or be Fellows or Licentiates of the College of Physicians. Applications, with testimonials, to "The Chairman of the Committee," Dorset County Hospital, Dorchester, on or before July 31.

General Hospital and Dispensary for Sick Children, 18, Bridge-street, Manchester.—Resident Medical Officer. Must be duly registered. Applications and testimonials to be sent in on or before July 22.

Hospital for Consumption and Diseases of the Chest, Brompton.—Dental Surgeon. Candidates must be Licentiates in Dental Surgery of the Royal College of Surgeons of England. Applications, with testimonials, on or before July 17.

Hospital for Sick Children, 49, Great Ormond-street.—House-Surgeon. Candidates must possess some legal qualification to practise. Applications, with testimonials, to Samuel Whitford, Secretary, on or before July 17.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

KILDALTON, ISLAY.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen.

LAMBETH PARISH.—Resident Medical Officer and Dispenser for the Workhouse. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to W. B. Wilmot, Clerk to the Guardians, on or before July 22.

LEEDS PUBLIC DISPENSARY.—Junior Resident Medical Officer. Candidates must possess at least one legal qualification (registered). Applications, with testimonials, to John Horsfall, 31, Albion-street, Leeds.

MANCHESTER ROYAL INFIRMARY.—Indoor Physician's Assistant. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Weekly Board, on or before July 24.

NEWBURY.—Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to John Tanner, Clerk, Speenhamland, near Newbury, before July 15.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY.—Resident Medical Officer. Candidates must be doubly qualified and registered. Applications, with testimonials, to the Secretary, A. R. Emmerson, on or before July 15.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification. Applications, with testimonials, to J. Barras, Hon. Sec.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Junior Resident Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before July 17.

ROYAL ISLE OF WIGHT INFIRMARY, RYDE.—House-Surgeon. Applications, with testimonials, to the Secretary, on or before July 29.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—Resident Medical Officer. Applications, with testimonials, to Ernest Morgan, Secretary, 20, John-street, Adelphi.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—Resident Medical Officer for the Lock Wards. Candidates must have graduated at a University, or be Members of one of the Royal Colleges of Surgeons of the United Kingdom. Applications, with testimonials, to the Secretary, on or before July 16.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Particulars may be obtained from S. S. Wigg, Esq., Honorary Secretary, 33, Gordon-street, Gordon-square.

SKIRLAUGH UNION.—Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to Thomas A. McCoy, Clerk to the Guardians, Beverley, on or before July 25.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Applications, with testimonials, to the Hon. Secretary, on or before July 29.

STOURBRIDGE DISPENSARY.—House-Surgeon and Secretary. Candidates must be M.R.C.S. Eng., L.R.C.P. Lond., or L.S.A. Lond. Applications, with testimonials, to the Secretary on or before July 30.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WESTERN GENERAL DISPENSARY, 10, LISSON-GROVE, N.W.—Resident Surgeon and Apothecary. Candidates must be Members of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Apothecaries' Society. Applications, with testimonials, to W. Kimpton, Secretary, before July 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Aberayron Union.—The Llansantfread District is vacant; area 30,323; population 7068; salary £40 per annum.

Battle Union.—The Fourth District is vacant; area 2850; population 580; salary £21 per annum.

Hailsham Union.—The Third District is vacant; area 13,733; population 3537; salary £80 per annum.

Skirlaugh Union.—Mr. Wm. H. Browne has resigned the Aldborough District; area 9590; population 1734; salary £32 per annum.

Uxbridge Union.—The Hayes District is vacant; salary £35 per annum.

APPOINTMENTS.

Crediton Union.—James Ford, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Chawleigh District.

Manchester Township.—James Hardie, M.D. Univ. Edin., L.R.C.S. Edin., to the Workhouse Hospital and the Crumpsall Workhouse.

Newton Abbot Union.—Herbert N. Chileote, M.R.C.S. Eng., to the St. Mary Church District.

Northleach Union.—Fred. A. E. Barnardo, L.K. & Q.C.P. Ire., L.R.C.S. Ire., to the First Division of the Third District.

PROFESSORSHIP OF OPHTHALMIC AND AURAL SURGERY IN THE ROYAL COLLEGE OF SURGEONS, IRELAND.—On Thursday, the 4th inst., the Council of the College elected Mr. Henry Wilson, F.R.C.S.I., Surgeon to St. Mark's Ophthalmic Hospital, to the newly created chair of Ophthalmic and Aural Surgery.

DR. BENJAMIN WARD RICHARDSON, M.A., M.D., F.R.S., Honorary Physician to the Royal Literary Fund, having intimated his willingness to act in the same capacity for the Newspaper Press Fund, the offer has been gratefully accepted by the Committee.

HOSPITAL SUNDAY IN DUBLIN.—A movement has been set on foot in Dublin for inducing all religious bodies to give a collection in their places of worship to the hospitals of the city. Cardinal Cullen, however, has refused to allow the Roman Catholic clergy to take any part in it.

PRESENTATION.—Mr. Henry Howson has been publicly presented at the Town Hall, Stockton, with a marble clock, a case of dessert knives and forks, a silver goblet, and a purse containing one hundred guineas, as a mark of esteem and respect on resigning as Resident Medical Officer to the Stockton Dispensary, and House-Surgeon to the Stockton Surgical Hospital.

DEATH OF M. BOUSQUET.—Dr. Bousquet, the most eminent of the promoters of the Jennerian doctrines in France, has just died, aged 76, having long since retired from practice with a good competence, which he has devoted to the erection of and providing for a hospital. In medical history he will be remembered as one of the most able and determined opponents of Broussais in the pages of the *Révue Médicale*, between 1820 and 1830, and therefore when the great antiphlogistic advocate was at the height of his popularity. Bousquet's "Traité sur la Vaccine" is one of the best works upon the subject, and has done immense service to the cause he had so much at heart, and which he defended to the last when it was threatened by the inroads of "animal vaccination."

COLLEGIATE ELECTIONS.—At a meeting of the Council on Thursday last, Mr. Henry Hancock, of the Charing-cross Hospital, was elected President of the College; and Messrs. Thomas Blizard Curling, of the London Hospital, and Frederick Le Gros Clark, of St. Thomas's Hospital, Vice-Presidents of the College. Mr. Francis Spencer, of Chippenham, was elected a Fellow of the College, his diploma of Membership bearing date December 20, 1839; and the following gentlemen, having been elected Fellows at previous meetings, were admitted as such, viz.—Messrs. Sprott Boyd, of Sydney, New South Wales, diploma of Membership bearing date March 15, 1839; and John Fountain Elwin, of Bristol, August 29, 1834. The report from the Court of Examiners on candidates passed and rejected at the Primary and Pass Examinations for the diploma of Membership during the collegiate year 1871-72 was received. The Professors, Messrs. Erasmus Wilson, Flower, and Holmes, were re-elected, as was Dr. Humphry, the Lecturer on Anatomy. As an illustration of the prosperous condition of the College of Surgeons it was stated at a meeting of the Council on the 11th inst. that, during the collegiate year ending that day, 349 gentlemen had been admitted Members of the College, against 291 last year, thus showing an increase of 58; and at the approaching examinations, commencing on Saturday next, the number of names entered is in excess of those at the corresponding period of last year. It was also stated that the balance at the bankers at Midsummer-day was nearly £600, against £7 11s. 10d. last year.

DUBLIN INFIRMARY FOR DISEASES OF THE EYE AND EAR, ELY-PLACE.—With the above title, an institution intended to be supported by voluntary contributions has just been founded, and in the wards of the Infirmary eighteen beds have been set apart for the intern treatment of patients. There is in addition an extern dispensary, which is open on three days every week. The following have been appointed as members of the medical and surgical staff:—Ophthalmic and Aural Surgeon: Archibald Hamilton Jacob, M.D. Dub., F.R.C.S., ex-Ophthalmic Surgeon to the City of Dublin Hospital; Consulting Physician: Evory Kennedy, M.D. (Hon. Caus.) T.C.D. and Edin., Fellow and ex-President King and Queen's College of Physicians; Consulting Surgeon: George H. Porter, M.D.T.C.D., Surgeon-in-Ordinary to her Majesty the Queen in Ireland, Fellow and ex-President of the Royal College of Surgeons of Ireland, Senior Surgeon to the Meath Hospital; Obstetric Physician: John Cronyn, M.D., F.R.C.S., Examiner in Midwifery in the Royal College of Surgeons, ex-Assistant-Physician Rotunda Hospital.

USE OF COLLODION IN PREVENTING CICATRICIAL CONTRACTION.—A case of harelip was reported in the *Gazette des Hôp.*, June 8, as illustrating M. Broca's employment of collodion. He practises the operation upon infants at the breast, securing union by silver threads, which he removes as soon as possible—the fifth, fourth, and often the third day. He does this not only from fear of the threads cutting through the tissues, but because suppurative inflammation set up around them may extend to the edges of the wound and disunite them; several examples of which he has seen. But a three days' cicatrix is not very solid, and cannot be relied on, seeing that the lips are

exposed to much traction, especially during the cries of the child. This traction may be much diminished if, after the removal of the wires, a small portion of wadding is wetted with collodion, and spread (bringing the cheeks of the child together at the same time by bilateral pressure) out above the lip, stretching out on each side like a moustache. When the ether has evaporated, not only does this layer of collodion adhere closely, but it retracts, just as collodion does, without the wadding; and the lip is in this way supported and protected from all separation. These collodionised strips of wadding are also of great use in diminishing the size of suppurating wounds and their consecutive cicatrices by reason of the sliding or "mobilisation" of the surrounding skin. M. Gosselin applies the same principle also in lesions of the lower eyelid, the cicatrices of which may give rise to ectropion, by exercising repeated pressure on the cheek from below upwards, pushing up the skin towards the eye. It acquires by this kind of shampooing a degree of mobility that may prevent the eversion of the eyelid.

"It is an Ill Wind that blows nobody Good."—M. Vibraye, in a communication to the Académie des Sciences, states that one great benefit has resulted from the recent calamitous campaigns on the Loire, in the shape of the spontaneous appearance of abundant crops of exotic provender. Brought for the most part from Algeria for the use of the cavalry, these plants have survived the rigor of an exceptionally severe winter, and have propagated in an excessive abundance, forming true oases amidst an arid soil on which no vegetation of any importance had hitherto thriven. This is especially the case between Blois and Orleans, so that 140 new varieties are now met with in the centre of France, in a *habitat* hitherto supposed to be much too far north for their cultivation. It is the migration of a complete and independent flora—a true treasure, which if properly looked after may prove invaluable.—*Union Méd.*, June 22.

Syphilis and Itch.—These are the most common affections found among the beggars—a class in Peking by far too great for a healthy state of things. Among the official and mercantile classes, too, drawn as they are from all parts of the eighteen provinces, and with a state of society which admits and licenses the grossest immorality, certain affections are but too common. One mandarin has been under treatment; his nose has fallen in, the tonsils and uvula have disappeared, and the necrosed nasal bones have been removed. The Chinese trace syphilis to about the time of Confucius, 500 B.C., to one of the principal of the many little kingdoms into which China was then divided. Report points to the *Tsi* kingdom at present comprised in the northern part of Shantung, as the district where it first made its appearance. The disease is here at present known by such names as *yang mei* and *tsang cheng*. Several cases of phymosis with adhesions of long standing, the result of the cicatrisation of ulcers, and a few cases of congenital narrowing of the orifice of the prepuce, were operated upon. The Chinese mercurial treatment is worthy of notice. An ordinary prescription is three drachms of saltpetre, five drachms of calomel, for one dose. The appearance of a female patient who applied at the Hospital for relief from the effects of half this dose almost baffles description. The term "salivation" conveys no idea of the state in which this woman was. Her tongue was one and a half inches thick, the gums and lower jaw of unusual dimensions; the mouth could not be shut, and the tongue could hardly be contained within it; the chest and throat were also swollen, and deglutition was nearly impossible. She died on the eighth day after taking the medicine. Calomel is said to be an aphrodisiac. The Chinese frequently give it to bitches for this purpose. It is believed, when taken to cure disease, to drive the poison to the bones and cartilages and fix it there. They know of its cathartic power. A person under its influence has a pencil tied in the mouth at night, like bridle-bits, to facilitate the flow of the saliva (or poison of the mercury, as it is called), and thus prevent the destruction of the teeth.—*Report of the Peking Hospital, by Dr. John Dudgeon.*

Iron in the Blood and in Alimentary Substances.—In a paper recently read to the Academy of Sciences, M. Boussingault details the results of his investigations. According to these the flesh of invertebrate animals contains about as much iron as that of the calf and ox, while the various vegetable substances serving for food for animals contain it abundantly, and that also when they are deprived of green colouring matter, as in fungi. Of all nutritive substances consumed by man, blood is that which is most rich in iron, and iron in the most assimilable form. In Europe pigs' blood is the only form of that fluid which is consumed for food, owing to the unpleasant taste and odour of that of other animals.—*Gazette Médicale*, June 15.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Stevens.—We believe journeymen bakers have good wages and good perquisites, and if they strike we hope they may be superseded by machinery. They are always usually considered a reckless and improvident class of men.

Juryman.—The coroner's jury, as stated by Dr. Pettijohn, of New York, consists only of six. There certainly would not appear to be any "magic" in the number 12, but that number as a rule has been found to work well.

Lambeth.—Dr. McCormack has shown conclusively that the water-supply of Lambeth is deficient. In his report he contrasts the state of health in the prisons, the penitentiaries, and at Pentonville, now that they are supplied from deep-sunk wells, and when the water was supplied from the Thames, as being most favourable to the former.

A Provincial Fellow.—The result of the election of Fellows into the Council of the College of Surgeons as published in the *Medical Times and Gazette* was quite correct. The *Lancet* has made the mistake of giving the largest number of votes to Mr. Curling, instead of to Mr. Hancock, who headed the list in both numbers and plumpers.

Infirmarius.—We believe the new material called Marezzo marble—being smooth, polished, not porous, and capable of being easily washed—will be a capital material for the floors, walls, and ceilings of hospitals. We learn that the slabs for floors cost about 2s. 6d., and those for walls and ceilings about 1s. 9d. per square foot. It is a good material, also, for baths, for dairies, pantries, etc. We hear that it is to be used in the construction of a hospital at Boston, U.S. The works are at Shenton-street, Old Kent-road.

Erratum.—In our correspondent's letter on the Dublin Exhibition last week an error of omission occurred. The painting of Dr. Mayne in the National Portrait Gallery was by the late much-lamented Mr. Calterson Smith, ex-President of the Royal Hibernian Academy, and not, as might be inferred, by Mr. Jones, of whose handiwork Dr. Beatty's portrait is an excellent example.

M.D. Edin.—In the case alluded to, the judge would not admit the claim of the M.D. of Edinburgh for medicines *sold* (not prescribed and dispensed) as an apothecary. The question raised, therefore, can scarcely be said to come under the Apothecaries Act. Indeed, the judge "fully recognised the right of the plaintiff to recover for medicines furnished in connexion with visits and advice." This was clearly acknowledging his right to supply the medicines he prescribed for his patients. The decision arrived at by some of the county court judges have been contradictory, and it is highly desirable that the question should be finally settled in one of the superior courts. The quotation made by one of our contemporaries from the Medical Act was not complete, and consequently did not convey its full meaning. The thirty-first clause runs thus:—

"Every person registered under this Act shall be entitled *according to his qualification or qualifications* to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for professional aid, advice, and visits, and the costs of any medicines, or other medical and surgical appliances rendered or supplied by him to his patients. Provided always, that it shall be lawful for any College of Physicians to pass a by-law to the effect that no one of their Fellows or Members shall be entitled to sue in manner aforesaid in any court of law, and thereupon that by-law may be pleaded in bar to any action for the purposes aforesaid commenced by any Fellow or Member of such College."

The italics are our own; but the words, to common understandings, seem clearly to supplement the Apothecaries Act of 1815, granting to persons registered under the Medical Act a right to recover for medicine and attendance in medical cases in any part of her Majesty's dominion, provided their qualification gave them that privilege in that part of the kingdom in which it was obtained. This, however, has been held by a county court judge not to be the case, and it is contended that the Apothecaries Act is still in force, and no one but an apothecary can recover in England and Wales any charges for medicines supplied in that capacity. Such a confused state of things should not continue.

We are glad to see that the subject of the burial of the dead is beginning to draw clerical attention. The following extracts from an address on funerals by a clergyman, which appears in this week's *Guardian*, are full of good sense, and will commend themselves to the medical reader:—

"That there are evils in our customs with regard to interments among us I think we shall all admit. The time between death and burial is far too long. In hot climates absolute necessity shortens this period. In France and Germany, where the average conditions of temperature are not widely different from those obtaining among ourselves, the law requires burial at an early date—I think before the end of the third day. In Ireland, where the law stands as in England, public opinion strongly demands speedy interment, and to delay a funeral beyond the third day is considered a disrespect to the memory of the dead. In Scotland the period is much as with us, but the

average temperature is lower, nor is a Scotch funeral in anything a guide for us. The non-interment of our poor for four, five, or even seven days, is simply shocking, when the crowding of cottages and the slight build of cheap coffins is considered. And yet the constant phrase—'I don't think we shall be able to keep him longer than such a day,' shows that in the mind of the speaker the delay is considered a respect for the dead. . . . The coffin is hoisted on the shoulders of men, not always well skilled in the work, with terrible risk of a ghastly accident, and these men, breathing poison through the coffin chinks, are sweltered and shrouded from fresh air under the folds of a pall. If the deceased is of social standing at all above the average, the unfortunate bearers are further enveloped in cloaks—the mourners in cloaks, or at least scarves; the parson has his hat-band, scarf, and gloves—all of which greatly increase the cost of the funeral, and do little good to any but the undertaker. . . . . It has been for some time my practice always in visiting at the house, as soon as possible after death to urge the sanitary necessity of speedy burial, and I have, I think, already in some slight degree changed the tone of feeling in my own parish in this regard. If we *all* did this, it would much conduce to bring about a change. It would be desirable that in no case should more than two clear days intervene between death and burial. It would be well that in all cases where possible we should discourage the use of hearses and coaches, and encourage walking funerals; but I admit that we can do little against the undertakers where a hearse is necessary. A bier is by law part of the furniture of every church, and on it the coffin should not only be placed in church, but be carried from the house to the church, and from the church to the grave, *underhand*. Very excellent patterns exist for the construction of this utensil, which would cost each parish about £3. This is just one of those points which might cause offence, if the bier were urged by one parson, who might be of ritualistic proclivities or might be supposed to be so; but if men of various opinions were to agree to comply with the law and provide such a bier, its use would follow, and its convenience and decency be speedily admitted, without any such outcry."

Curious Statistics.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—There is an article in the *Contemporary Review* on the propriety of making experimental prayers for the sick in certain wards where any new treatment is under trial; in the other wards, under the old treatment, either no prayers or else the regular formulary. After a time, tot up mortality and cures, compare results, analyse statistics in general and special hospitals, take two sides of a ward, give one to High Church, the other to Dissenting practitioners, find out whose patients recover the most rapidly. Somehow the story of Elwes the miser, suffering with ulcerated legs, he treating one limb, the doctor the other, the miser curing fourteen days sooner, recurs to recollection. In the long hours of the night, in the time of difficulty and danger, every medical man, in some form or another, invokes Divine assistance. What occasion is there to classify remedies—say, to ask for a particular blessing on condurango root, the antiseptic treatment, chloral, a new cephalotribe, or a radical cure for hernia? There is an old story somewhere of a general praying that, if he received no assistance, his adversary should be similarly dealt with. What formulary would be adopted by the Committee and the Medical Officers at the Orthopædic and London Hospitals? I am, &c., Cynic.

COMMUNICATIONS have been received from—
Dr. G. J. Sealy; Dr. Broadbent; Dr. Strange; Mr. Morris; Dr. Sedgwick; Mr. Bateson; Professor Halford; Dr. Hayward; Mr. N. C. Dobson; Mr. T. Hall; Mr. Wasdale Watson; Mr. E. Stevens; Mr. Henry Wilson; Mr. J. Brown; Dr. Whitmore; Mr. J. Chatto; Dr. G. W. McNalty; Professor Flower; Mr. T. M. Stone.

BOOKS RECEIVED—
The Affinity between the Hebrew Language and the Celtic, by Thomas Stratton, M.D., R.N.

PERIODICALS AND NEWSPAPERS RECEIVED—
Westminster Review—Pharmaceutical Journal—Journal of Gynæcological Society of Boston—Amateur Chess Magazine, No. 2.

APPOINTMENTS FOR THE WEEK.

July 13. *Saturday* (*this day*).
Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

15. *Monday*.
Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

16. *Tuesday*.
Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædie, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

17. *Wednesday*.
Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

18. *Thursday*.
Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

19. *Friday*.
Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 6, 1872.

BIRTHS.

Births of Boys, 1102; Girls, 1100; Total, 2202.
Average of 10 corresponding weeks, 1862-71, 1943·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	602	591	1193
Average of the ten years 1862-71	684·3	622·1	1306·4
Average corrected to increased population	...	...	1437
Deaths of people aged 80 and upwards	...	...	38

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	1	5	2	1	6	...	2	2	8
North ...	751668	15	10	4	...	11	2	2	...	19
Central ...	333887	1	7	1	...	5	1	1	...	10
East	638928	7	10	3	1	12	..	2	2	12
South	966132	11	10	7	1	12	...	3	2	12
Total	3251804	35	42	17	3	46	3	10	6	61

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·871 in.
Mean temperature	64·5°
Highest point of thermometer	85·3°
Lowest point of thermometer	44·8°
Mean dew-point temperature	52·7°
General direction of wind	Variable
Whole amount of rain in the week	0·31 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 6, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending July 6.	Deaths Registered during the week ending July 6.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2202	1193	85·3	44·8	64·5	18·05	0·31	0·79
Portsmouth ...	115455	12·1	85	53	77·6	46·8	60·2	15·66	0·14	0·36
Norwich	81105	10·9	29	20	85·2	45·0	62·5	16·94	0·23	0·58
Bristol	186428	39·5	143	65	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	40	22	80·1	43·0	60·3	15·72	1·12	2·74
Birmingham ...	350164	44·7	238	117	80·2	43·8	61·4	16·33	0·30	0·76
Leicester	99143	31·0	60	36	86·5	42·0	63·0	17·22	0·71	1·80
Nottingham ...	88225	44·2	48	36	86·9	42·5	62·5	16·94	0·44	1·12
Liverpool	499897	97·9	393	245	79·1	52·7	60·9	16·06	0·67	1·70
Manchester ...	352759	78·6	258	163	...	...	...	...	...	...
Salford	127923	24·7	102	39	82·5	42·0	59·9	15·50	0·75	1·90
Oldham	84004	20·2	58	46	...	...	...	...	...	...
Bradford	151720	23·0	111	65	81·6	48·0	62·7	17·06	0·23	0·58
Leeds	266564	12·4	125	130	83·0	46·0	61·5	16·39	0·24	0·61
Sheffield	247847	10·9	176	96	82·0	43·7	60·6	15·89	0·92	2·34
Hull	124976	35·1	97	53	81·0	45·0	61·2	16·22	0·65	1·65
Sunderland ...	100665	30·4	57	40	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	99	55	80·0	50·0	60·4	15·78	0·02	0·05
Edinburgh	205146	46·3	133	98	73·0	44·7	60·6	15·89	0·15	0·38
Glasgow	489136	94·8	418	257	...	...	...	...	...	...
Dublin	310565	31·9	125	153	81·4	44·0	61·1	16·17	0·23	0·58
Total of 21 Towns in United Kingd'm	7393052	34·0	4997	2982	86·9	42·0	61·5	16·39	0·44	1·12

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·87 in. The highest was 30·08 in. on Thursday at noon, and the lowest 29·66 in. on Monday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

PURE AIR AND HEALTH.

EFFICIENCY AND SAFETY.

FREE FROM POISON.

McDOUGALL'S
PATENT CARBOLIC DISINFECTANTS,

In Powder, Fluid, and Soap,

PREVENT INFECTION & FOUL SMELLS.

Selected by the Royal Commissioners as

THE BEST DISINFECTANT.

Should be used in every house as **Safeguards from Infectious Diseases,** also for the purification of **Water-closets, Dust-bins, Drains, Sick-rooms, Outhouses, &c.**

NOTE.—Non-volatile and "odourless" preparations only act upon the matter to which they are applied; they do not purify the atmosphere or destroy infectious germs floating in it, and for that reason are but of slight utility for general use. The above Carbolic Preparations of Messrs. McDOUGALL purify the surrounding atmosphere as efficiently as they disinfect the matter with which they are brought into contact.

Sold by Chemists, Chandlers, &c.

McDOUGALL BROTHERS—LONDON, 158, Leadenhall-street; MANCHESTER, 68, Port-street.

WESTERTON'S PATENT
ZYMOTIC DISINFECTING FLUID

Prevents the spread of infection; protects the nurse and those about the sick-room. Sponging over the body with the Fluid disinfects the emanations from the skin and (being volatile) exhalations from the lungs of the sufferer. Destroys the noxious properties of the excretions, and purifies the atmosphere.

PREPARED BY

W. C. WESTERTON, 85, Abingdon-villas, Kensington, London;

and may be had of all Chemists, in bottles, 1s., 1s. 9d., and 3s. 6d.; 10s. per gall.

F L O U R.

HORSNAILL & CATCHPOOL,

BULLFORD STEAM MILLS, ESSEX,

Continue to supply families in and around London with Flour, &c., of their own manufacture (warranted pure), carriage free. Whites for Pastry. Fine Households, specially recommended for Bread-making. Seconds. Wheaten Meal for Brown Bread. Rye Meal. American Hominy Meal. Pure Flour of Lentils. Scotch Oatmeal (fine) for Gruel; ditto (round) for Porridge. Scotch Brose Meal, &c., &c.

Address, Horsnaill & Catchpool, Liverpool-road, London, N., for all information.

HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

Messrs. Baiss Brothers & Co.	Messrs. Geo. Curling & Co.	Messrs. Hearon, Squire, & Francis.	Messrs. Southall, Son, & Dymond.
,, Barron, Harveys, & Co.	,, Drew, Barron, & Co.	,, Herrings & Co.	Mr. James Woolley.
,, Battley & Watts.	,, Evans, Lescher, & Evans.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Langtons, Scott, & Edden.	,, Wyleys & Co.
,, Cox, Gould, & Co.	,, Samuel Foulger & Son.	,, Preston & Sons.	Glasgow Apothecaries' Co.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

LECTURE VII.

(*Continued from page 679, vol. i.*)

NEARLY allied in many respects to the *Insectivora*, the CHIROPTERA or bats are chiefly distinguished by the modification of their anterior extremities into organs of flight. The species are very numerous, and widely distributed over the earth's surface. They are usually divided into two principal groups—1. The *Pteropi* or *Frugivora*, containing the largest members of the order, mostly living on fruit, though some are more or less insect-eaters, characterised by a complete three-jointed index-finger and molar teeth with blunt cusps, and a longitudinal furrow on the free surface, found in Africa, South Asia, and Australia. 2. The *Entomophaga*, which have an incomplete index-finger, and teeth usually furnished with numerous sharp-pointed cusps or cutting edges. These are more abundant, though generally smaller in size than the first. The greater number feed on insects which they catch on the wing, but some are partially or wholly frugivorous, and some are blood-suckers. To this group all the European and American bats belong.

I will first give an account of the digestive organs of one of the most common of the fruit-eating bats—*Pteropus Edwardsii*. The animal measured from tip to tip of the wings three feet six inches, and from mouth to anus eight inches.

The general form of the muzzle is elongated and pointed, rather like that of a dog or fox, whence the trivial name of "flying foxes" often applied to these bats. The gape of the mouth is wide, the lips thick and fleshy in their lateral parts especially, where the upper and lower lip come into apposition by a flat surface of considerable breadth, marked by transverse ridges which on the inner edge are developed into papillæ or tubercles. The upper lip has a vertical groove in the middle line in front, bordered by a pair of ridges which pass up between the nostrils. The lower or free edge of this groove forms a small spout-like process in contact with the upper incisor teeth; on each side of this is a small group of tubercles. The lower lip is notched in the middle line in front, leaving a V-shaped depression in which the tip of the tongue lies. On each side a process or flap of the mucous membrane, with an evenly arched upper free edge, rises up to the height of ·15 of an inch, extending backwards to the posterior border of the inferior canine tooth. The outer surface of this flap is covered with small rounded tubercles, and it shuts within the upper lip when the mouth is closed. In the allied genus *Epomophorus* the lips are still more largely developed and complex, a structural modification which, combined with the reduction in number and size of the molar teeth, is supposed to be related to their habit of sucking the juices of very soft succulent fruits.

The mucous membrane lining the interior of the cheek is raised throughout into close-set wavy folds, having a general longitudinal direction. The palate has numerous strongly marked curved ridges, the hinder ones with beautifully denticulated edges. The aperture of the fauces is extremely small, transversely oval, and but one-tenth of an inch in width. There is no uvula.

The tongue is long and narrow, pointed and decurved at the tip. The hinder third is thick and convex above, the anterior part flat, with thin edges, and depressed in the middle line. About half the length of the whole organ is free from the frænum. The under surface of this part is quite smooth, and shows no trace of a sublingua; nor are there any salivary papillæ near the frænum. The dorsal surface is thickly beset with papillæ. The circumvallate are three in number, very near together, and close to the base of the tongue. The fungiform are very few, inconspicuous, and confined to the anterior part. All the other papillæ may be regarded as modifications of the conical variety. They are large and, except at the base of the organ, covered with a hard, almost horny epithelium. Quite at the tip they are long, thin, very sharp-pointed, and erect; but passing backwards they become shorter and broader, and more lozenge-shaped, and, arranged in a *quincunx* pattern, they cover as with a pavement the lateral regions of the anterior half of the tongue. Further back the hinder edge of each papilla becomes more developed and elevated, and is armed with several minute spines; such papillæ cover the greater part of the dorsal surface of the hinder half of the tongue, though at the lateral parts of the base they are gradually modified, becoming long, conical, pointed, and soft. There still remains to be mentioned the depressed tract in the middle of the anterior region of the dorsum, not extending quite to the tip, where the papillæ are remarkably modified—as may be distinctly seen with the naked eye. They are much larger than elsewhere, quite horny, flattened, and resembling a trident, with the three points directed backwards. It seems not unlikely that this comb-like surface of the very extensile and mobile tongue of these animals is related to the practice of licking and cleaning their fur, rather than to that of obtaining or preparing their food. The salivary glands are largely developed, especially the parotid, which exceeds the submaxillary in size.

The stomach is large and complex, formed somewhat on the same principle as that of the monkeys of the genus *Semnopithecus*. The very slender œsophagus opens into a fusiform pouch (see Fig. 26), to the left of which is a large conical

FIG. 26.

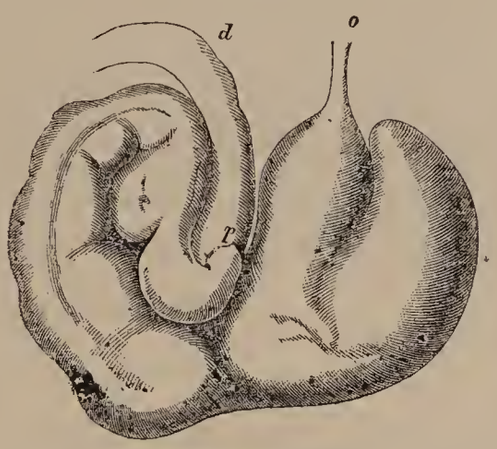


FIG. 26.—Stomach of *Pteropus*: *o* œsophagus, *p* pylorus, *d* duodenum.

cardiac sac, marked off by a strong ridge from the rest or pyloric part of the stomach, which is slender, elongated, sacculated, and doubled on itself, so that the pylorus is placed close to the first or œsophageal pouch. The muscular walls of the stomach are everywhere very thin, but the mucous membrane is raised into thick and strongly marked ridges, placed at wide intervals, and reticulating. These become slighter and more longitudinal as they approach the pylorus.

The intestinal canal from pylorus to anus is nine times the length of the head and trunk, and without a cæcum. The duodenum is long, and suspended by a lax mesentery, and passes beneath the arch of the colon, which is very short and simple, and only distinguished from the ileum by a moderate increase of calibre. The villi of the small intestine are large. The great omentum is very little developed. The suspensory ligament of the liver is also rudimentary (a)—a condition which has been associated teleologically with the animal's habit of passing the greater part of its time supended with the head downwards, and the abdominal viscera resting on the diaphragm, though it must be remembered that this structure is equally rudimentary in most ungulates.

The liver is remarkably symmetrical both in position and in form. The right central and left central lobes are almost exactly equal in shape and size, and separated in front by a wide notch. There is no cystic notch. The lateral lobes are deeply cut off from the central lobes by the lateral fissures; they are nearly equal in bulk, but the left is the most expanded and thinnest. The Spigelian lobe has a free, pointed termination, and there is a large caudate lobe, which lies in contact with the inner and anterior part of the right kidney, and even passes down beyond it. The left lateral lobe lies upon the cardiac portion of the stomach. The elongated pyriform gall-bladder is loosely connected with the under surface of the right central lobe by a peritoneal fold, having no groove or notch for its reception. The cystic and hepatic ducts have a considerable

(a) Its development, however, appears to vary in different individuals. In one specimen it extended half-way to the anterior edge of the liver.

course before they unite to form the common bile-duct, which enters the duodenum five inches below the pylorus. The pancreas consists of two elongated foliated lobes, which unite around the common bile-duct.

Of the second section of the Chiroptera, my limits will only allow me to describe two principal forms—one which may be taken as a type of the ordinary insect-eating bat, and the other an aberrant form, in which the structure of the digestive organs is remarkably modified in accordance with the requirements of a very specialised mode of life.

The common English Noctule Bat (*Vesperugo noctula*) differs much from the *Pteropus* just described, in the structure of its digestive organs. The mouth is shorter and broader, the face having much the aspect of a bulldog, and the teeth developed more on the true carnivorous pattern. The palate is strongly ridged; the tongue short, thick, and fleshy, with two very distinct circumvallate papillæ, and the remainder of the surface covered with evenly distributed, very small, soft, conical papillæ, a few of which are more prominent and rounded in the middle line posteriorly. There is a thick frænum beneath, but no under-tongue.

The stomach is large, simple, and globular; the intestine barely three times the length of the body from mouth to anus, of nearly uniform diameter throughout, and without cæcum. The colon forms a short simple arch, beneath which the duodenum passes, and then descends in a straight line to the pelvis. The liver lies more to the left than to the right side of the body, in consequence, chiefly, of the great development of the left lateral lobe, which covers the stomach. The left central lobe is small; the right central larger, and prolonged and pointed at its free edge; the right lateral is also long, narrow, and pointed; the Spigelian large and leaf-like; the caudate rather smaller, triangular, and pointed. There is no suspensory ligament, and the gall-bladder is loosely attached to the right central lobe; the duct enters the duodenum two-tenths of an inch from the pylorus.

Contrary to the general rule in the Chiroptera, a cæcum about a quarter of an inch in length is said to be present in *Rhinopoma Hardwickii* and *Megaderma spasma*.(b)

Two South American genera—*Desmodus* and *Diphylla*—are distinguished from their allies by their remarkably modified dentition, especially the immense development and lancet-like form of their central upper incisors, and the rudimentary character of their molars. Although the practice of obtaining nourishment by sucking the blood from living vertebrate animals is apparently not confined to these genera, it is in them that it is most developed, and that the most striking structural modifications evidently related to it are found.

The modifications affecting the teeth have just been noticed. No less remarkable is that of the stomach, which exhibits a form quite unique among mammals. This organ consists almost entirely of a greatly elongated, intestiniform, convoluted cæcal tube, about twice the length of the entire animal, and corresponding with the fundus or cardiac cul-de-sac of the stomach of other mammals, as it is situated to the left of the point at which the narrow œsophagus terminates.(c) To the right of this point the stomach can scarcely be said to be continued, as the gall-duct enters but two-tenths of an inch from it. The remainder of the alimentary canal is a simple tube, about twice the length of the gastric cæcum, but of considerably less calibre.

The liver of *Desmodus*, which has not previously been described, differs from that of the *Pteropus* or the Noctule, or, indeed, of all Insectivora and Carnivora, in being comparatively little divided into lobes. The umbilical fissure is distinct, but the lateral fissures are only notches in the free edge of the organ, imperfectly marking off two small and nearly equal central lobes. The left lateral lobe is large and crescentic; the right thick and rounded; but neither the Spigelian nor the caudate lobes are distinct, being only indicated by a strong ridge on the under surface of the right lateral lobe. As in other bats, the gall-bladder is loosely attached to the under-surface of the right central lobe, which is not notched for its reception.

Fig. 27.

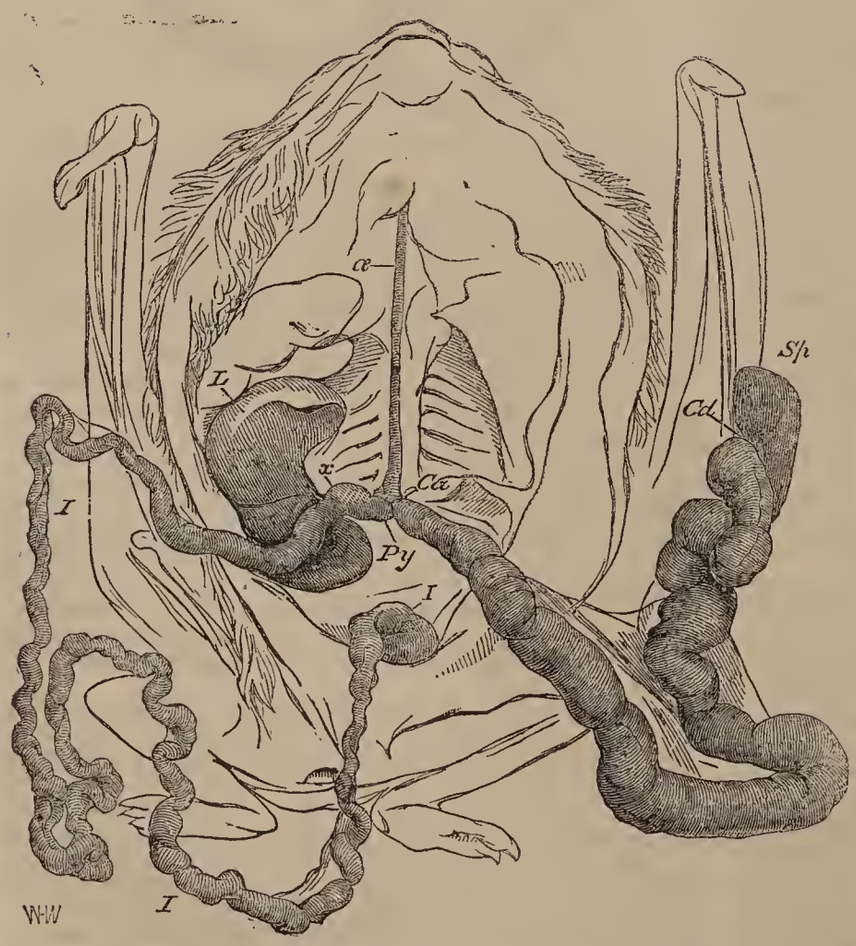


Fig. 27.—*Desmodus rufus.* The thoracic and abdominal cavities are laid open, and the alimentary canal is unravelled and displayed throughout its whole length. (From a preparation in the Museum of the Royal College of Surgeons. Natural size.) *α*, the œsophagus; *Ca*, the commencement of the cardiac sac of the stomach; *Cd*, the blind end of that sac; *Py*, the short pyloric division of the stomach; *Sp*, the spleen; *L*, the liver, with *x*, the point at which the bile-duct opens into the alimentary canal; *I*, *I*, *I*, the intestine.—*From Professor Huxley's figure, "Proceedings of the Zoological Society,"* 1865, p. 388.

CLINICAL LECTURE

ON A CASE OF

SUB-STERNAL BRONCHOCELE.

By J. S. BRISTOWE, M.D., F.R.C.P.,

Physician to St. Thomas's Hospital; Examiner in Medicine to the University of London.

Gentlemen,—I suppose that all of you have some knowledge of the case whose details I am now about to place before you, and upon which I shall presently base some clinical observations. It is that of A. K., a single woman, 46 years of age, who was admitted into Alice ward, under my care, on September 19, 1871, with bronchocele, and who is now, after a couple of months' sojourn in the Hospital, about to leave, not indeed cured of her tumour, but at all events in an infinitely more satisfactory condition as regards her prospects of life than she was when I first saw her.

Some of you will recollect that as I was paying one of my official visits to the Hospital on the morning of September 20 I was suddenly fetched from the ward in which I then was, to see a patient in Alice ward who had just been seized with symptoms of suffocation, and who was supposed to be dead or dying. On arriving at the bed we found the patient, a spare middle-aged woman, lying upon it flat on her back. Her lips were blue, her face ghastly, her skin moist, her eyes half-closed, her breathing slow and stridulous, her pulse excessively feeble, somewhat irregular, and at least 130 in the minute. She seemed insensible, but yet, when spoken to loudly, obviously made slight movements with her lips. As she lay with her head thrown back somewhat, the presence of a swelling at the lower part of the neck, in front, was at once apparent. This had the usual position of the thyroid body, but presented some special features. It was not very large

(b) Owen's "Anatomy of Vertebrates," vol. iii., p. 429.

(c) See Huxley "On the Structure of the Stomach in *Desmodus rufus*." *Proceedings of the Zoological Society*, 1865, p. 386.

—certainly, in the aggregate, no larger than a halfpenny bun; it was not quite symmetrical, and yet gave no evidence of the lobes which constitute the normal gland; its lateral boundaries were hard to define, especially below; and its lower margin, which was rounded, overhung and concealed to a slight extent the upper edge of the sternum and the sternal extremities of the clavicles. The neck indeed was, on the whole, not much more deformed than that of Rubens's second wife, as represented by himself in the celebrated picture known as the "Chapeau de Paille." Dr. Evans, the Resident Assistant-Physician, who had seen the patient almost at the commencement of her suffocative attack, had immediately and simultaneously sent for me, for the Surgeon on duty (Mr. Wagstaffe), and for the tracheotomy instruments. We (including the instruments) were all there. The patient was dying: what was to be done? A little careful examination of the tumour satisfied us that its anterior and more prominent portion, at all events, contained fluid, and we determined, therefore, in the first instance, to puncture it. This was done by Mr. Wagstaffe with a fine trocar and canula, in the mesial line of the neck, about an inch and a half above the sternum; and between two and three ounces of opaque, reddish-brown, slightly glairy fluid escaped quickly through the canula. The relief to the patient was immediate. As the contents of the cyst flowed away, so her breathing became natural, her livid tint faded away, her pulse became slower, her eyes opened, and within a minute or two she appeared to be perfectly restored to life and health.

The history which we extracted from her then and subsequently was as follows:—She appeared to have enjoyed almost uninterrupted good health until quite recently, and never to have lived in a goîtrous locality. In answer to leading questions, she said that during the last eight years she had on four or five occasions noticed a swelling in the neighbourhood of the thyroid body, which came on without obvious cause, produced no pain or inconvenience during its presence, and, after a variable time, disappeared as unaccountably as it had come. Neither she nor any of her friends, however, had observed any permanent peculiarity in the form of her neck. Her present illness seems to have commenced six weeks before admission with thirst, loss of appetite, and loss of strength, which after three or four weeks were complicated for a few days with diarrhœa, and subsequently for about a week with vomiting. Two days before she was received into the Hospital she complained of some fulness in the neck and a little difficulty of breathing, and these latter symptoms are said to have continued. But there is no doubt that she made no complaint whatever about her neck at the time of her admission, that she was said merely to be suffering from fever, and that all that was recognised by those who examined her at that time was the presence of obscure febrile symptoms indicated by furred tongue, a temperature of 102·4°, and a pulse at the rate of 136 in the minute.

When the patient had sufficiently recovered, a more careful examination was made. The thyroid tumour appeared to be only in a slight degree diminished in size, that diminution occupying the central and lower part, so that the upper margin of the sternum was now perceptible. There was no distinct fluctuation in any of the remaining portions of its mass. On each side, in the angle between the clavicle and the sterno-mastoid, was a somewhat doughy swelling, which at first sight looked as though it were a portion of the tumour, but which was obviously formed by a series of tortuous and distended veins. There was now nothing like stridor, the intonation of her voice was perfect, there was not (and indeed there never had been) any impediment in swallowing, and her pupils were natural and equal. There was no evidence whatever of heart, lung, kidney, or other visceral disease. The fluid removed from the tumour was found to contain disintegrating blood-corpuscles and leucocytes, and though kept for a day or two did not coagulate.

For about ten days after the operation the patient suffered from a continuance of those symptoms for which she had sought admission—she was feverish, slept badly, had a quick pulse, a furred tongue, little appetite, and occasional diarrhœa; but beyond the facts that the wound still discharged, and that its edges became inflamed, no symptoms referable to the tumour developed themselves.

On October 14 I noted that she was in very fair general health, that the wound had ceased to discharge, and that the thyroid tumour was smaller and apparently harder than it had been.

On the 18th she complained of some tenderness in the left side of the tumour. This increased, and in the course of a few days the lower and left part became much more prominent than it had been, distinctly congested (the congestion extending from the point of puncture, where, in fact, it was most intense), and presented obscure fluctuation. I thought it not improbable that suppuration was in progress; it was certain, at all events, that enlargement of the tumour was taking place, with inflammation; and, indeed, from the 25th to the 28th there were on several occasions slight threatenings of suffocation and slight impediment in swallowing, and she was consequently very carefully watched. At this time, too, the venous masses on each side became larger than they had been. However, the signs of inflammation soon subsided, the prominent and indistinctly fluctuating part diminished in size, and became somewhat hard. All threatening symptoms disappeared; and by about November 4 or 5 all signs of this latter attack had vanished. It is worth while to add that during the whole of this time there was no recurrence of the general febrile symptoms from which she had suffered in the early part of her illness. She remained in fair health, and left the Hospital on November 20, the tumour at that time presenting no tender or fluctuating spot, exerting no injurious pressure on any part but some of the veins which have been referred to, and, excepting that it was less prominent in the mesial line, and less dependent there, having as nearly as possible the same form and dimensions as it presented on her admission.

Now, before you can clearly understand the case which I have just detailed, it is essential that you should have some knowledge of the anatomy and pathology of the organ which I assume to have been diseased in it. The thyroid body, as you know, is a small glandular organ, formed of two elongated, nearly symmetrical, lateral lobes, joined towards their lower extremities by a comparatively narrow transverse band. It lies beneath all the muscles, and closely embraces the front and sides of the upper part of the trachea, extending from its fifth or sixth ring below on to the lateral surfaces of the thyroid cartilage above, and coming into relation by its posterior edge, on the one hand with the pharynx and œsophagus, on the other with the sheath of the great vessels of the neck, and thus not only with the large arteries and veins, but with the pneumogastric, the sympathetic, and the recurrent laryngeal nerves. It is richly supplied with lymphatics, but is most remarkable for the extraordinary abundance of arteries and veins which are distributed to it, and which it receives from the neighbouring arterial and venous trunks. The organ is invested in a capsule of connective tissue, from which septa are prolonged inwards, dividing it into lobules, which lobules again are subdivided by a series of yet more delicate fibrous processes into a number of comparatively minute bodies, the presence of which gives to a section its characteristic granular appearance. Each of these latter bodies or granules is found, under the microscope, to consist of a number of roundish vesicles, separated from one another by an abundant plexus of vessels and a little connective tissue, continuous through the medium of the septa with the capsule of the organ; to be limited by a distinct hyaline membrane; and to be lined, at all events in the fœtal condition, by a distinct epithelium. It is generally held that these vesicles are each of them perfectly closed cavities. Virchow, however, states that all of those contained within any one of the minute lobules or granules communicate with one another in the same manner as do the air-cells of a pulmonary lobule, or the ultimate vesicles of other racemose glands. He states, further, that in the perfectly healthy condition the cells within them are not arranged as an epithelium, but that they entirely fill the cavities, which thus present an appearance almost exactly like that of lymphatic glands or lymphatic tissue. It must be added that it is by no means uncommon to find that, even in apparently healthy thyroid bodies, many of the vesicles contain distinct cavities, and have undergone considerable dilatation. This seems to be due to the secretion, from the cells which they contain, of an albuminous fluid, which makes a cavity for itself by splitting up, as it were, the solid mass of cells, and compressing them against the parietes; and within the cavities thus formed a solid albuminoid or gelatinous precipitate is often to be found.

Now, the thyroid body not unfrequently undergoes enlargement, forming a characteristic tumour in the front of the neck, which may vary from such an increase as constitutes a mere fulness in that region (which by many persons of equivocal taste is regarded as ornamental) up to a protuberant mass as large as the head. These enlargements constitute the disease which is commonly now known by the name of goître or bronchocele. The condition of the hypertrophic gland presents considerable varieties; but these are all allied to one another, and admit of easy explanation. Goître, in fact, consists simply of a kind of hypertrophy or hyperplasia, or over-growth of the

normal constituents of the gland, which are (as has been pointed out) chiefly the bloodvessels, the connective tissue, and the vesicular cell-containing bodies. In some cases all these may become increased in due proportion; and the goître then differs little, if at all, in character from the healthy organ. More frequently, however, one of these constituents becomes developed in a disproportionate degree, and the texture of the tumour hence becomes characteristically modified. Thus, sometimes the connective tissue becomes alone hypertrophied, and the tumour consequently grows hard and dense; sometimes the vessels become preternaturally developed; and sometimes the vesicles become generally dilated, and converted into cysts containing albuminous fluid, and probably the solid albuminoid matter which has been already adverted to; and then it not infrequently happens that some of the cysts—partly by mere dilatation, partly by coalescence with others in their neighbourhood—attain the size of a pigeon's egg or of a hen's egg, or even a yet larger bulk. Mr. Spencer Watson records, in vol. xix. of the Pathological Society's *Transactions*, a case of goître in which a cyst yielded on puncture a pint and a half of blood-coloured fluid. It must be added that in many cases these various conditions are more or less irregularly intermixed, and further that a goîtrous tumour may become, in whole or in part, the seat of inflammation, and that hence blood may be poured out into the cysts which it contains, or suppuration and ulceration may take place, or degenerative changes may ensue after a time, which are marked especially by the deposition of earthy matter, and the diminution in size and induration of the tumour.

A goîtrous tumour varies in its consistence according to the nature of the processes which have been going on in it; so that in some cases it is hard and resisting, in other cases it is soft and yielding or elastic, and in other cases again it presents in certain situations distinct fluctuation; and when the enlargement of its arteries constitutes a special feature in the disease, there may be pulsation resembling that of an aneurismal tumour.

A goître sometimes retains accurately the form of the healthy gland; but more commonly it becomes more or less unsymmetrical in the progress of its growth, and by growing in certain directions, or by throwing out lobules, may come to press inconveniently or dangerously on important organs in its vicinity. And occasionally, indeed, as Virchow points out, small supplemental thyroid bodies may be detected in the neighbourhood of organs thus hypertrophied.

It is not difficult from the account which has already been given to guess with tolerable accuracy what are the injurious consequences which are apt to flow from enlargements of the thyroid body. In the first place the tumour may prove seriously inconvenient by its mere bulk and weight. In the second place it may exert pressure on the large veins in its neighbourhood, or on the trunk of the sympathetic, or on the pneumogastric or recurrent laryngeal, or brachial plexus. And in the third place it may displace and compress the œsophagus or the trachea. In reference to the last of these consequences (which is the only one, perhaps, of any real importance), it might be supposed that the gradual enlargement of a superficially placed and comparatively soft tumour, which does not, like carcinoma or even like an aneurism, invade other tissues and organs in its progress, and the direction of whose enlargement must be largely determined by the degree of resistance which it encounters, could scarcely exert any serious amount of compression on a tube with such resisting walls as those of the trachea. Any pathological museum, however, will supply abundant facts in proof of the reality of the compresion which may be thus exerted upon the trachea; and in reference to this point it is important to note that we constantly observe in pathological processes that pressure, however slight, when long continued, produces serious effects, and further that the pressure which the thyroid body exerts is necessarily increased by the fact of its being situated beneath muscles (the sterno-hyoid, sterno-thyroid, and, in cases of enlargement, the sterno-mastoid). We have several specimens in our museum which illustrate the displacement which the trachea may undergo when pressed upon by an unsymmetrically enlarged bronchocele. And we have one, taken from a girl about 20 years of age, which shows not only some considerable deviation of the trachea, but almost complete flattening of the two sides of the tube against one another, so that when the parts were *in situ* the compressed portion presented only a linear chink instead of a nearly circular lumen. She had had the tumour for many years, and indeed it was very dense in texture. There is no history, however, to show that it had ever caused her any material inconvenience until a day or two before her death, when, it is said, "a sudden accession of inflammation occurred in the gland; it became painful and tender to the touch, and there was great difficulty of breathing. Leeches were applied without benefit, so that it was deemed advisable to perform tracheotomy. This was done, but with little relief to the symptoms." But the least common, and on the whole by far the most serious case, is that in which the trachea is compressed from before backwards against the spine—a direction of pressure which can only take place when there is a substernal goître (as it is called), a goître, that is to say, in which the middle lobe of the gland, or some outgrowth from it, sinks downwards beneath the sternum, and continues to enlarge in that situation. This event, too, is apt, unfortunately, to occur in cases of comparatively small goître, and thus they escape recognition. Virchow, in his great work on tumours, quotes from Hanuschke a very touching case of this kind. "A pregnant woman (who had had several very severe attacks of suffocation) sent for him, in the full belief that she should die if another attack came on. He found her making her will, yet she did not seem to him seriously threatened, and he was much astonished at the urgency with which she implored him to save her babe after her death. Suddenly, an attack of asphyxia seized her; all help was vain, and the doctor had only the consolation of saving the babe by the Cæsarian operation. At the autopsy of the mother a sub-sternal aneurismal goître was found." When a goîtrous tumour is causing pressure on the trachea, the gradual narrowing of the tube becomes attended, after a while, with a certain amount of difficulty of breathing, especially after exertion or under excitement, and a certain stridulous character of breathing under similar circumstances, and of cough; but the severe attacks of dyspnœa—those, for example, which cause death—usually come on suddenly as exacerbations, and sometimes they come on thus suddenly in persons who seem to have had no previous warning of any kind. The cause of such attacks is usually to be found in some inflammatory affection of the gland, or in the rapid development of some cyst or group of cysts.

You are now, I think, in a position to understand the case with the details of which I commenced this lecture. I will, nevertheless, spare you the trouble of thinking for yourselves, by discussing briefly some of the more important points which it presented. First, in describing the case, I may seem to have assumed that it was one of goître, and you may be disposed to ask on what grounds was this assumption based. The reasons are simple. The tumour occupied the position of the thyroid body, and moved, as such tumours always do, with all the movements of the trachea. It is difficult to see how any other tumour than a goître or a growth involving the thyroid body could occupy this exact situation. The presence in it of a cyst containing bloody fluid is, as you now know, common in such tumours; and the fact that its lower border seemed to overhang the sternum was (for reasons which have been fully considered) in no degree opposed to it. It was quite clear there was a goître; the only other question immediately pressing as to the cause of her symptoms was whether there could be any other important local disease present in addition, such as a thoracic aneurism, a mediastinal tumour, or inflammation or œdema of the larynx causing the paroxysm of dyspnœa, which *primâ facie* seemed due to the goître. The presence of any such complication was at least improbable—moreover, there had been nothing during the four-and-twenty hours of her stay in the Hospital or in her history to point to laryngeal disease; and a brief examination satisfied us that there was no evidence beyond the dyspnœa (for which we already had a sufficient cause) of intra-thoracic disease. Secondly, what was the cause of the suffocative attack? It was fair to assume that it was due to direct pressure on the trachea. The fact that there had been no previous hoarseness or loss of voice, which is an argument against there having been laryngeal inflammation, is equally an argument against the dependence of the dyspnœa on involvement of the recurrent larnygeal. That the trachea was not compressed from side to side followed almost certainly from the small size of the tumour, and from the fact of its little lateral extension—indeed, there can be no doubt whatever, I think, that the pressure was exerted in the antero-posterior direction, and was due to the extension of the tumour, and especially of that part which had become hollowed into a cyst, behind the upper part of the manubrium. Thirdly, as regards the several weeks' febrile disturbance which preceded her admission into the Hospital, and the febrile symptoms which continued for a short time afterwards, I confess I have no satisfactory explanation to give. It might, perhaps, be supposed that they were connected with inflammatory mischief going on in the thyroid body, were it not for the fact that no such febrile condition attended the far more

obvious inflammation which occurred in that body at a later period of her stay in the Hospital. But if this was not the cause, she must, I suppose, have been suffering from some febrile or inflammatory affection, which was already subsiding when she came under my care. Fourthly, as regards treatment. In this case it is clear that when I first saw her it was simply a question of performing some operation for the immediate preservation of life. The detection of a fluctuating cavity in the anterior and lower part of the tumour of course determined for us the nature of the operation to be first performed; and fortunately, as you know, the tapping of the cyst removed the pressure which seemed on the eve of proving fatal. If the tumour had been solid, or if the opening of the cyst had failed, what could have been done? I think Dr. Evans, Mr. Wagstaffe, and myself were all fully agreed that, under the circumstances, tracheotomy should be performed. The question did not arise as to the spot at which the operation would have had to be effected, but I think it probable that the opening would have been made above the tumour (for it could not have been made below it, since the tumour overhung the sternum); and I fear that the hæmorrhage which would have taken place, and the other obvious difficulties which would have attended an incision through the substance of the gland, would have prevented anything like a speedy operation (and a speedy operation was necessary) upon that part of the trachea covered by the goître. Indeed the difficulties here adverted to would probably in most cases oppose a serious, if not insuperable, bar to successful tracheotomy in the latter situation. But if tracheotomy had been performed above the tumour would it have been efficacious? We know that this operation may be of temporary benefit in the attacks of dyspnœa caused by a thoracic aneurism; but it is only of benefit in those cases in which the aneurism causes dyspnœa through the involvement of the recurrent laryngeal nerve, and not in those in which the dyspnœa depends on pressure directly exerted on the trachea. And hence it seems to me clear that the mere opening of the trachea above a goître which is compressing it must equally be a perfectly useless procedure. And indeed I may state that tracheotomy was performed in the case which I have quoted from our museum catalogue, but performed above the goître, and uselessly; and that it is expressly stated there in reference to this very point, that "had the tracheal tube been longer, relief might have been obtained." I am not enough of a surgeon to recommend you how or where to perform tracheotomy in such cases should they present themselves; but I have a strong impression that, if ever you are called upon to perform it, you will do it above the tumour; and, if so, do not forget that, in order to afford relief, your tube must be passed through and beyond the strictured portion of the canal.

I do not propose to enter upon the question of the curative treatment of goître; there was nothing in the present case to throw any light upon it, and to discuss it adequately would require much more time than remains now at my disposal. I treated my patient in the first instance with tonics, and subsequently, as in orthodoxy bound, with iodide of potassium. But I do not think that my medicinal treatment affected the tumour in any degree directly.

Before I conclude this lecture I may just say a word or two with regard to the causation and associations of goître. It is well known that the affection occurs in an endemic form in certain parts of the world, and more especially in certain valleys, as in some of those of Switzerland, and in those of Derbyshire, and that it is dependent there on certain telluric influences limited to those valleys. It is commonly thought that water contaminated with lime or some other mineral is the efficient agent in its production; but in truth the exact cause has never been clearly demonstrated. That the cause is, however, something material and inherent in the locality, is proved by a variety of considerations, such as—first, that non-goîtrous persons remaining temporarily in goîtrous districts themselves contract the disease, and often lose it on their removal thence; secondly, that non-goîtrous natives of such districts do not become goîtrous after quitting them, and that even those who are already goîtrous not infrequently recover wholly or in part under similar circumstances; and, thirdly, that the peculiar form of combined idiotcy and deformity known as cretinism, which is begotten in intensely goîtrous districts by goîtrous parents, and which is obviously due to the operation of the same poisonous matter as that which produces goître (acting, however, more intensely, and upon the fœtus itself) ceases to manifest itself in the children of goîtrous, or even cretinous parents, who have removed from an infected district, and who are therefore no longer under the special influences of that district.

The disease, however, also occurs sporadically, as, in fact, it did in the patient whose case I have been considering, who never was in a goîtrous district. Many such cases are met with, and I need scarcely say that the cause here is even more obscure than that of the endemic variety. The most curious of the sporadic cases are those which go by the name of exophthalmic goître, of which you will recollect I had a case, though not a very typical one, in my ward, whilst the other goîtrous case was under treatment. In exophthalmic goître the thyroid enlargement is not usually very great, and often the vascular element is chiefly involved, and the tumour may pulsate; but the most remarkable features in these cases are (1) that the patients are generally women; (2) that the enlargement of the thyroid body has generally been preceded, and is generally accompanied by, severe palpitation and dilatation of the heart; and (3) that the eyes gradually become prominent, and in severe cases so much so that the patient is unable to close her lids. I may add that it has been argued, with some show of reason, that the primary cause of this combination of symptoms is some affection of the vaso-motor system of nerves, and that the prominence of the eyes (which ceases after death) seems to be due only to hyperæmia of the fatty tissues of the orbit.

It is interesting to remark that in all the apparently different forms of goître which I have adverted to, the morbid processes which are going on in the thyroid body are essentially of the same kind, or, at all events, fall within those varieties which are included in my account of the morbid anatomy of the disease; and further, that there is a marked tendency to association between goître and affection of the nervous system, shown in the case of endemic goître by the frequent presence of cretinism, and, in the case of so-called "exophthalmic" goître, by the excessive palpitation which attends it, and by various other nervous phenomena which commonly manifest themselves.

I have spoken only in this lecture of one particular kind of disease, which is special to the thyroid body; but it is worth while to call your attention to the fact that an unenlarged thyroid body, and still more, one that is goîtrous, may become the seat of inflammation, and that, as a consequence, abscess and other sequelæ of inflammation may take place in it; and, further, that carcinoma and other forms of malignant disease occasionally invade this organ. But neither inflammation nor carcinoma alone constitutes goître, nor is included within the scope of my present lecture; and I content myself, therefore, on the present occasion with simply calling your attention to the fact of the possibility of your meeting with these affections, and perhaps of being in some degree puzzled by them.

ORIGINAL COMMUNICATIONS.

CASES OF DISEASE OF THE NERVOUS SYSTEM, WITH CLINICAL OBSERVATIONS.

By W. H. BROADBENT, M.D., F.R.C.P.,
Physician to St. Mary's Hospital and the London Fever Hospital.

It is a very easy matter to comment on cases which have been elucidated by a post-mortem examination, but sometimes this is not afforded us, and fortunately, also, the patient will often recover, and the interpretation of symptoms is necessarily then more or less conjectural. This is especially the case in diseases of the nervous system, in which we have not the aid of physical signs, which permit of more direct and more definite inferences. While, however, we learn more when the seat and character of a fatal disease have been laid bare, it must be remembered that our indications for treatment have to be gathered during life, and it cannot therefore be unprofitable to record cases, such as the following, in which we have only the life history, although, as has been said, there will be uncertainty in our inferences, and much conjecture in any comments.

Slight Right Hemiplegia of gradual access—Impaired Articulation—Peculiar Affection of Respiration—Sudden Death.

Ross C., a sweep, aged 39, became an out-patient at St. Mary's Hospital, January 30, 1865. He had gradually been losing power in the right limbs for a year, and the leg, hand, face, and tongue trembled. His speech was slow and his utterance thick. The right pupil was smaller than the left.

He was "very heavy for sleep," and would often fall asleep in his chair, and while sleeping his wife said he turned blue, and at length woke up suddenly, appearing bewildered and often laughing. He had had syphilis, and iodide of potassium in eight-grain doses was given three times a day, and a Plummer's pill at night. He improved considerably, his speech became less thick, he regained power in his right limbs, and was able to resume work. On March 9 he paid his last visit to the Hospital, and was remarked by his wife to be in very good spirits on account of his improvement. In the course of the day he took beer to excess with a friend, went home, lay down on the bed, fell asleep, and was found dead.

I heard nothing of this till three or four weeks later. A post-mortem examination had been made and an inquest held, the cause of death assigned being heart disease. I afterwards saw the medical man who had made the examination, and found that the opinion given was an inference from the mode of death, and was not based on definite change in the heart. No morbid appearance had been found in the brain, but there had been no special examination of the pons and medulla.

This case interested me greatly at the time. The slow and imperfect articulation was not accounted for by the paralysis, which was slight, and it was not of the kind suggestive of softening in the cerebral hemisphere. It was considered probable that there was disease in or round the medulla, and the peculiar failure of respiration during sleep causing the blueness of the face, and the mode of death, which was apparently by prolongation of this partial asphyxia under the influence of beer to complete suffocation, are confirmatory of this supposition. The volitional respiration while awake, supplementing the impaired reflex respiratory action, and preventing the blueness of the surface seen during sleep, was interesting.

In the following case there was more distinct anatomical evidence of disease in the pons :—

Partial Paralysis of Right Limbs and Left Face—Fits.

Charles J., aged 44, a painter, came as out-patient to St. Mary's Hospital, August 30, 1866. Had enjoyed good health till the present illness came on, and had had no lead accidents, no syphilis. Eighteen months before he had begun to have pain in the head and behind the ears, with giddiness; and nine months later fits, the last having occurred twelve days before his visit. In April a fit had left him partially paralysed on the right side, so that he had been unable to work since.

When he came under observation he had partial paralysis in the left face, affecting the eyelid and nostril, and therefore the nucleus, or nerve-trunk, of the portio dura. Articulation was indistinct; the left pupil larger than the right. Right arm weak and both legs, but especially the right. Memory bad, and getting worse; apparently some confusion of intellect. He was ordered—pot. iod. gr. iv.; spt. am. aromat. ɱxx., in infus. calumb., three times a day; cod-liver oil and steel wine.

The facial paralysis was much more marked than the paralysis in the limbs; there was no loss of sensation, but the right ear was deaf. He improved and so far gained strength in the limbs as to resume work at the end of September. His memory and mental powers were also greatly improved; the paralysis of the left face persisting.

On October 29 he had another fit while getting out of bed at 5 a.m., no account of which could be obtained; he was insensible for half an hour, and was left extremely weak. The muscular markings of the right side of the face were now weakened. No marked paralysis, but he staggered slightly when walking. He again improved under the influence of an increased dose of iodide of potassium, to which, on November 19, sixteen grains of the bromide were added, but in February he had another fit, which left him more completely paralysed than ever. He could not come into the Hospital, and lived at too great a distance to be watched at home, and so was lost sight of.

The seat of the lesion was here much more obvious than its character. There was cross-paralysis, so called, of the left side of the face and of the right limbs, both legs, however, being weakened. Taken alone, the facial paralysis—involving as it did the orbicularis oculi and the ala nasi, which escape almost entirely in hemiplegic paralysis of the face—indicated an affection of the nerve nucleus of the left portio dura, or of some part of the nerve before the distribution of its branches; the paralysis of the right limbs, without paralysis of the same side of the face, indicated—but less definitely—lesion in some part of the motor tract from these limbs above the decussation in the pyramid, which would bring it into the left half of the nervous axis and below the point at which the fibres from the nucleus of the right portio dura to the left corpus striatum have coalesced with those from the nerve nuclei of the limbs. A very small extent of disease in the left half of the pons, near its lower border, meets anatomically both indications, and this has been found after death in similar cases. The nature of the disease can only be conjectured, but the most probable supposition is that there was a small tumour in this situation; and, from the occurrence of fits and the amendment observed while under treatment, it would seem to have its starting-point on the exterior, gradually compressing and perhaps invading the pons, rather than in the substance of the nerve-structure. The iodide of potassium seemed to do good, and it is always desirable in organic disease of the brain of uncertain nature to give the patient the chance of whatever benefit this remedy may afford.

Paralysis of Left Portio Dura—Temporary Paralysis of Arm and Leg of same side, with Chorea-like Movements of Hand, and Impaired Articulation.

Rebecca S., aged 37, married, three children, came under observation August 22, 1866. A fortnight previously she became giddy one morning, sat down, and when she tried to rise could not on account of the giddiness, and had to go to bed. She was very ill for two days, and then suddenly found she had lost power in her left hand and leg and her face was distorted. No loss of consciousness or sensation, no delirium, but her articulation was so indistinct that speech was said to be lost. The left hand was in continual motion for two days; the leg did not move, but felt numb. The loss of power in the face, arm, and leg was sudden, and was simultaneous with the loss of articulation. She had gradually regained speech and recovered the use of her arm and leg, which when seen were not at all paralysed. The left face, on the other hand, presented almost total paralysis; the forehead was smoothed, the eye unwinking and not capable of being closed by effort, the cheek flaccid, the nostril collapsed, the mouth drawn to the right, and continually being restored to its place by the hand. Both pupils small, the right smaller than the left; vision and hearing equal and good; no affection of sensation; no paralysis of masticatory muscles; tongue protruded straight. The only complaint was of great weakness and of occasional attacks of giddiness.

The patient was under observation for a short time only, and was improving. Where was the mischief here, and what was it? I had not the opportunity of testing the electrical sensibility of the facial muscles, but the history is sufficient to set aside the supposition that the paralysis was peripheral. The lesion, then, involved the nucleus or trunk of the left portio dura; for here, still less than in the last case, was the paralysis such as could be due to disease of the higher centres, the reflex actions between the nuclei of the fifth and seventh being arrested. The difficulty is to understand how any lesion in or near the origin of the portio dura could give rise to the fugitive paralysis of the limbs on the same side, and the chorea-like movements of the arm. Had the hemiplegia been on the opposite side the case would have been much more clear. However, there was positive evidence of damage in the course of the portio dura in the complete paralysis of the face, and this had set in suddenly, and at the same moment with loss of articulatory power and paralysis of the limbs, which forbids us to look for the lesion elsewhere than in the central nervous system—that is, at the origin of the nerve at the lower edge of the pons. The contraction of the pupils is another symptom attending affection of the pons. The paralysis of the limbs on the same side of the face must remain an unexplained phenomenon, conjecturally reflex. The vertigo should not be forgotten, though it cannot be explained. The most probable cause of so sudden an attack is hæmorrhage.

Headache—Fits of Uncertain Character—Hemiopia—Later Slight Right Hemiplegia—Sudden Death.

Robert K., aged 26, shoemaker, first came under observation December 7, 1865. He had had syphilis seven years previously; six months before, and again recently, had had a fit, no account of which was obtained. Before the fit had had pain in the head, and at times saw double. The headache, which was frontal in situation, continued, was worse at night, but was especially exacerbated when the patient stooped or rose from the sitting posture. At times he was giddy, but he did not fall. Ever since the fit he had been "dark on the right side"—*i.e.*, while he could see an object directly in front or to his left, he could not see anything to his right, and it was found on testing the two eyes separately that the inner side of the right retina and the outer side of the left were blind. He saw a little better with the right than with the left eye; the pupils

were equal. The patient was a well-built and well-nourished young man, inclined to be stout; pale, but not anæmic-looking, with a depressed expression. Besides the pain, he complained of feeling weak, low-spirited, and deficient in energy. Bowels open; appetite failing. He was ordered a couple of aperient pills and four grains of iodide of potassium, with ammonia and gentian.

On the 14th he was worse; had pain over the brow and in the mastoid regions. When he rose from the sitting posture his strength seemed to leave him altogether. Vision as before; right pupil a little larger than the left; sleep imperfect; appetite good; bowels confined; stools of clayish colour; tongue white. Iodide continued. Pil. hyd. gr. ¼; pil. rhei co. gr. ij.; ext. tarax. gr. ij. ordered twice a day.

18th.—Worse, and quinine substituted for the iodide of potassium by the clinical assistant. He improved for a time after this change, and on January 1 had much less pain in the head, the state of the vision remaining the same, and the right pupil being still larger than the left. The headache, however, returned, and on January 8 liq. pot. arsenitis, in doses of four minims, was given with calumba, in the place of the quinine; pil. aloës c. sapone having also on the 4th been substituted for the pill previously taken. He took the arsenic for a month, improving on the whole, but at the end of this time he was made sick by it, and it was discontinued. After this he continued to attend the Hospital with the greatest regularity for more than a year, taking nearly all this time ammonia, with gentian and an aloetic pill. The vision was restored, and the headaches ceased or returned only at intervals. For a short time (about February, 1867) he complained of tingling in the right face and pain in the right shin, the first of these symptoms acquiring significance from the subsequent history.

In this case there was no doubt from the first as to the existence of some intracranial lesion. The fits alone would not have been conclusive; but the association of these with the peculiar affection of the sight left no room for uncertainty. The situation of the lesion could moreover be approximately fixed. The blindness in the left half of the two eyes, of the inner part of the right retina, and of the outer part of the left, showed that the left optic tract was involved at some point between the commissure and the corpora quadrigemina. The conjecture I entertained provisionally was that there was a tumour in the cerebellum, giving rise to pressure on the optic tract. It seemed reasonable to suppose that it might be syphilitic, and iodide of potassium was given at first; but improvement following the substitution of quinine, it was discontinued before an adequate trial had been made. After an interval of two years, during which the patient had been seen occasionally, he again came under observation on April 29, 1869. He then complained that his head felt queer, and had done so for some time. At times he staggered, as if drunk, and a weakness of the right side had gradually come on. This he felt most after walking, and he noticed that he dragged the foot, wearing out the right boot at the toe very rapidly. The right arm was weak. There was evidence of slight paralysis of the muscles of the right side of the face, and articulation was indistinct. Sensation was not apparently impaired. Right pupil a little larger than left; both small.

The expression of his face was that of great depression of spirits; he sighed frequently and deeply. He was unable to stick to work, earning only 3s. to 6s. a week, instead of 18s. to 20s.; he was indisposed to go out, and would sometimes remain in bed all day. He ate and slept well. Bowels confined.

The treatment adopted was iodide of potassium beginning with six grains gradually increased to sixteen, aperient pills, and a succession of blisters behind the left ear. He attended at the Hospital for two months, and seemed to improve a little—gained strength in the arm, dragged the leg less, spoke more distinctly, and did more work—but was never able to go on with it steadily through the day. He was lost sight of at the end of June, and, as was learned subsequently, became an out-patient at the Epileptic Hospital.

He died in January, 1870, and from his father the following particulars were obtained:—

For four months before his death he scarcely did any work; would begin, but would cut the "uppers" all to pieces; could not control his movements. He appeared "lost," was unable to give his attention to anything, and was extremely irritable. His appetite was enormous, and he became very fat, but was extremely weak. When he stooped his face would become so red that it seemed as if all the blood in his body rushed to his head. On the day before his death he did one or two odd things, and went home to bed, where he was found next morning at 10.30 lying in a torpid condition, but answering when spoken to. He refused to rise, and struck violently at a man who tried to drag him out of bed. Later in the day he had a sort of fit which consisted in violent movements of the legs only, and he became unconscious, lingering in this condition for four hours, and "dying from the feet upwards"—*i.e.*, the feet became cold and the legs motionless. It may be conjectured that the immediate cause of death was hæmorrhage into the membranes at the base of the brain and round the medulla. No post-mortem was made.

The original conjecture of tumour in the cerebellum, suggested by a case very similar in many points to this, was subsequently modified on the occurrence of paralysis in the right limbs and face; and it seemed more likely this paralysis, with evidence of pressure on the left optic tract, would be produced by a tumour or syphilitic disease of the membranes round the outer side of the left crus cerebri.

Hypochondriacal Symptoms—Hemiplegia—Recovery.

Henry P., aged 32, a painter, came under observation as out-patient at St. Mary's Hospital, September 30, 1869. His symptoms were mainly distressing subjective sensations of various kinds, great mental agitation without cause, apprehensions of something dreadful about to happen to him, sensations at one time as if his brain were shaking loosely about in his head, at another of shaking in the abdomen, rush of blood to the head. More definite complaints were of pain in the chest, frequent desire to pass water, shaking and trembling in all his limbs, restless nights, with talking in his sleep. He looked agitated and alarmed, but had not in other respects the aspect of ill-health. His pulse was soft, his tongue moist and flabby, bowels loose. A faint and doubtful blue line was seen on the gums, but he had no lead antecedents, and had had no serious illness at any time. There was no albumen or sugar in the urine.

During the next six weeks he took successively opium, iron with quassia, and iodide of potassium (dose six grains), without any obvious effects. The symptoms came on in attacks, usually when he was at work or walking in the street, and on November 7 he went to the Hospital in the evening, saying that he felt as if he would make away with himself, complaining also of pain in the head, and that when he walked he shook as if he would drop. His tongue was now furred, large, and indented by the teeth. He was ordered to take a couple of blue pill and colocynth pills occasionally, and liq. strychniæ mviii. three times a day. After another attack, in which he said he was delirious and had suicidal impulses, a grain of opium was given every night. This was on November 18, and on November 29 bromide of potassium gr. xl. with spt. chloroform and spt. ammon. aromat. mxx. was substituted for the opium. Later iodide (gr. v.) and bromide of potassium (gr. xv. to xxx.) were given in combination three times a day for six weeks; then liq. pot. arsenitis for six weeks, and again strychnine; cod-liver oil also was tried. During this time he was better and worse. At one time he referred all his troubles to the epigastrium, and the abdomen was large and tense; at another the complaint was of the head, at another of palpitation of the heart. New symptoms were profuse perspirations (the sweat would stand in drops on his nose and forehead when in the out-patient room); this was in February, and in March he had a discharge from the urethra not accounted for by contagion.

On March 24, 1871, he complained of loss of power in the left arm and of pain in the shoulder. This was the precursor of a severe attack of hemiplegia.

He did not appear again at the Hospital till May 12, when he stated that within a day or two of his last visit he was seized while at work with pain in the loins; he went home and to bed, and on waking up in the night he found he had lost the use of his right side. The paralysis was at first almost complete. He had pain in the forehead and in the back of the head; could not bear any noise; his eyes were bloodshot and the pupils dilated. Movement of the right arm gave pain.

When seen by me on May 12 (about nine weeks after the attack) he could walk, and had a little power in the right arm; with great effort he could raise it to his head; it shook very much from the exertion. There was no apparent diminution of sensation. He still had pain in the head, and he looked pale and worn. He said he did not see so well with the right eye. He was ordered cod-liver oil and iron and three-grain doses of iodide of potassium. He gradually gained power in the affected limbs, but he had for a time pain and swelling, first of the wrist, then of the elbow of the right side; there was distinct effusion into the wrist-joint. There was also

swelling and remarkable sweating of the right foot; the pulse, moreover, seeming larger in the right wrist, and the veins fuller in this hand.

May 23.—He came to the Hospital with an excited and exalted expression on his face. He had been to the miracle-worker two days previously, and had been told he would be well in three days. The operations of the impostor had obviously impressed and excited him greatly.

30th.—He had had one or two returns of his nervous attack, apprehension of immediate death, violent beating of the heart, etc.

June 2.—Still worse. Great pain in the head across the entire forehead, but mostly on the left side behind; thinks it will drive him mad. Pulsation visible in arteries of both hands; very violent. A week later, suffering less pain, he complained of low spirits, suicidal feelings, apprehensions, twitchings all over.

11th.—Had almost completely regained the use of the right arm and leg. Since the last date there had been noticed a herpetic patch on the right elbow, a peculiar elastic swelling in the forearm, a superficial ulceration on the left shin, and the right foot had continued to perspire much. Up to this time the cod-liver oil, iron, and iodide of potassium—the dose of the latter increased to ten grains—had been continued. Bismuth, with hydrocyanic acid and calumba, was now given, on account of dyspeptic symptoms. Blisters were applied behind the left ear.

The suicidal feelings and nervous attacks returning, the iodide of potassium was resumed, in sixteen-grain doses, on August 25; but as after various fluctuations he was as bad as ever, on September 8 all drugs were suspended for a time, and a seton was put in the back of the neck and retained for six weeks, during part of which time he took liq. hyd. bichlorid. ʒj. three times a day in infusion of quassia, and this was continued till November 10.

October 13.—Apprehensions and suicidal feelings gone; "pressure" in head relieved; he had been at work a fortnight.

He continued to attend at the Hospital, suffering very little from his nervous symptoms, but complaining of flatulence and uncomfortable sensations in the abdomen, and for a short time of diarrhœa.

December 19.—Severe pain in the left temple, ushering in a very severe attack of iritis of the left eye, which was treated at the Western Ophthalmic Hospital by small doses of iodide of potassium and bicarbonate of potash, being looked upon as rheumatic in character. The eye had recovered itself on January 9, 1871.

On March 30, 1871, when last seen, he was at work, having occasional slight attacks of giddiness, and at times of fear. He complained of flatulence, and palpitation of the heart, but on the whole he was much better, and had gained flesh. The only medicine taken since the attack of iritis was mist. ammonia c. gentian and aperient pills.

Ophthalmoscopic examinations were repeatedly made during the last eighteen months of his attendance, both by myself and by Mr. Haynes Walton, but no morbid condition of the optic disc was ever detected.

This was a case which up to the occurrence of the hemiplegia might not unwarrantably have been set down as hypochondriasis or lowered nerve-tone through some peripheral visceral disorder, but there was something undefinable in his appearance which suggested disease of the higher nerve-centres. The varied character of the attacks, the suddenness with which they came on, the profuse perspiration of the face on a cold winter's day, were features of interest. He was treated successively and alternately on the hypothesis of functional nervous disorder, lead-poisoning, abdominal visceral disorder, general debility, imperfect nutrition of the nervous centres, and syphilis; temporary relief was experienced from time to time, but no good result of any degree of permanence was obtained till after the use of the seton. This improvement can scarcely be looked upon as a mere coincidence, but possibly the bichloride may have contributed to it. Indications of syphilis, both local and general, were very carefully looked for, and occasional suspicious manifestations appeared, but it was never possible to conclude definitively that the patient was suffering from this disease. Iritis is a common syphilitic accident, but as a rule it belongs to an earlier period of the disease than that at which the patient must have been, and the attack he had did not exhibit the characters of syphilitic iritis. Iodide of potassium, the remedy on which so much reliance is to be placed in most syphilitic affections of the nervous system, was, however, fairly tried several times, but without decided benefit.

MAGNETO-ELECTRICITY IN THE TREATMENT OF MUSCULAR ATROPHY.

By ALEX. P. FIDDIAN, M.B.

Whilst the value of electricity in the treatment of disease is a matter of dispute, a case where there is distinct evidence of its utility may be considered worthy of publication, and for this reason the following is brought forward. The patient (J. L., Bute Docks, Cardiff), to state the matter summarily, was paralysed to an extent fast approaching completeness. Both upper limbs were affected, so that he was quite helpless; yet in six weeks from the time he was first seen he was enabled to walk fairly well, and in five months more active than he had ever been. A detailed account of his condition and of the steps taken for his recovery is given as follows:—

August 19, 1871.—J. L., aged 26, pilot, is a single man and a sober one. Has been much exposed in his occupation necessarily; and also, because of his cagerness to do all that came to hand, was often at work night and day. Was not subject to rheumatic pains; never had syphilis; but was always a strong, healthy, stout-hearted fellow. Strange to say, he has had an aversion to meat, and has not eaten any for years as an article of diet; he has lived almost wholly on bread. For at least a twelvemonth has been subject to constipation, and to relieve it has consumed large quantities of Epsom salts and of pills—in fact, whenever he could lay his hands on "salts" they were sure to disappear. Up to nine weeks ago he considered himself to be a picture of health, but about that time as he was walking to town he felt as if struck in the calves. In a way unaccountable to himself, he seemed gradually to lose the power of walking—he tottered, and finally ceased to walk within three weeks of the attack. His feet and legs lost their sensibility and their power. Then his thighs and forearms lost their power, but not sensibility.

He has used a great variety of applications, external and internal, but every day the disease seemed to grow upon him; and, except in the matter of sensibility, his condition has all the time steadily become worse, and the same constipation, which for the last twelve months has been a trouble, during the last nine weeks has been aggravated. His appearance is that of a strong, healthy man, but he cannot shake hands with anything like a good grasp. His first complaint is that he cannot stand, for his knees give way at once, and if taken out of bed he must be supported. He cannot lift either foot from the bed, but in trying to do so raises the knee a few inches. He cannot flex or extend either foot or move his toes. He can only turn in bed with the greatest difficulty and clumsiness. His hands, too, he complains of as quite useless, for he can neither grasp a book nor unbutton his shirt, nor hand his food to his mouth. He makes no complaint about his arms, and, indeed, he moves the forearm upon the arm or the arm at the shoulder-joint with his usual freedom and force. No reflex action is observed on tickling the soles of the feet, nor is any twitching observed in either arm or leg.

Tremulousness characterises every movement. Swelling comes in his feet and legs if he allows them to hang down; otherwise they are much like sticks. His thighs are small and flabby, especially on the inside. His hands are thin, and the bones prominent; there is decided flattening between the thumb and first finger. His forearms are small and offer a contrast to his arms. Sensation as tested by pins' points at varying distances is good everywhere.

To make the diagnosis complete, the magneto-electric machine was used, and as it was applied in the same manner as was afterwards found necessary in the treatment, a statement of the manner will not be out of place here. The machine used was the common electro-magnetic, with a single large magnet, and the strength of current was regulated roughly by drawing out the keeper. Wet sponges were placed within the conductors, and were applied to the skin in such a manner that the sponges alone touched its surface. Each superficial muscle was electrified in turn, by simply placing the wet sponges on it so as to cover as large a portion of the one muscle as possible, and the application lasted for about two minutes. By this means it was found that the muscles of the forearm, though feeble in their response, were much more active than those of the thigh and leg, hand and foot. Those of the thigh were more active than those of the leg; the hand was better than the foot. It was difficult to perceive any movement in the latter with the most powerful current he could bear. A good idea of the feebleness of muscular power

in the leg may be gathered from the fact that with all the anterior tibial muscles acting together the foot just moved.

It must also be noted that in certain situations, however much the sponges were wetted, the application was very painful. Thus, on each calf, where mustard poultices had been applied, no amount of wetting could rob the electricity of its pain-producing power, when sufficiently strong to make the muscles contract. Over the buttocks, too, where no mustard-poultice had been applied, sensibility was still more acute, and remained so the whole time, whereas that of the calves disappeared after a fortnight. The dorsum of the foot and the back of the hand were also very sensitive.

A diagnosis was then made, to the effect that the muscles were atrophied without any affection of the spinal cord or motor nerve trunks; that the disuse of the muscles was adding to their atrophy, though not the primary cause.

A prognosis on the strength of this was given to the effect that the limbs would regain their power, but that time and patience would be largely drawn upon.

A plan of treatment was also determined—namely, to electrify each muscle every day (the whole taking two hours or more) for about two minutes; to take three times a day a mixture containing three minims of liq. strychniæ for a dose, and to increase the dose gradually. (He went up to eight minims.) Also a stimulating liniment to be rubbed into the legs.

After a week the liniment was given up, because of a rash it had produced, and at the same time he was put on full meat diet. He ate heartily of beefsteak and eggs. No beer, spirit, or wine was ordered.

His progress was as follows:—

August 24.—Can lift left leg to the height of one foot, and right leg to height of six inches.

26th.—Able to stand with the help of one hand.

30th.—Can feed himself, rise up from sitting posture, stand a moment without help, and grasp without trembling. Calves and shins filling up. Can flex and extend left foot.

September 1.—Able to undo buttons of his sleeves.

5th.—With his hands can lift a large quarto book.

9th.—Walks from one room to another with help.

16th.—Bowels moved twelve times in twenty-four hours; therefore liq. strychniæ was omitted, quantity of food reduced, and chalk mixture given.

25th.—Walked downstairs and up again with help. No diarrhœa for several days past.

October 4.—Able to walk with one stick, to flex each leg, to point each foot without flinging it about. Bulk of legs and of thighs increases. Without producing pain, no contraction of the extensor brevis digitorum takes place. Resumed liq. strychniæ, four-minim doses.

20th.—Able to walk a short distance without stick. Walked across the road for first time. Notable increase in steadiness of limbs.

28th.—By occasionally touching the wall is able to walk a considerable distance without his stick. Power of hands as great as that of many men, but not equal to his former self. Muscles of leg, thigh, buttock, and forearm of their natural size and firmness. Those of hand still show room for improvement, as well as those of the foot. There is an advantage decidedly in favour of the hand. Able not only to button his shirt at the wrist, but also at the neck, where he can have no help from his eyes. Uses both knife and fork in eating. His feet have never swelled since August 19. This was the last time electricity was applied.

November 5.—With his own hand wrote to say he was gaining strength daily, and going into the country for change of air—Cheltenham.

April 7, 1872.—Returned from Cheltenham, where he had taken certain baths, and rapidly gained in walking power; then took to his occupation, and pursued it more vigorously than ever, keeping to his new diet of meat. Latterly has been for a short tour in Scotland, leading all the while a most active life. No defect can be noticed of any kind.

The first question to be answered is, whether the electricity was the remedial agent? It evidently was, and for these reasons. Up to the time of its application the limbs were steadily growing worse. The patient, with a concern that deepened every day, had watched the wasting and flabbiness and weakness of his legs extend upwards to his thighs. From the time of its application they made uninterrupted progress towards recovery. It may be objected that the strychnia was as powerful an aid as the electricity, and so I might have thought had I not learned afterwards that he had been taking it previously in just as large doses as I gave him, if not larger. Further, had the improvement in his diet a material connexion with his recovery? It no doubt aided materially, but was not the starting-point; for when it was adopted a marked improvement had already begun. Having watched the case most carefully, I feel convinced his recovery was due to the electrical agent. The time expended was considerable; but a point of more importance is, whether the daily and prolonged stimulus does not produce a state of irritability. On the contrary, it turned out that what was borne with difficulty at first, was borne with ease afterwards. At first I hardly knew how to make its application mild enough; at last he could bear more force than I could command.

With regard to the cause a good deal might be said about hard work of muscle, with deficiency in meat diet, and about degenerate structure; but enough has been said to mark out the value of electricity, and its claim on our attention as a remedial agent.

Cardiff.

CASE OF

DIFFUSED GANGRENE OF THE LUNG OCCURRING IN A YOUNG CHILD.

By G. W. McNALTY, M.D., F.R.C.S.I.,
Staff Assistant-Surgeon.

Albert W., aged three years and six months, was admitted on November 19, 1871, into the Hospital for Soldiers Wives and Children, Devonport, for bronchitis following a severe attack of measles. The child had generally enjoyed good health previously.

On admission there was loud ringing cough, almost croupy in character, hurried respiration, high fever, and restlessness. The bronchitis appeared to be confined to the larger tubes. The treatment consisted in the application of poultices of mustard and linseed meal to the chest, small doses of hydrarg. c. cretâ with ipecacuanha, and a saline diaphoretic mixture. As there seemed to be a large amount of secretion in the bronchial tubes, an emetic of ipecacuanha wine was administered twice in the twenty-four hours. Nourishment was given in the shape of beef-tea and milk. There was a temporary improvement until the 21st, on which day signs of debility set in, and there was slight fetor perceptible from the breath. The gray powder was omitted; he had been given rather less than a grain every six hours. Was ordered port wine, and a stimulating expectorant mixture.

On the 22nd the sputa became muco-purulent in character, and there was increased fetor from the breath, but no soreness of the mouth whatever. The child was very fretful, restless and sensitive, crying out when touched.

On the 23rd he was much worse—extremely weak; pulse steady, 144; respirations, 60; there were sordes on the lips. Half an hour before the morning visit he expectorated some muco-purulent matter tinged with blood. Both breath and sputa were quite fetid Subsequently the surface of the body became quite blanched, and the features ghastly. On stethoscopic examination there was found to be absence of respiratory murmur, with dulness on percussion over nearly the whole of the left side of the chest, and subcrepitant râles were audible at the base of the right lung. I considered the case to be one of gangrene of the lung following pneumonia of a low type. Surgeon Young, 18th Royal Irish, to which regiment the parents of the child belong, kindly saw the case with me in the evening, and came to the same conclusion. While we were in the ward the patient expectorated about an ounce of coagulated blood mixed with lung *débris*, and currant-jelly-like in appearance. Afterwards some prune-juice-looking fluid came up, and there was an intolerably putrid smell from both breath and sputa; this was followed by extreme exhaustion, the pulse being hardly perceptible. Ordered sesquicarbonate of ammonia with senega; wine, beef-tea, and milk were directed to be given at short intervals.

On the 24th the following notes were made:—"Passed an extremely restless night, 'fidgetting about,' and picking his nails and nares; he also vomited a considerablo quantity of blood, about two ounces and a half. To-day there is no cough; dyspnœa is extreme; the pulse about 160, very difficult to count. There is extreme pallor of countenance, and the surface of the body is cold. Although well wrapped up in flannel, he asks for more covering. During the day considerable quantities of coagulated blood passed by the bowels. There were constant fetid eructations, and the child, notwith-

standing the free administration of stimulants, gradually sank, and died quietly, being conscious till within half an hour of his death, which took place at six o'clock on the morning of November 25."

Dr. Young and myself made a post-mortem examination on November 26. The following appearances were observed:—The right pleura was healthy. The base of the lung on the same side was hepatised, its remaining portion free from disease. The left pleura was adherent behind and inferiorly (recent adhesions), and contained about four fluid ounces of bloody serum. The left lung appeared collapsed; the central portion of the lower lobe was in the third stage of pneumonia, passing, I would say, into gangrene; a chocolate-coloured fluid exuded from its cut surface. The periphery of this lobe was in a state of hepatisation. The apex and thin edge of the upper lobe were crepitant; the remainder (about five-sixths) was in a state of sphacelus. Near the root of the lung were situated two ill-defined cavities, one capable of holding a filbert, and the other a hazel-nut. Bronchial tubes and blood vessels were seen stretching across them, and they contained a small quantity of a dark-coloured fluid, and emitted the most intensely putrid odour that I have ever experienced. The substance of the lung in this neighbourhood was quite broken down, and shaded, from the cavities towards the apex of the lobe, from dark brown (almost black) to olive and green. There was some vivid redness where the gangrenous portion met the crepitant thin edge of the lung. It was noticed that the upper and lower lobes were adherent, and that there was little more than the pulmonary pleura intervening between the cavities and the pleural sac. There was not a trace of tubercle in the lungs, and the bronchial glands were normal.

Remarks.—Gangrene of the lung is a very rare termination of pneumonia in children. Dr. West states, in his work "On Diseases of Infancy and Childhood," that only one case has come under his notice, and gives the particulars of the case with post-mortem appearances. Dr. Churchill mentions that Rilliet and Barthez met with only eleven cases, and that Barrier does not even allude to the subject. Dr. Aitken classifies cases of diffused gangrene of the lung, which he has noticed, with one exception, as being either associated with morbid conditions of the blood or with lesions of the great nervous centres. I have no doubt but that the changed state of the blood in the case under notice, depending on the previous attack of measles, favoured the disposition of the inflamed lung to run into gangrene. A relatively very large amount of hæmorrhage took place from the lung, and hastened the fatal termination.

An explanation(a) has been given, based on anatomical grounds, why hæmoptysis is very rare in young children suffering from pulmonary consumption, while it occurs so often in the same disease affecting adults. It would be interesting, on the other hand, to investigate the reason why expectoration of blood, which is characteristic of gangrene of the lung in the young, should be an exceedingly infrequent symptom of the latter in grown-up persons. As to treatment, reliance was placed chiefly on good nursing, appropriate nourishment, and the free use of stimulants. Chlorine and turpentine vapour have both been advised. Should I meet with a similar case again I should, looking at the morbid condition of the blood, feel much inclined to give chlorate of potass and tincture of the perchloride of iron.

It may be mentioned, as it bears out Dr. Aitken's classification, that the only other case of pneumonia ending in gangrene of the lung that I have seen, and which occurred in an adult, was associated with severe injury to the head inducing epileptiform seizures.

Devonport.

THE new buildings of the Hôtel-Dieu, Paris, which were nearly completed when the war broke out, will, it is understood, be finished without further delay by the Conseil Municipal. There are twelve other hospitals in Paris.

SOCIAL SCIENCE CONGRESS, 1872.—The subjects for discussion at the meeting to be held in September next, at Plymouth and Devonport, will include, in the Health Department—1. What are the principles on which a comprehensive measure for the improvement of sanitary laws should be based? 2. What steps should be taken to guard against sewage poisoning? 3. What means can be adopted to prevent the pollution of rivers?

(a) "On Hæmoptysis in Children," by Dr. Vald. Rasmussen, in *Medical Times and Gazette*, September 2 and 16, 1871.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

TWO CASES OF AMAUROSIS TREATED BY THE SUBCUTANEOUS INJECTION OF STRYCHNIA.

(Under the care of CHARLES HIGGENS, F.R.C.S.)

Case 1.—Joseph W., a single man, a watchmaker, has been in the navy, and seen a great deal of foreign service, especially in India. Twenty years ago he had a sore on his penis, but no symptoms of syphilis. Has left the navy ten years. His health has generally been good. He has been in the habit of smoking a large quantity of tobacco, and has drunk a great deal of spirits. For two months he has noticed his vision becoming impaired in the same degree in both eyes, accompanied by a feeling of fulness in the eyeballs, but no pain.

February 10.—Can make out letters of No. 8 of Snellen's types at about five inches with either eye. On examination with the ophthalmoscope, in the left eye the outer half of the optic disc is pink and white in patches, the inner half uniformly pink; the retinal bloodvessels, especially the arteries, are thin, and few in number. The right eye is the same as the left, with the exception that the retinal vessels appear larger and more numerous. In both eyes the vessels appear displaced towards the inner side of the optic disc. Ordered pulv. opii gr. ½ in pilula ter die.

24th.—No improvement. One-fortieth of a grain of strychnia injected beneath the skin of the temple.

28th.—One-thirty-second of a grain of strychnia injected.

March 3.—One-thirty-second of a grain of strychnia injected. Reads Snellen 6½ at six inches with both eyes.

30th.—Strychnia has been injected twice a week, the quantity having been gradually increased to one-eleventh of a grain. Reads Snellen 3½ at about six inches.

April 13.—Injection has not been repeated for a fortnight. Reads Snellen 3½ at about eight inches with both eyes, and says he can do his work as well as ever he could. Examination with the ophthalmoscope shows little change. The outer half of each disc is of an uniform pinkish-white colour, not patchy as before; the inner halves are still uniformly pink. The retinal bloodvessels present no change.

Case 2.—Charles K., the father of three healthy children, was formerly in the army, is now a cabinet-maker. Thirty years ago he had a sore on the penis, accompanied by suppurating bubo, but no symptoms of syphilis. Six months ago he had a severe blow on the head from a piece of timber. About the same time he had a severe attack of rheumatic fever. Five months ago he noticed his sight failing; both eyes became affected together, and loss of vision has continued to progress in both equally. His health is usually good. He is a great smoker, and has drank a great deal of spirits.

February 24.—Right eye reads Snellen 12; left eye reads Snellen 15. With both at six inches he cannot distinguish colours. On examination with the ophthalmoscope both optic discs appear white and anæmic; the retinal vessels, especially the arteries, are thin and few in number, the change being more marked in the left eye. One-fortieth of a grain of strychnia injected beneath skin of temple.

27th.—One-thirty-second of a grain injected.

March 2.—Right eye reads Snellen 2½ at eight inches. Left eye reads Snellen 6½ with difficulty with a biconvex lens of fourteen-inch focus. Right eye reads Snellen 1½; left eye not improved by any lens. Can distinguish colours.

20th.—The injection has been repeated twice a week, the quantity of strychnia having been increased up to one-eleventh of a grain. He still reads the same letters.

April 10.—Has not attended for three weeks. Vision remains the same as on February 27; the left eye has never improved as much as the right. Examination with the ophthalmoscope shows little or no difference, excepting that I fancy the retinal vessels are rather larger.

Remarks.—I look upon both these cases as examples of tobacco amaurosis. Both certainly improved much under the treatment. Whether the good result was brought about by the use of the strychnia or by abstinence from smoking and drinking I am not prepared to say. I may add, however, that I so frightened both these patients at their first visit by telling

them what probably would happen if they continued these habits, that I have reason to believe they ceased to smoke and drink to a very considerable extent. In the first case the strychnia seems to have done all the good, as the patient had been under treatment by opium for a fortnight before its injection.

ST. PETER'S HOSPITAL.

STONE IN THE BLADDER—LITHOTRITY—CURE.

(Under the care of Mr. TEEVAN.)

E. E., aged 24, plumber, was admitted into the Hospital on September 6, 1871.

Past History.—Five years ago patient commenced to suffer from a difficulty in making water. For many years past he has often noticed red gravel in his *pot de chambre*. Very rarely passed blood. Has never suffered pain at the end of penis, but experiences great discomfort above the pubes on the slightest motion. Is a native of Croydon. Is ignorant of where his parents were born. No history of stone in his family.

State on Admission.—Patient is deaf and nervous, but his body is well nourished and he appears in fair health. Is troubled with a frequent desire to make water, and the act is attended with severe pains at the root of the penis, lasting for some minutes after the urine is expelled. The slightest change of position gives rise to great pain. Passes blood after riding in any vehicle. The stream of urine is sometimes interrupted, and on other occasions is forked or twisted. Mr. Teevan sounded the patient, and detected a stone.

September 8.—To-day Mr. Teevan introduced a lithotrite, and, finding the stone to be about one inch and a quarter in diameter, and apparently phosphatic, he crushed it. One hour after the operation two small fragments passed.

9th.—Patient complains of a difficulty in making water; a full-sized French elastic catheter was passed into the bladder, and the urine drawn off.

15th.—Patient is pretty comfortable. Operation repeated to-day.

17th.—Several large fragments have come away since operation.

27th.—To-day some large pieces were broken up.

October 4.—Three fragments crushed to-day, after which the patient went home, as he felt pretty well and had some business to attend to.

21st.—Readmitted. Several large fragments were broken up to-day, and on October 31 the operation was again repeated.

November 1.—Several pieces of stone have come away: one large fragment became impacted at the orifice, and was with difficulty released.

4th.—Lithotrity was again performed to-day.

8th.—Three large fragments became impacted in the fossa navicularis, and had to be extracted with the forceps.

15th.—Two small pieces were crushed to-day.

20th.—Mr. Teevan examined the patient with the lithotrite, as he said he now felt quite well and free from all annoyance; nothing was, however, detected in the bladder.

21st.—The patient left the Hospital quite cured.

May 4, 1872.—To-day the patient visited the Hospital to report himself. He states that he has remained perfectly well since he left last November.

Mr. Teevan remarked that the case illustrated the benefits of removing a calculus by a number of crushings, each of very short duration, instead of a few prolonged sittings. The result was that when the patient, in the midst of his treatment, was summoned home, he was in so comfortable a condition that he was able to go without the slightest discomfort to himself, and then to return to the Hospital, after a fortnight's absence, to resume the treatment, none the worse for the forced interruption and consequent exercise. On no occasion was chloroform given. Its exhibition was, in lithotrity, usually most injurious to the patient, as the surgeon was generally tempted to do too much whilst the patient was under its influence, and it was thus that chronic cystitis or incontinence of urine was induced. Some surgeons objected to lithotrity on the ground that, although the operation might successfully remove the stone, it often left the patient in a worse condition than he was before, and made him an invalid for life. Such an objection was, however, not valid, as the unfortunate consequences referred to were not incidental to the operation, but were caused by the surgeon's want of delicacy in manipulation, and an ignorance of the conditions essential to success. It had been stated, in a work recently published, that inasmuch as a catheter could usually be left in the bladder with impunity for several hours, no harm could follow from manipulating a lithotrite for a few minutes. The comparison, however, was utterly fallacious, for the conditions were quite dissimilar: in one case the catheter was *passive* in a bladder not inflamed, whereas, in the other, the lithotrite was *active* in an organ in a state of acute congestion and excessive sensibility from the prolonged presence of a very irritating foreign body.

EDINBURGH ROYAL INFIRMARY.

CASE OF EXTRA-UTERINE PREGNANCY.

(Under the care of Dr. MATTHEWS DUNCAN.)

[Reported by Dr. J. R. HARDIE.]

A. E., aged 29, married nine years ago, had one child eight years ago, no miscarriages or abortions, was admitted to Ward XVI. on October 22, 1871, complaining of stoppage of menstruation, swelling in the lower part of the belly, and pain in the left iliac region, which extends through to her back.

History.—Her menstruation, which had previously been regular, ceased at the end of May. A month subsequently she was seized with pain and swelling in her belly, for which she was leeched, poulticed, and variously medicated, but without relief to her symptoms. Five weeks ago she had an attack of pain in her inside, which she thought was a threatened miscarriage, but it only lasted for an hour. At this time she first noticed the swelling in the lower part of her belly. The pain in her belly has remained up to the present time, relieved by intervals of ease.

Physical Examination, November 8.—The breasts, she says, are enlarged, but contain no milk. Around the nipple on either side is a well-marked areola, measuring 8 mm. across; the nipples are not prominent. The belly when exposed is observed to project as in a woman at the seventh month of pregnancy. The prominence is much greater between the navel and the anterior superior spine of the ilium of the left side than it is between the corresponding points of the opposite side. It was very tender, but is not so now. It has an elastic, soft feeling, approaching in character to that of a moderately tense fluid bag, but does not present the feeling of fluid, nor is there any fluctuation to be felt. A firm tumour can be felt filling the whole lower half of the belly, and of it the above-mentioned prominence is evidently a part. The line of absolute dulness on the right side is only a little above the level of the anterior superior spine of the ilium; on the left side it is two inches higher, but here the tumour can be felt to extend beyond the line of absolute dulness. Over the lower part of the prominence the uterine sound can be heard distinctly. This bruit is rather abrupt at its termination; it is not heard on the right side. The fœtal heart was not heard. Cervix pretty high up, softened and enlarged much as in the early pregnancy of a multipara. Behind cervix, and projecting just below its level in the brim, is a rounded hard mass, which is tender.

November 9.—Fœtal heart was heard on right side of abdomen. It was like that of a six months' pregnancy. Pulsations 144.

15th.—Cervix was found hard and narrow. Futile attempts were made to insert the smallest Barnes bag. A tangle tent was then introduced.

16th.—The tangle tent was expelled this morning. Noon: A small Barnes bag was introduced with ease.

17th.—Barnes bag removed. Cervix was found freely dilated so as to admit the finger. A Barnes bag of large size was introduced.

18th.—Barnes bag removed. Cervix was fully dilated. The uterus was detected in the pelvis by combined external and internal manipulation. A sound was then introduced, and found to pass about four inches.

22nd.—A long slender trocar and canula was inserted into the abdomen on the left side, about an inch below the most prominent part, the orifice of the canula being guarded with a curtain of lint soaked in carbolic oil (1 in 8). Less than an ounce and a half of liquor amnii deeply tinged with blood were drawn off.

25.—The ordinary symptoms of general peritonitis, under which she had laboured since admission, increased, and patient died to-day.

Autopsy, November 27.—Liver adherent to the peritoneum; fatty. The transverse colon was enlarged, lying beneath the umbilicus, and extending transversely up to near the tip of the sternum. A rounded tumour occupied the lower half of the abdomen on the left side, and there were numerous adhesions

matting together the tumour, the intestines, and the pelvic viscera. Part of the intestine was removed, and an incision made in the wall of the tumour, which exposed a dead fœtus about seven months old, having an imperfect development of the anterior abdominal wall. The fœtus lay with its head lowest, and looking towards—*i.e.*, with its face—the placenta, which was on the left side of the abdomen. The head was above the brim of the pelvis. The whole mass was cut out and handed to Professor Turner for dissection.

From Professor Turner's Report.—The sac which contained the fœtus projected considerably to the left side in the region of the left Fallopian tube and corresponding broad ligament. It lay in relation to the posterior wall of the uterus, and even extended downwards for some distance between the back of the vagina and rectum. It was adherent to the posterior part of the uterus and its appendages, and to the rectum and sigmoid flexure of the colon. The uterus was about twice the size of the unimpregnated organ. From its upper and right angle the Fallopian tube extended outwards to its fimbriated extremity, lying in contact with, but easily separated from, the upper and right portion of the sac. A bristle was passed into the uterine orifice of the left Fallopian tube for a short distance, but about half an inch from the uterus the walls of the tube were obviously expanded into the great sac already described as containing the fœtus, so that the tube had lost its characteristic form and appearance. The placenta was of large size, and was attached to the upper and front part of the wall of the sac in its left half, the remaining portion of the sac being quite free from placental attachment.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1	8	0
" "	*Six* "	0	14	0
The Colonies and the United States	*Twelve* "	1	10	0
" "	*Six* "	0	15	0
India	*Twelve* "	1	15	0
"	*Six* "	0	17	6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*			

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0	4	6
Each additional line (10 words)	0	0	6
Half-column, or quarter-page	1	5	0
Whole column, or half-page	2	10	0
Whole page	5	0	0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JULY 20, 1872.

THE GENERAL MEDICAL COUNCIL.

We understand that there will be no summer session of the General Medical Council this year. On reviewing the whole situation, we think this a matter not to be regretted. The Branch Medical Council for Scotland have just met, and given the *coup de grace* to the abortion which has been named the Scottish Scheme for a Conjoint Board. It is now tolerably clear to all concerned that the Scottish Examining Bodies never had the least intention of surrendering their privileges, and that nothing which the General Medical Council can either do or say will induce them to do so. The Scottish Branch Council have declared by a vote that the whole thing is at an end, as far as Scotland is concerned. The conjoint "practical examination" scheme we always considered as a sham, and a transparent one; but it has served its use as a show of compliance with the recommendations of the General Medical Council, to which no medical authority in Scotland had ever the slightest intention of meekly submitting.

In Ireland the Queen's University is still recalcitrant, and whilst the member for the city of Dublin represents it in the Medical Council, and has a vote and some influence in medical matters in the House of Commons, it can pretty safely afford to be so. In England things remain in the unsatisfactory condition in which they were left at the last meeting of the Council. The partial Conjoint Scheme between the two Royal Colleges of Physicians and Surgeons to which the Universities of Oxford, Cambridge, and Durham have given their adhesion is seen to involve difficulties and dangers of no ordinary description. With the Scottish bodies defiantly maintaining their separate position, and offering education and examination on easier terms, the Royal College of Surgeons is threatened with most serious loss of influence and income as the only exchange for its independence. The letter which we this week publish from Mr. Busk, the late President, although he thinks the danger to the College has been overrated and may be disregarded, betrays at the same time a certain misgiving on the subject, which we know is shared in a far higher degree by other members of the Council of the College. In the Royal College of Physicians the attempt to render the Committee of Reference entirely independent of the College has been resisted—and very rightly resisted—by Dr. Quain, and is far from being palatable to the Fellows at large. Meanwhile no Bill has been introduced into Parliament to enable the Apothecaries' Society and the University of London to take part in the scheme supposing that they are inclined to do so, and there is a report that the price of introducing and passing such a Bill would be the placing the whole matter under the Privy Council by making the arrangement of the scheme subject to its approval, or practically to the approval of its Medical Officer—whoever at the time that Medical Officer may be. This, we maintain, would be a surrender of independence on the part of the Profession which is too heavy a payment for a very doubtful benefit.

Added to these difficulties, the little interest that the great body of the Profession is taking in this matter is surely a reason for some caution and deliberation, and we therefore are glad that the General Medical Council is postponing its session. There is another reason for congratulating the Council—we mean the consideration for its own reputation. It would be unpleasant for the Council to meet merely for the purpose of finding anything like a fulfilment of its wishes and a compliance with its recommendations as far off as ever, and to separate, having repeated a recommendation which it will be perfectly aware is doomed to be again disregarded.

The fact is that things are not ripe for a conjoint action in any one of the three divisions of the kingdom; and were a full and sufficient scheme agreed on in one, non-compliance in the others must be fatal to it. In order to induce a different state of things, fresh legislation is absolutely necessary. But legislation at the price of Governmental interference with the examination and education of the medical profession and the surrender of its independence would be an evil greater than any under which we labour in our present system—patchwork piece of machinery as it is.

We learn that Dr. Paget, the President of the General Medical Council, Dr. Acland, and the Treasurer, Dr. Quain, had an interview last week with the Chancellor of the Exchequer on the subject of providing a habitation for the deliberative body of the Profession. We hear that Mr. Lowe received the deputation from the Council with distinguished urbanity, made inquiries in reference to the functions, income, and property of the Council, and finally intimated that the Government will either provide the Council with apartments in one of its public build-

ings, or grant to the Council a site for a building of its own. We clearly should prefer the latter; and we think that medical practitioners who contribute so largely to the maintenance of the Council, would gladly see a portion of the moneys received from them expended in providing a building worthy of the great profession of Medicine, and suitable to the dignity of the body which presides over medical education.

PUNISHMENT.

"To PUNISH" is a good wholesome English verb—not the Latin *dare pœnas*, to pay a penalty and so go scot-free, but a word which implies a determination to have a pound of flesh out of the offender, be he who he may. It implies no respect of persons; before it high and low, if wrongdoers, are equal. There is no mawkish sentimentality about it: the word betrays the spirit of rancour which is natural to mankind. There is no idea of hating the sin and leaving the sinner in it.

Such ideas are begotten from reading the reports of the Prison Congress which has been sitting among us. A goodly number of females were included in its membership, and their presence and influence are unmistakable in the whole proceedings. Doubtless the speakers manifested their humanity and their interest in a not very interesting class of society, but as regards the great bulk of our prison community it is a humanity wholly misplaced. The prevalent idea seemed to be that prisons were a peculiar kind of training institutions in which curious specimens of the human race were to be, as far as possible, brought back to the uniform pattern. One speaker alluded feelingly to our criminal classes as "our failures," but from a somewhat close study of the subject we are inclined to assume another tone.

We have two sets of criminals to deal with—those trained to crime as it might be to a trade, and those who turn to crime as a more profitable speculation than honest work. A considerable bulk of our criminals belong to the former class, but the most dangerous belong to the latter. If a man starts heavily handicapped in life, and never has had a chance to succeed in an honest way, to him the reformatory treatment may be fairly applied—the only question is whether it will succeed. To the other class such a rule is pretty well inapplicable; the only thing we can do is to teach them that crime will not pay. "Once a criminal always a criminal" is by no means an invariable rule, but it does apply in a considerable number of instances. It is therefore proper that all schemes of punishment should entertain the idea of reform, but it is by no means proper that reformation should be the leading idea in a penal code. Punishment, as we commonly understand the word, implies two things—the due reward of evil-doing, and incapacitation. Now, it seems to us that the proper way of dealing with criminals of two kinds implies incapacitation to a large extent. First, to the young criminal who is brought up badly and trained to crime, the only chance we can give him is to send him to a reformatory for a long period of years. During that period he will be incapacitated from crime, and he will have an opportunity of learning some business other than that of preying on the public. There should be no paltering with such cases—no week's imprisonment now, and ten days again another time—but, the history being fairly made out by proper officials, a long sentence should at once follow.

Again, with hardened criminals—men who will not reform—one rule should be adopted: permanent incapacitation, imprisonment for life. If society has to pay for the livelihood of these gentry, let society elect the most eligible way of paying for it. The cheapest and the best would undoubtedly be to lock them up altogether.

But the question is forced upon us, Is imprisonment the best punishment possible for all offences? We take leave to think it is not so. Suppose the case of a hungry child who has not been duly indoctrinated into the question of "mine and thine." This child, being hungry, takes food wherever he sees it; but the proper means of teaching this child not to do so again is, not to send him to prison, but to give him a good sound whipping. And so of children of more mature years; for them imprisonment is decidedly neither the best nor the cheapest means of punishment. There is in the mind of the public an idea that a prison is a very dreadful place—a place to be avoided by all means. It is not advisable to break that spell; and the surest way of breaking it is to send a child to prison. Far better give him a good sound whipping and let him go his way.

Corporal punishment has been found most efficacious in stopping crimes of violence, and there is no reason why it should not be extended to crimes of a different class. A child falling casually into crime is made worse by imprisonment, instead of better. He has tasted the worst punishment which can be applied to him, and he no longer dreads it potentially; he has experienced it actually. But a good birching is a totally different thing: the effect of every additional stroke is something very far different from every additional day's imprisonment. The difference is something like that between simple and compound interest. Neither does this idea rebel against humanity. Punishment is deterrent as well as penal, and there can be no doubt but that the dread of a good sound beating would operate far more powerfully than would the dread of a brief imprisonment.

THE WEEK.

TOPICS OF THE DAY.

WE understand that Mr. Hancock, having attained the highest honour in the surgical branch of the Profession—the Presidency of the College—has determined to make way for some of his younger colleagues at the Charing-cross Hospital, and has resigned the Surgeoncy of that Hospital. Of course he will be appointed to the honorary rank of Consulting Surgeon. We hear he retains the post of Lecturer on Clinical Surgery. Mr. Hancock has set an excellent example in thus doing, but the loss to the Hospital staff and patients will be great.

Mr. Disraeli's adhesion to the residuum of Mr. Stansfeld's Public Health Bill makes it more than probable that it will pass through Committee in the House of Commons. The Bill has been rendered more palatable to the ratepaying classes by the provisional arrangement that local boards shall be empowered to borrow money from the Public Works Loan Commissioners at 3½ per cent., and that half the salaries of the medical officers and sanitary inspectors shall be paid by the Exchequer. The Bill certainly is reduced to very modest proportions. The compulsory power which the Bill gives to appoint Medical Officers of Health is one of its principal and best features. The creation of sanitary authorities throughout the country from the existing materials of boards of guardians and town councils, and their subordination to one central authority, will at least give us a uniform system. But whether or not town councils, although, according to Lord R. Montagu, they systematically break the law by polluting the rivers, and boards of guardians, whose sole instinct is said by the same authority to be the keeping down of rates, are materials out of which, with the help of the Local Government Board, Officers of Health, and Sanitary Inspectors, a good public health organisation may be constructed, we think with Mr. Disraeli and Sir C. Adderley that the present measure should be accepted. It will at least do this—reduce to something like order the confusion in which sanitary administration in the ports of the kingdom is ever found when an epidemic threatens our shores. With cholera already on the shores of the Baltic, we shall be glad of any legislation which will enable us more effectually to resist its inroads.

The Corporation of London have determined to apply to be

constituted the "sanitary authority" for the whole port of London. The Corporation, as was long ago shown by Dr. Letheby, have already sanitary power in part of the port, and they state that they are in position to establish a perfect system of inspection of all shipping entering the port. Moreover, they have taxing power and sufficient funds, neither of which is possessed by the Conservators of the river. The Metropolitan Board of Works has no authority at present on the river.

Cholera has appeared in St. Petersburg. Up to July 9 there had not been many cases. Inspection of all vessels from Russian ports is recommended by the English Ambassador, and Mr. John Netten Radcliffe's valuable services will, we hope, be employed, as in last year, to enforce it.

Dr. Lockhart Clarke has been invited to accept the post of Physician to the Infirmary for Epilepsy and Paralysis, and has consented to do so. We need not say that this appointment is *par excellence* one of the right man in the right place. No living man has done more to unravel the pathology of nervous diseases than Dr. Lockhart Clarke, and we congratulate the patients of the Infirmary for Epilepsy and Paralysis on obtaining his services.

We hear that Dr. Shepherd has been recommended for the post of Assistant-Physician to St. Mary's Hospital, vacant by the resignation of Dr. Nunneley. We also understand that Dr. Wiltshire has been recommended to the post of Assistant-Physician-Accoucheur.

The medical practitioners of Jamaica are petitioning the Governor and local Parliament against a Bill which would admit the Canadian medical practitioners to practise in the island without further examination. The chief grounds of their petition are that medical licences and degrees vary much in the different provinces of Canada, that the Profession there is in an unsatisfactory condition, and that there is no reciprocity between the colonies in this matter — that, for instance, Jamaica practitioners would not be allowed to register in other colonies without examination unless they possessed medical diplomas or licences from the mother country.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE annual general meeting of the Association of Medical Officers of Health was held on Wednesday last, the 17th inst., at the Scottish Corporation Hall, Crane-court, Fleet-street; Dr. Robert Druitt in the chair. The treasurer presented his balance-sheet, and the secretaries their report for the past year, which were received, and directed to be printed as usual. A vote of thanks was passed to the secretaries for their report and for their services during the past year. The election of officers for the ensuing year was then proceeded with, when Dr. Druitt expressed his wish not to be nominated to the presidency of the Association on account of his ill-health. He expressed his sense of the honour conferred on him by being elected President of the Association for eight years in succession, and his regret at being obliged to be temporarily absent from its meetings. After an unanimous expression of regret at Dr. Druitt's retirement, the following resolution was agreed to:—

"That this meeting having heard with feelings of deep regret that ill-health compels Dr. Druitt to retire from the presidency of this Association, a position which he has held with so much benefit to it during the past eight years, desires (while reluctantly accepting Dr. Druitt's resignation) most cordially to sympathise with him, and to express its earnest hope that his contemplated retirement may be the means of his restoration to health, and that the Association may again have the benefit of his valuable services. Also, that the cordial thanks of the Association be and are hereby given to Dr. Druitt for the ability, dignity, and uniform courtesy with which he has presided over its meetings during the whole period of his presidency."

Dr. Henry Letheby was unanimously elected President of the Association in succession to Dr. Druitt. The following were also elected:—*Vice-Presidents:* Dr. A. W. Barclay, Mr. F. J. Burge, Dr. H. G. Sutton; *Treasurer:* Dr. C. J. B. Aldis; *Secretaries:* Dr. J. N. Vineu, Dr. T. Stevenson; *General Purposes Committee:* Dr. W. Hardwicke, Mr. J. Liddle, Mr. C. J. F. Lord, Dr. J. W. Tripe, Dr. W. T. G. Woodforde, Dr. T. O. Dudfield, Professor W. H. Corfield, Dr. S. Gibbon.

A SHOCKING SCENE AT THE CHELMSFORD ASSIZES.

A SCENE was enacted in the Assize Court at Chelmsford on Monday last, which was probably unique in a court of justice; and certainly those who witnessed it are never likely to forget it. A young and, as the newspapers express it, "interesting-looking" married woman was arraigned for the wilful murder of her husband's first wife by poison. The deceased had died on October 10 last, and the prisoner, who was married only in December, was far advanced in pregnancy. The woman was in the dock, with a couple of brief intervals, for the space of seven hours, and bravely she bore the trying ordeal, conducting herself with as much ease and self-possession as any lady whilst dispensing the hospitalities of her own drawing-room. In the course of the afternoon, just after Serjeant Parry had cross-examined Dr. Stevenson relative to the presence of arsenic in the viscera of the deceased, and the Hon. G. Denman was commencing his re-examination, the prisoner, who had risen from her seat during the delivery of Dr. Stevenson's evidence, was led out of Court, and the rumour spread that her confinement was imminent. Her speedy reappearance, accompanied by Drs. Gilson, Finch, and Carter, reassured the Court, and it was intimated to the judge that the trial had better proceed. It was evident, however, to skilled eyes that the poor creature suffered from either true or spurious labour pains. A couch was brought, and the examination of the expert was resumed. For the next hour or two the scene was ghastly in the extreme. Labour pains recurred at one time every three or five minutes, the prisoner alternately reclining, sitting, and standing; the evidence meantime proceeding as if nothing had happened. At one time two medical men were with her in the dock at the same time, and it was evident that their cheery counsel revived the poor creature. At 5.30 p.m., the evidence for the prosecution being finished, and no evidence being forthcoming for the defence, the question arose what was to be done. Baron Martin offered to go on with the case till midnight if necessary, but it was represented by counsel that the medical men were of opinion that the poor creature might be the better for a night's rest; so the trial was adjourned till next morning, and the excited spectators, among whom were a large number of unmarried females, dispersed. In the course of the evening the prisoner was delivered of a child; next morning the jury was discharged, and the trial postponed for three months. We suppose such a harrowing scene could scarcely have been avoided. What the consequences would have been had the trial proceeded, and either a verdict of guilty or of not guilty been pronounced whilst the woman was in the dire anguish of travail, we cannot say. Happily such another tragedy as this can rarely be enacted in all its details. Meanwhile the miserable woman is condemned to a further three months of suspense.

THE WIDOW OF DR. CALVERT HOLLAND.

IT is not often that the widow of a medical practitioner either applies for or obtains a pension from the Civil List. We regret to hear that the widow of Dr. Calvert Holland, the well-known physician, of Sheffield, is left all but destitute. Dr. Holland had a large and lucrative practice, and had amassed a considerable fortune. This was wrecked in the panic of 1866. A memorial to the Prime Minister is being prepared on her behalf. The Duke of Norfolk, Lord Howard of Glossop, Lord

Londonderry, with the borough members, the mayor, and others, have signed the memorial, which is an application to Mr. Gladstone to place Mrs. Holland on the Civil Pension List. Dr. Holland had strong claims on the gratitude of his countrymen, and we fervently hope the application to the Premier will be successful.

WIMBLEDON CAMP.

The health of the camp has been excellent throughout. Indeed, when the carelessness of many volunteers about their diet, and the readiness with which they buy and consume inferior fruit which has been hawked about all day in the sun, are taken into account, it is remarkable that diarrhœa is not prevalent. Few cases have required treatment, and only one was attended with fever. The patient in this one case after recovery from the diarrhœa was again laid up with acute rheumatism affecting both knees, but is doing fairly. Besides a case of lead splash previously recorded, the only accidents worth notice have been a bad scald of both arms from boiling grease which happened to one of Messrs. Jennison's cooks, and a rather severe laceration of the face which a sergeant of the Rifle Brigade got by falling on a tent-peg. Thus experience seems to show that for volunteers the camp is one of the safest as well as one of the healthiest places of residence that could be selected. The dry earth system has continued to work well, notwithstanding the heavy demands made upon it. Those who remember the use of water-carriage at the camp appreciate the vast improvement which has taken place since the abolition of that costly and inefficient method. No serious cases of illness besides that above mentioned have occurred. The medical duties of the camp have been, as before, in the hands of Assistant-Surgeon Temple, V.C., and Dr. Mayo, of the Inns of Court Rifles; Surgeon-Major Wyatt, of the Coldstream Guards, acting as Consulting Surgeon. Mr. Gladstone paid a visit of inspection to the hospital on Wednesday, and appeared surprised at the comfort of the arrangements.

PERMANENCY OF MEDICAL OFFICERS UNDER THE PUBLIC HEALTH BILL.

We referred last week to the omission from this Bill as amended of the clause insuring for medical officers of health permanency of tenure. Notice has since been given by Mr. Andrew Johnston to insert—"The medical officer of health, surveyor, inspector of nuisances, and clerk of an urban or rural sanitary authority shall not be removable from office except with the approval of the Local Government Board." By Dr. Lyon Playfair—"The Local Government Board shall have the same power with regard to the appointment, qualification, duties, salary, and tenure of office of a medical officer of health appointed under this section, as in the case of a district medical officer of a union." By Mr. Stansfeld—"The Local Government Board shall have the same powers as they have in the case of a district medical officer of a union with regard to the qualification, appointment, duties, salary, and tenure of office of a medical officer of health or other officer of a sanitary authority, any portion of whose salary is paid out of moneys voted by Parliament."

PRESENTATION TO A SURGEON.

On Saturday week, at a public meeting at Penicuick, Dr. Messer was presented with a testimonial on his leaving that town to settle in Helensburgh. The attendance was large and influential, and the 3rd Midlothian Rifle Volunteers, of which Dr. Messer was a member and Staff-Surgeon to the 1st Administrative Battalion, were also present. Mr. Charles Cowan, Logan House, was called to the chair, and in a few appropriate remarks presented the Doctor with a gold watch valued at £40, and £80 in gold. The Doctor thanked the subscribers, and assured them he did not need such substantial presents to convince him he had many friends in Penicuick, as during his stay amongst them their friendship and kindness had been his daily experience.

MARINE STORE DEALERS AND DISEASE.

Dr. Aldis, in his last report to the Vestry of St. George's Hanover-square, stated that nine cases of small-pox had originated at a marine store dealer's in Eccleston-place, exclusive of one designated chicken-pox. Two of the patients, the marine store dealer and his son, had died. From long experience Dr. Aldis was convinced that it was most desirable that the trade of a marine store dealer should be subjected to more efficient legislation than it was at present. If, for instance, it was licensed, as were the slaughter- and cow-houses, the public health would be better protected. The Vestry determined to memorialise the Local Board, recommending that Dr. Aldis's suggestion be carried out.

MISCHIEFS OF IMPERFECT WATER-CLOSETS.

Dr. Corfield, in his report on the sanitary condition of St. Mary, Islington, for June, 1872, speaks thus:—

"It is time that I should make especial allusion to a sanitary malpractice which I find to be very prevalent in Islington, in common with the rest of London—I mean the plan of running the waste-pipe of the water-cistern into the trap, or, still worse, into the soil-pipe of the water-closet. I am convinced that much of the typhoid fever and diarrhœa in our towns is caused by foul air coming up these pipes and being absorbed by the water of the cisterns; it would appear to be an ingenious plan for effectually poisoning the air and the drinking-water of the house. Now in all cases the waste-pipes of cisterns, whether they be drinking-water ones or not, should end in the open air, either over a yard or roof, or in a rainwater-pipe which is not itself joined with the sewer. A more filthy, not to say dangerous practice than the direct connexion of the drinking-water cistern with the soil-pipe, or even with the trap of the water-closet, cannot well be imagined. I have lately observed a case in which a whole family was attacked with diarrhœa, which was unmistakably traced to this method of water contamination. It is of very little use being supplied with excellent water if it is directly exposed to excremental pollution in the cisterns. . . To give additional force to my advice with regard to the waste-pipes, I may add that there can be no doubt that in times when cholera is prevalent its poison may get into the drinking-water with the sewer air in the way indicated."

APPOINTMENT AT THE ROYAL MILITARY COLLEGE.

The *Army and Navy Gazette* states that Surgeon-Major S. H. Fasson, M.D., has been appointed Medical Officer at the Royal Military College. Dr. Fasson's appointment—for the first time in the case of Medical Officers of the Academy—is limited to five years.

VACCINATION AND REVACCINATION.

The value of vaccination and revaccination is becoming generally appreciated. Marshal MacMahon has given orders for the entire army of Paris to be vaccinated or revaccinated. A measure has been submitted to the Chilian Congress to make vaccination compulsory.

QUEKETT MICROSCOPICAL CLUB.

On Friday, July 26, at eight o'clock, the annual meeting and election of officers will take place. The presidential address will be delivered by Dr. Lionel S. Beale, F.R.S.

HEALTH OF BERMONDSEY.

It is a somewhat curious fact that the parish of Bermondsey, now suffering from a deficient supply of water, is on the whole "exceedingly healthy." Hooping-cough, however, is prevalent and fatal.

HEALTH OF ST. MARYLEBONE.

Dr. Whitmore, in his report for last month, states that among zymotic diseases measles still continues the most fatal. No death was registered during the past month from idiopathic diarrhœa, a very remarkable circumstance. With respect to putrid fish Dr. Whitmore says—

"It is to be regretted that the vigilance exercised by the sanitary officials at Billingsgate-market fails to prevent the sale of a large quantity of unsound fish, which is purchased by costermongers and small dealers, and sold in all the poorer districts of the metropolis. In the past month the quantity destroyed by the inspectors of this parish amounted to 332 lbs., together with twenty-four lobsters and three bushels and a half of whelks, and although they continue to exercise great vigilance, it is impossible for them to prevent the sale and consumption of a great deal that is altogether unfit for human food."

INDIAN MEDICAL NEWS.—HEAT AND SUNSTROKE—DEATHS FROM SNAKE-BITE — HEALTH OF THE LIEUTENANT-GOVERNOR — AN UNHEALTHY HOSPITAL—MEDICAL HONOUR TO A NATIVE.

THE *Times of India* says that in the Ganges valley the heat has been terrific, and the same may be said in a somewhat less degree of Madras and parts of the Bombay and Bengal Presidencies. Many deaths have occurred from sunstroke and heat-apoplexy at Secunderabad. Five hundred and eighty-five occurred from snake-bite during the past year in the Madras Presidency.——The Lieutenant-Governor of Bengal is suffering from an attack of dengue. The epidemic appears to be slightly on the increase again in Calcutta.——The Calcutta correspondent of the *Times* (London) has given prominence in his last communication to what he calls a "medical question of some importance"—it refers to the site of a new hospital in the neighbourhood of Calcutta, and it certainly is of great importance with respect to the health of the poor population and to their well-doing in sickness. It appears that a native hospital was founded in 1793 by Lord Cornwallis; it was originally situated in the Chitpore Road, but was subsequently removed to Dhurrumtollah, where it is now situated. The neighbourhood of late years has become overcrowded with small huts, livery stables, etc., and Dr. C. N. Macnamara has long been of opinion that its removal was absolutely necessary. A most eligible site for a new hospital has been selected. It is in every way fitted for the new building, but the inhabitants of Dhurrumtollah object, and have presented a petition signed by 800 against the removal, and this has led the Lieutenant-Governor to pause. The *Times* correspondent says—

"The arguments of the petitioners are absurd to the last degree. They (in opposition to experienced medical practitioners) deny that more space is needed, that the ventilation is bad, and dispute, indeed, the entire position of the medical men. The Inspector-General of Hospitals 'fully concurs with Dr. Macnamara,' as also do a host of other persons; but Dhurrumtollah considers that it has a vested right in the Hospital, and it scouts the idea of bad air or want of accommodation. 'Did the Hospital not serve all the purposes of a hospital in past times?'—the orthodox Hindoo plea. To some people the subject may seem a small one for your columns, but no one who knows aught of Calcutta will think so. The sufferings of the native poor are among the saddest realities of Indian life, and the sufferers have no kinder friends than many of the European doctors, whose patience and attention are beyond praise."

How strangely alike is humanity in all quarters of the globe. "Vested rights," whatever they may be, and however inimical to the public welfare, are always pleaded by those who possess them—not less in London than in Calcutta. We trust that the able statement and remonstrance of the *Times* correspondent will have their due weight with the Lieutenant-Governor.——The correspondent of the *Times* also refers to an honour conferred on a purely native medical man, Baboo Koni Lal Dey, teacher of Chemistry and Medical Jurisprudence in the Medical College, Calcutta. On the recommendation of Dr. Chevers and all the medical men connected with the College, the Lieutenant-Governor, and others, the Government has conferred the title of Raj Bahadoor on the Professor aforesaid. The conferring of the title has given universal satisfaction. The title is equivalent to our order of knighthood, and is highly esteemed in India.

FROM ABROAD.—THE SMALL-POX AT LEIPZIC—M. DIDAY NEGATIVED—STUDENTS OF THE BERLIN UNIVERSITY IN 1871-72—THE STATUE OF BOERHAAVE AT LEYDEN.

THE last number of Wunderlich's *Archiv der Heilkunde* is rich in papers upon the recent epidemic of variola at Leipzic. 1. There is one by the Professor himself, upon the disease as observed at the Municipal Hospital, this being the only public establishment into which cases of small-pox are admitted. 2. Professor E. Wagner has a paper upon the morbid anatomy of the fatal cases of the disease. 3. Dr. Wendt treats of the condition of the organ of hearing and the naso-pharyngeal passages in variola. 4. Professor Thomas furnishes a statistical account of the Leipzic epidemics; and 5. Dr. Bierwirth has a paper on "Febris Variolosa sine Variolis."

At present we can only notice Professor Wunderlich's paper. He believes that small-pox has prevailed more severely at Leipzic than in other places in Germany during the recent epidemic, and that in consequence of the great neglect of vaccination and revaccination which has ensued upon the agitation of the so-called "nature-doctors." Until recently epidemics have been very few, and attended with a very slight mortality. During the years (1852-69) that he has been Director of the Municipal Hospital, there have been admitted 663 cases, furnishing only 29 deaths; and during the years 1868 (when the cases increased to 150) and 1869 (when they were 108) the deaths were only 10 and 3 respectively. The deaths almost exclusively occurred among the non-vaccinated; for while the general mortality from the disease was $4\frac{1}{4}$ per cent., that of the unvaccinated was 33 per cent. It was not until quite the end of 1870 that the epidemic seemed to be taking on large proportions, but from then to February, 1872, 1727 cases have been admitted; and although the number of admissions has gradually diminished since July, 1871, the epidemic can scarcely be regarded as terminated. Of course temporary hospitals (in the form chiefly of sheds) had to be provided, and among other contrivances the erection of a "station" for *suspected cases* proved of great value, as it had done formerly in cholera outbreaks. Many cases were sent to the Hospital as small-pox, in which the diagnosis was not confirmed; others, which in the Hospital were yet doubtful, were transferred here, so that they might be watched; and they were either discharged or returned to the Hospital as the course of the disease indicated.

Of the 1727 patients 139 had not been vaccinated, 22 had already had variola, 1504 had been vaccinated, and of 62 no account could be got. In 79 revaccination had been performed, giving rise to pustules only in 13. The large proportion of the cases occurring in the vaccinated must excite surprise; but in point of fact a small proportion only of the population is unvaccinated; and infants, who constitute the great proportion of cases in the unvaccinated, are only brought to the Hospital in direful emergencies. The present epidemic has been remarkable, not only for the number of cases, but for its great fatality. While during the last eighteen years the mortality from small-pox has averaged $4\frac{1}{4}$ per cent., in this epidemic it has nearly reached (253 deaths in 1727 cases) 14·7 per cent.; and, making allowance for some of the deaths being due to other causes, the fatality has at least tripled itself. Of the 139 unvaccinated there died 99, or 71 per cent.; and of the 62 in whom it was doubtful whether vaccination had been performed, 32, or $51\frac{1}{2}$ per cent., died. Of the 22 persons who had small-pox for the second time, 6, or 23 per cent., died. Of the 1504 vaccinated, 116, or $7\frac{7}{10}$ per cent., died. None of the 13 successfully revaccinated died As the epidemic diminished, the mortality became not only absolutely, but *relatively* less. The observation applies during the whole eighteen years over which this account ges, that the relative mortality is increased with the number of cases. Thus, with 168 in 1857, it was 5 per cent.; and in 1868, with 150 cases, $6\frac{1}{2}$ per cent.; while in the fifteen other years, during which the cases

averaged 22, it was only 3⅔ per cent. In the present epidemic it has reached 14·7 per cent. *Sex* exercised little influence on the mortality, but a very different account is to be given of *age*. Of 116 children under 15 years of age there died 73, or 63 per cent.; while of 1611 persons above that age there died 184, or 11⅓ per cent. The contrast is still more remarkable in unvaccinated infants. Of 29 such under 1 year, 27 died, and of 31 under 2 years, 27 died. This influence diminishes in the third year, when, of 15 unvaccinated, only 8 died; and of 23 between 4 and 8 years, only 7 died. The effect of vaccination in early life is strongly brought out by the fact that not a single vaccinated child of 8 years or under was brought to the Hospital. The number of unvaccinated children of this age amounted to 100, and of these 69 died.

As still further illustrating the benefits of vaccination, it is stated that while of 11 unvaccinated between 9 and 14 years 4 died, none of the 20 vaccinated died. Between the years 15 and 25 there were 11 unvaccinated with 4 deaths, and 801 vaccinated with 23 deaths. Of the 18 unvaccinated above 25 the whole died, while the mortality of the 671 vaccinated amounted to 14 per cent.

The Committee of the Lyons Society of Medicine, appointed to take into consideration M. Diday's extraordinary proposition (*Medical Times and Gazette*, July 13, p. 44) that the Society should pass certain resolutions to enable the strong arm of the law to be brought to bear upon those obstinate and wilful heretics who persist in preferring the employment of chloroform to that of ether, has just made its report. First, it declares unanimously that, reserve being had for exceptional cases and circumstances, ether should be preferred to chloroform as an anæsthetic agent. But it is also no less unanimous in pronouncing upon the inexpediency of adopting M. Diday's conclusions, encouraging legal interference. In the discussion which preceded the adoption of the report, M. Desgranges said that the Lyons magistracy, before consenting to stigmatise the practice of employing chloroform, would naturally seek for information in Paris and other large towns, and would then learn that the vast majority of the Profession favoured the employment of chloroform. It might, therefore, come to pass that this project of setting the law in motion might tell against its promoters in case of a death from ether occurring to them, the judges, guided by the general voice of the Profession, pronouncing against *their* fatal obstinacy in continuing to use a means that all the rest of the world had abandoned. M. Diday's line of action, M. Valette truly observed, would arrest all progress, for many practices in Medicine that were at first blamed have since been accepted. If ether is eventually to triumph it will be only through a scientific propagandism, and not by legal coercion. Of course, this battery of opinions opened upon M. Diday on the part of his fellow-admirers of ether had no effect upon his convictions. He repelled as ridiculous the statement that, if the interference of the law were once admitted in such cases, it might also be brought to bear upon those who had the misfortune to lose patients under ether. Before this could happen some hardy spirit must be found who would venture to say that chloroform is less dangerous than ether!

By the official statements we learn that at the Berlin University there matriculated, during the first *semester* of 1871-72, 2603 students, while 1017 left the University. During the present *semester* 404 have entered, making in all 1990 matriculated students. Of these 249 belonged to the theological, 552 to the juridical, 450 to the medical, and 739 to the philosophical faculties. Under this last category, 495 are returned as students of philosophy, philology, and history, 239 of mathematics and natural science, and 5 of political economy and agriculture. Besides these, there are 1307 non-matriculated students attending the lectures at the University, consisting of pharmaceutists, dentists, pupils of the military academies, pupils of the agricultural and mining academies, students of the trades academy, etc., making in all 3297 students. Of the 1990 matriculated students, 1526 (of whom 337 are medical) are Prussians, 194 (44 medical) belong to other German States, 167 (49 medical) belong to non-German European States, and 67 (20 medical) belong to extra-European States. Of the 69 non-German medical students 1 was from France, 2 were from Greece, 4 England, 3 Italy, 1 Gallicia, 2 Hungary, 7 Roumania, 19 Russia, 2 each from Sweden, Turkey, and Switzerland, 4 from Servia, 1 Africa, 10 America, and 9 Asia.

On the 26th of last month an event of great interest took place at Leyden, in which two countries, separated by what were at one time deemed political exigencies, were enabled to show that many sympathies still united them, bound up as these are in their common history. This was the inauguration of the statue of the illustrious Hermann Boerhaave, the Dutch Hippocrates. At the banquet M. Vleminckx, the head of Belgian Surgery, who attended with others of his colleagues as a deputation from the Brussels Academy of Medicine, delivered an eloquent discourse, enumerating the chief of the medical celebrities whose names adorned the annals of their then common country. He terminated by saying:—

"If *noblesse oblige*, as we all admit, no *noblesse* commands us more imperiously than that of our predecessors. May the men placed at the heads of your establishments for instruction continue to bear high and boldly the flag of science, and never allow its colours to be tarnished. May they always remember, and always inculcate in their disciples, that Science is the queen of the world, the torch of civilisation."

PARLIAMENTARY.—THE LICENSING BILL—THE PUBLIC HEALTH BILL—WITHDRAWAL OF THE CONTAGIOUS DISEASES' PREVENTION BILL—THE METALLIFEROUS AND COAL MINES BILL.

On Thursday, July 11, in the House of Commons,

On the motion of Mr. Bruce the Licensing Bill was read a second time.

On Friday,

Mr. Stansfeld, in bringing up the report of a resolution agreed to at the previous sitting, took the opportunity of explaining the financial proposals of the Government with regard to the Public Health Bill. Premising that they were provisional, and in anticipation of the general consideration of local taxation, he stated that the local boards would be enabled to borrow money from the Public Works Loan Commissioners at 3½ per cent., and that half the salaries of the Medical Officers of Health and of the Sanitary Inspectors would be paid out of the Imperial treasury. After some discussion the report was agreed to.

On going into Committee on the Public Health Bill,

Mr. M'Cullagh Torrens moved an instruction to the Committee to provide for the rebuilding of workmen's cottages where they have been extensively pulled down under Acts of Parliament.

Mr. Stansfeld, sympathising with the object of the resolution, urged the impossibility of dealing with it at this time of year.

Sir C. B. Adderley took the same view.

Mr. Henley, Colonel Barttelot, Mr. Muntz, and Mr. Dimsdale joined in pressing Mr. Stansfeld not to go on with the Bill in its present mutilated condition at this period of the session; but Colonel Hogg, Mr. D. Dalrymple, Mr. Brand, and Sir T. Acland entreated him with equal urgency to persevere. Mr. Torrens, having withdrawn his instruction, Mr. Pell moved the adjournment of the debate, to which Mr. Stansfeld consented.

On Monday, July 15, the Contagious Diseases' Prevention Bill was withdrawn, it being one of the Bills which Mr. Gladstone had announced the Ministry had determined to give up for the present session.

On Tuesday, in the House of Commons, at a morning sitting,

The debate on going into Committee on the Public Health Bill was resumed by Sir M. Lopes, who canvassed its provisions in much detail. On the whole, however, though he would have preferred a wider measure, on the principle that half a loaf is better than no bread, he acquiesced in the Bill going on, and refrained from proposing an amendment of which he had given notice.

Mr. Pell likewise thought that the Government might have gone further with their concession, but such as it was he accepted it as a reason for not opposing the measure.

Mr. Vernon Harcourt, speaking on behalf of borough authorities, declared that they would prefer to pay for their own officers and be free from central control, and called on Mr. Stansfeld to declare that he would not interfere perpetually with local control.

Lord R. Montagu regarded the Bill as an obstacle to a comprehensive measure of sanitary reform, and criticised specially the provisions relating to the local authority. The town councils were generally composed of men who broke the law by polluting the rivers, and guardians had no other object but to keep down the rates. He was in favour of an intermediate central authority to control the local boards, and to act as a "buffer" between them and the State.

Mr. Gourley supported the Bill; while Sir L. Palk predicted that county members would hereafter have cause to regret that they had closed with Mr. Stansfeld's offer.

Mr. Hibbert gave some explanations as to the acts dealt with by the Bill, and argued that it would cause no real increase of cost, but would only transfer the expenditure from the curative to the preventive stage.

Colonel Barttelot attributed the difficulty Mr. Stansfeld found in getting on with the Bill to Mr. Gladstone's mismanagement, which had prevented a full and fair discussion on the second reading, and protested vigorously against the country being handed over to an army of doctors.

Mr. Stansfeld defended generally the course he had taken with regard to the Bill, and particularly his selection of the local authorities. He repudiated any desire to override the local authorities, and assured Colonel Barttelot that there was no intention of creating a great medical hierarchy, though he pointed out to him that the assistance of the medical profession was indispensable.

Mr. Disraeli remarked that the question now was, not whether the Government could have passed a more complete and comprehensive measure if they had given their minds to it at the beginning of the session, but whether this Bill would make the sanitary legislation of the country more efficient. No candid mind could doubt this, and as Mr. Stansfeld's reasonable concession had removed the financial objections to the measure, he advised the House to pass it at once as a preparatory step.

Mr. Newdegate and Mr. Read spoke against the Bill, and Mr. Henley expressed a decided opinion that the ratepayers would not thank the House for what it was about, and that the Bill would hang up and stop all sanitary improvements until next year.

The House then went into Committee, but the Committee immediately adjourned until Thursday.

The Metalliferous Mines Regulation Bill as amended was considered, and various new amendments were introduced into it.

The Coal Mines Regulation Bill was read a third time, and passed.

REPORT ON THE

TEACHING OF PRACTICAL PHYSIOLOGY IN THE LONDON SCHOOLS.

No. I.

Every member of our Profession who feels an interest in the training of its future representatives cannot fail to be deeply impressed with the strong tendency, both of medical teaching and medical examinations, to become more and more practical in character every day. The practising physician may have watched the men who are following him through the schools, as they have been required to frequent, with ever-increasing regularity, the natural history museums, the chemical laboratory, and the post-mortem room; and as steadily, year after year, he may have learned that the examinations which introduce his juniors to the profession have been becoming more and more practical. And most lately of all he has learned that the medical student is now expected to make himself practically acquainted with physiology also, and to show to his examiners that his knowledge of this part of medical science is something more than a merely theoretical one. Most naturally, and we believe with considerable interest, must the inquiry be at present made—What is practical physiology, and how is it to be taught and learned? These two questions are most intimately involved in each other, and are both exceedingly difficult to answer; and the correct reply to the latter especially is a matter of very various and opposite opinion. This second question we shall leave to be answered by the following report. On the first point we wish to make but one remark. The expression, "practical physiology," has evidently a different signification according as it is applied to the labours of the men who entirely devote themselves to the study of the processes of life, or is extended to comprehend as well the working of students in a school of Medicine. How much has still to be done before we understand the working of our bodies we all know; this is what the special labourer in physiology has to do, and the doing of it is practical physiology. But the term has come to be applied in a more comprehensive sense. Our teachers of physiology have now gone beyond mere theoretical details, and demonstrate to their students many of its leading truths by actual experiments, teaching them at the same time how to perform these, and so be able to repeat them at pleasure. To this kind of teaching also we cannot refuse to apply the name of practical physiology. But even if we accept this definition, we have still to discover the exact scope of the subject as it is variously taught in our different schools. This must be an inquiry full of interest; and we shall now, as we have said, proceed to give in detail the practically expressed opinions of the various teachers of London, believing, as we do, that we shall thus be able to supply the general reader with material from which he may be able to come to some definite opinion on the subject.

1. University College.

At University College there is a Professorship of Practical Physiology and Histology, in addition to one of Anatomy and Physiology. The purpose of the course of practical physiology and histology "is to make the student practically acquainted with the methods and instruments which are employed in conducting physiological investigations." The fee for the session is £6 6s.; perpetual, £9 9s.

The accommodation provided here for the study of practical physiology is most abundant, and consists of a large laboratory for the students, the professor's private laboratory, and an almost unlimited amount of space for rough work, for the larger apparatus, for storing material, and for keeping animals. The students' laboratory is, as we have said, large; but in regard to internal arrangements and lighting it cannot be called perfectly satisfactory; and we believe there is a proposal at present, either to alter it considerably, or to remove it altogether to another building.

The class of practical physiology is held during the winter session only. Once a week Professor Sanderson gives a lecture, with demonstrations on the subjects which are to be practically studied by the students on the following days: and the course is divided into two parts, the first half of the session being devoted to histology, and the remaining months to physiological chemistry and other experimental work.

Last winter the class numbered some eighty students, of whom sixteen were taken each of the remaining days of the week, and equally distributed between the professor and his assistant, every individual pupil thus receiving special instruction once a week. At the commencement of the course on histology each student has assigned to him a place at a table, where he finds himself provided with a microscope, the other necessary apparatus, and a rack of ordinary histological reagents, such as solution of salt, acetic acid, alcohol, etc., and the various materials for colouring and mounting. The microscopes used are mainly by Crouch, but several new German ones are also available. Fresh tissues chiefly are given for examination, and the phenomena of life, as far as demonstrable microscopically, are specially studied; the students thereafter learn to preserve, harden, and colour specimens, to cut sections, and to mount permanent objects.

The second part of the course is (1) devoted to physiological chemistry. Along the tables previously used for microscopy a number of burettes are arranged, and a couple of students are set to work at each. The usual apparatus and reagents are of course abundantly provided; and an evaporating chamber and the other requisites are to be found around the laboratory. The students are now taught to analyse the more important animal fluids; they examine blood, bile, etc., qualitatively, and urine quantitatively. They also experiment with artificial digestive fluids. (2) The students perform experiments on animals. Frogs, curarised or chloroformised, are given to them, working in pairs as before, and the experiment, which has previously been fully explained and demonstrated by the professor, is per-

formed by them as far as practicable. The whole of the students' practical work is closely superintended by the professor and his assistant.

Such is the training that every pupil is put through; but in addition to this the students are allowed, at the commencement of the session, to volunteer for extra working in the laboratory, and such volunteers have an opportunity of doing similar work daily instead of but weekly. There is no extra fee. Also, if at any time during the course a student is anxious to spend an extra hour over an object or an experiment, his request to be allowed to do so is at once granted. The subjects for competition for prizes are the mounting of objects, the writing of reports on experiments performed by the professor, etc.

In summer those students who have distinguished themselves during the winter course are allowed to work privately in the laboratory under the superintendence of the professor and his assistant; and some of them proceed to more advanced histology, including practical embryology, others perform more difficult experiments—on the circulation, for example, and so on. The fee is £2 2s. for the first month, and £1 1s. monthly thereafter, the laboratory affording all animals and reagents.

We found the University College laboratory abundantly furnished with apparatus of every kind for histological, chemical, and other experimental work. The number of microscopes provided is unusually large, and the arrangement of the electrical and injecting apparatus worthy of special mention.

VACCINATION LAWS OF EUROPE.

No. II.

We have received information from several European States and we now proceed to lay the additional particulars before our readers.

France.

Vaccination is not compulsory in France. There is no opposition to vaccination on the part of the people generally; but in some country districts there is a disinclination to have the children vaccinated. A certificate of successful vaccination is required before admitting a candidate to the Government schools, and also in some private schools, and also in some trades. In the present state of public opinion in France, it would be very difficult to enforce a compulsory vaccination.

Spain.

Vaccination is not compulsory in Spain, the Government limiting itself to recommending the practice. Vaccination is generally performed before the completion of the first year of infantile life, the most healthy period of the year being selected for its performance. There is no penalty imposed upon parents for the non-vaccination of children. Revaccination is not compulsory, but it is also recommended, and has been at different times practised in the army. The only civil disability attached to non-vaccination is that unvaccinated children are refused admission into the public schools and some other establishments.

Belgium.

Vaccination is not compulsory in Belgium. There is no general opposition in Belgium to the practice of vaccination; still, the benefits of the practice are not so generally appreciated (especially by the lower classes of society) as to deserve any compliment upon the foresight of parents in taking care to have their children vaccinated.

A Royal Mandate of April 18, 1818, contains the following regulations on this subject:—"Article 1. All persons who are maintained at the expense of the public, or local rates, or who are in the receipt of any aid, and who have children who have not had the small-pox, either naturally or by inoculation, and who have not been vaccinated, are compelled to have those children vaccinated as soon as their state of health and constitution will permit. It is enjoined upon the administrations of all establishments, of any charity whatever, in which infants are fed and lodged (when these establishments are maintained at the expense of the public or local purse, or when they are exempt from taxation), to cause to be vaccinated in the six months following the date of the present order (April 18, 1818) all those infants who have not yet had the small-pox, either naturally or by inoculation, or who have not been vaccinated, and who are in a fit state of health for the operation. The same thing should be observed, with the like allowed time of six months, with respect to all infants who shall for the future be admitted in the said establishments."

The same Mandate, with the view of encouraging the gratuitous vaccination of the poor, has decreed that there shall be an annual distribution of gold medals to the Practitioners who shall prove themselves to have performed gratuitously more than a hundred vaccinations. This regulation has not produced the good results that were expected, and a Royal Mandate of July, 1868, has substituted another method of encouragement, consisting in the establishment of a vaccine institution charged with collecting and distributing gratuitously to medical men lymph obtained by the inoculation of heifers.

Lastly, a Royal Mandate of May 26, 1843, relating to the gratuitous instruction of the children of the poor, enacts,—"That in order to obtain admission into schools, the children should produce a certificate of vaccination or of having had the small-pox."

There exists, moreover, in nearly all the provinces, regulations intended to make the practice of vaccination general. These regulations impose upon the State the obligation of paying the medical men who are appointed to carry out, at certain determined seasons, the gratuitous vaccination of all persons who present themselves for that purpose.

Netherlands.

There is no compulsory vaccination law in the Netherlands, and, of course, no penalty for its neglect. The vaccination of children is indirectly promoted by the local authorities by refusal of admission into public schools, and occasionally private schools; in the whole of the province of Friesland vaccination is thus indirectly promoted. No legislative enactments on the subject of vaccination exist at present, but regulations on this head have been proposed in a Bill at present before the States-General.

REVIEWS.

Granular Ophthalmia. By Assistant-Surgeon Welch, F.R.C.S.E., of the 22nd Regiment. Printed for her Majesty's Stationery Office by Harrison and Sons.

This little treatise is the result of observations made upon the 1st Battalion of the 22nd Regiment, dispersed over a number of years, and supplemented by data from military and civil sources. The author limits the term "granular ophthalmia" to that variety of conjunctival inflammation which is preceded by chronic follicular hypertrophy. This hypertrophy, synonymous with "sago-grain bodies," "vesicles," "grey granulations," has its origin in a hyperplasia of the elementary constituents of the solitary follicles of Krause, which, as is known to anatomists, exist in the submucous tissue of the eyelids, and are spread over the whole surface of the conjunctiva palpebrarum.

Admitting that it is a fairly debateable ground whether the ophthalmia as exemplified in the English army of the present day is identical with that which was prevalent in the early wars of the present century, the author thinks that the circumstances under which the follicular disease of our day arises decide against its derivation from without, "leaving as a problem its *de novo* generation and cause of endemicity."

There is abundant independent testimony, however, that miasmatic conditions and hygienic deficiencies are the excitants of follicular hypertrophy. Stromeyer and other Continental and some English observers have adduced evidence of this, and Mr. Welch's account of the phenomena observed in the 1st Battalion of the 22nd Regiment supports the same view. Now, these hypertrophied follicles or grey granulations are a primary element in the inflammation of granular ophthalmia, which is, in fact, dependent or engrafted upon prior follicular disease. The presence of grey granulations is not necessarily followed by an inflammatory attack, nor do their endemicity and the associated ophthalmia exclude the occurrence of the ordinary catarrhal or purulent forms of ophthalmia in healthy lids of the same community, when exposed to the usual agencies.

As to the exciting causes of the engrafted ophthalmia, the author observes:—"The presence of grey granulations substantiated, the nature of the agent determining the conjunc-

tivitis seems but of secondary importance, any mucous membrane irritant sufficing; the engrafted lesion being invariably out of all proportion to what the ascribed cause would have produced in a prior healthy lid."

The evidence furnished by the 22nd Regiment does not exhibit a sufficiently frequent concurrence of grey granulations and ill-health to justify the hypothesis that the one is the cause of the other. Sometimes the granulations were observed in the most healthy, and were absent occasionally in the most debilitated; but when the inflammatory action is superadded to the hypertrophy of the follicles, all the signs of deteriorated health and of a morbid frame of mind will ere long be induced.

From this explanation of the origin and nature of granular ophthalmia it follows that the prevention and treatment of the primary follicular hypertrophy and the subsequent inflammation merge the one into the other, "sanitation predominating in the former phase, medicinal applications in the latter."

The "*laissez aller*" system of dealing with inflammation is, of course, condemned, and the unquestionable advantage of early treatment in protecting the tissues of the eye and eyelids from severe lesions is insisted upon.

NEW BOOKS, WITH SHORT CRITIQUES.

On the Treatment of Carbuncle. By J. Murray, M.A., M.D., of Wickham, Hants.

*** This is a brief paper reprinted from the *Glasgow Medical Journal*, in which the author describes the manner by which he was led to the use of potassa fusa as a substitute for incision in the treatment of carbuncle. The plan was, at the time he adopted it, so far as he knew, quite original. He gives short notes of cases which he treated by this method, and with uniform success. Incision in carbuncle is advocated, Dr. Murray thinks, upon mistaken pathological grounds, and he is impressed with the truth of the view of Rokitansky, that the core or plug of a carbuncle is not sloughing cellular tissue, but is a product of the inflammation going on in the cellular tissue, and contained in the meshes of the corium, and resembles false membrane. It is, in fact, exudation. By the use of potassa fusa the nutrition of the parts is so modified that the inflammation subsides and the cores are reabsorbed.

Clinical Surgical Report for the Year 1871. By George Buchanan, A.M., M.D., Surgeon and Lecturer on Clinical Surgery, Glasgow Royal Infirmary; Professor of Anatomy, Anderson's University, &c.

*** This pamphlet is also a reprint from the *Glasgow Medical Journal*. It contains a short statement of the surgical practice of the author's wards in the Glasgow Infirmary. The table of casualties shows the importance of the Infirmary as a clinical school, as it offers a wide field of observation in the everyday occurrences of surgical practice. In the table of operations are included three cases of ovariotomy, and amongst twenty-four excisions of tumours was one of recurrent lipoma, the first operation having been performed six years previously.

FOREIGN AND COLONIAL CORRESPONDENCE.

AUSTRALIA.

Melbourne, May 22.

A Case of Craniotomy under Difficulties: Courage and Ingenuity of Mr. Jackson; his Reward—The Diphtheria Commission.

A case of peculiar obstetric practice has occupied the attention of the Medical Society for some weeks past. A medical man named Jackson, residing in one of the thinly populated districts in the West, where a practitioner has to ride probably thirty or forty miles to see half a dozen patients, attended a case of midwifery in March last, and had to perform craniotomy. There was nothing remarkable in the case, beyond the fact that the head had become impacted, turning was not practicable, and the woman was rapidly becoming exhausted. But, being many miles from his residence, and having no instruments with him, he did the best he could with such instruments as he could extemporise. With a chisel, a gimlet, an auger, and a hook made out of a piece of telegraph wire, he delivered the woman successfully, and she recovered without the least bad effect after. But two rival practitioners of base-minded proclivities actually set on the woman's husband to move the coroner to hold an inquest on the remains of the child, and so worked upon the prejudices of the people in the district that the jury returned a verdict of manslaughter against Mr. Jackson, and he was forthwith committed for trial. He thereupon communicated with Mr. Knaggs, one of the Vice-Presidents of the Medical Society, and a committee meeting was held to consider his case. They unanimously adopted the following resolution:—

"This Committee having been informed by their acting honorary secretary that Mr. William Harvey Jackson, of Merino, has been committed to take his trial at Belfast for causing the death of a child by the use of instruments during its birth, and having further learnt from the acting honorary secretary, after a perusal of the depositions taken at the inquest held upon the child, that the use of instruments was apparently necessary; considering further that although the instruments employed were roughly extemporised for the occasion, on emergency, they were used with safety to the mother, and with no greater mutilation of the child than would have been effected with the regular obstetric instruments; considering also that the practitioner in attendance is alone able to judge of the necessity for speedy delivery or otherwise in cases of difficult labour, and that instances have occurred before, where various kinds of tools and instruments have been used to meet the risk of delay as regards the safety of the mother: It is therefore resolved,—That, in the opinion of this Committee, no blame is fairly to be attributed to Mr. Jackson for his conduct in the case as reported; and that the attention of the law officers be drawn to the circumstances under which he was committed for trial."

The Hon. Secretary of the Society forwarded this resolution to the Solicitor-General, and requested to know when it would be convenient for him to receive a deputation from the Committee on the subject. After considerable delay he replied as follows:—

"Referring to your letter of the 19th ult., forwarding a copy of a resolution adopted at a meeting of the Committee of the Medical Society of Victoria, relative to the case of W. H. Jackson, surgeon, Merino, who has been committed for trial on a charge of manslaughter, I am directed by the Solicitor-General to inform you that he has no power to interfere with the decision of a coroner's jury, and therefore he does not deem it necessary to trouble the deputation mentioned; but, supposing that he had the power to interfere, it is not deemed proper that the law officers should receive any representations such as the Medical Society propose in matters that are *sub judice*, and about to be tried by a court having jurisdiction in criminal matters."

You may not be aware that we have no grand jury in this country, but that the law officers of the Crown review the verdicts of juries and the committals from the police-courts, and, in doing so, regularly seek professional evidence in order to guide them to a correct conclusion. The Medical Society, therefore, in tendering information to the Government upon this most extraordinary verdict, simply desired to give what would most likely have been sought, and the general opinion is that, although the Solicitor-General might deem it "improper to receive such representations," it was not at all improper for the Committee to desire to make them. As it is, a struggling practitioner will suffer loss to both reputation and pocket, and the State will be put to the expense of a trial which might have been avoided by the usual *nolle prosequi*.

The Diphtheria Commission are pursuing their abortive labours, scorned and ridiculed by everyone in the Profession. Their absurd circular of impossible queries has, however, caused a good deal of amusement. Like other preposterous public bodies, they seem to be unaware of the ridicule they have created, and are going about the country at the State's cost, apparently in the belief that they are rendering some signal benefit to mankind. One member of the Commission has found his dignity offended by some remarks upon the Commission in the *Australian Medical Journal*, and has commenced an action against the publishers for libel.

The last meeting for the season of the National Health Society was held last week. Mr. Sneade Brown presided. Papers were read by Dr. Francis Morgan on the "Household Water-supply of London," and by Mr. E. Swanwich, giving facts as to filters.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

July 15.

SMALL-POX—SEWAGE DIFFICULTIES—THE QUEEN'S HOSPITAL—COLLEGE DIFFICULTIES—REMUNERATION OF THE VACCINATOR—HOSPITAL CASES.

THE small-pox epidemic, which has for a long time past prevailed in our town, seems now to be on the decline, the number of cases diminishing almost weekly. Although the ravages of this frightful disease have been so widespread, still the number of its victims has not been so great as might have been expected.

We have noticed, in several instances in which the protective influence of successful vaccination has been insured, that the cases have been of the variety of "confluent" small-pox, which, however, have invariably terminated in recovery, showing that although vaccination does not prevent the occurrence of small-pox, and the severer form of it, yet the patients are rendered less liable to succumb to the fell disease.

From the excessive heat which has prevailed here we might have anticipated a prevalence of diarrhœa, but this has not been realised; cases of diarrhœa have been, and are, very few indeed.

The sewage question, which has engaged the attention of our Town Council for some months past, is very far from being settled. The query seems to be, Which is the more confounded, the question itself or the Town Council? so hopeless is the confusion into which the whole matter is engulfed. On the one hand there is the disposition of the noxious matters to be got rid of, and on the other, the furious and costly opposition threatened by the powerful owners whose lands are coveted for the reception of the contents of what have been facetiously called the "stink-pots" of our large community. Now, is it to be wondered at that the proprietors of these fair lands should object to an experiment of this kind, and that they should prefer to have them kept intact from the offensive—whatever may be said to the contrary—odour of town sewage, however valuable it may be in the eyes of the Town Council, and in an agricultural point of view. The disposal of sewage, however, is a very important and serious question, and no doubt the energy and intelligence which distinguish some of the members of the Council will lead them, sooner or later, to hit upon some means by which the sewage of our large towns may be made innocuous to the people, and available for utilitarian purposes.

The "extension fund" for the enlargement of the Queen's Hospital is being now converted into bricks and mortar. This is evident from the mass of building which is being reared in the old rectory grounds adjoining the Queen's Hospital. The working men, not contented with raising money for the enlargement of this useful institution, have gratified themselves by doing honour to the promoter of the undertaking. Mr. Sampson Gamgee has been the recipient of a suitable testimonial from them, whereby his exertions and organising skill have met with due recognition. When the Queen's Hospital is completed by these additions it will be a credit and an ornament to the town.

We are sorry to hear that Queen's College is likely to lose one of its ablest professors, who has been connected with it for a series of years. It was thought that when the College had undergone a change of management, and came under a new *régime*, peace and happiness amongst its staff would flourish, and that the words of the poet, slightly altered, would be realised—"Peace o'er the 'College' its olive branch extend"—and there would be no more petty jealousies and bickerings; but—alas! for all that is human—this happy state of things, we learn, is not, and that there are causes in existence in the institution which do not allow so happy a consummation. Time will point out the *casus belli* to which we refer. The number of students in this *Alma Mater* of medical learning is large, and, in the absence of what might be termed a tinge of mild despotism in the powers that be, there is every reason to predict for it that high position as a school of Medicine in which its ill-used and distinguished founder persevered to place it.

The post of Public Vaccinator here has become rather remunerative, as will appear from the fact that it was worth not far short of £400 last quarter. No doubt the prevalence of small-pox is the cause of this increase, together with the energetic operations of the vaccination officer, who is indefatigable in the performance of the duties of his office, the working expenses of which have been taken off his hands by the appointment by the guardians of an inspector, to look up the cases at a salary of 30s. a week. This, we think, shows that our guardians, at least, are not quite so niggard as one might be led to suppose from some of their actions; in this matter certainly they have shown they know what is right, and how to do it with a good grace.

The following cases have been under treatment at the General Hospital:—B. W., aged 61, suffering from calculus vesicæ, was admitted under Mr. Goodhall. Lateral lithotomy was performed, and two calculi removed; they were of the mixed variety. Duration of disease two years. Patient doing well. Another case of Goodhall—Excision of the knee-joint: C. C., 12 years of age, strumous disease, admitted November, 1871. Diagnosis: Gelatinous disease of synovial membrane; an abscess formed outside the joint. He left the Hospital in May, and was admitted again in the following June, when excision of the joint was performed on the 10th. A posterior splint was applied, and the wound dressed antiseptically. Recovery. Nævoid tumour of abdominal wall, under Mr. Goodhall: C. T., aged 10, admitted May 17. There was found a large nævoid tumour of abdominal parietes situated to the left of umbilicus. It was congenital, and rapidly increasing in size. Removed, partly by ligature and partly by excision. Now convalescent.

Dr. Solly, of the General Hospital, after the operation for fistula in ano, uses no dressing at the time, but paints the surface of the wound with tr. ferri perchlor., which he finds effectually prevents primary union, and is attended with excellent results.

GENERAL CORRESPONDENCE.

"OUR LORD'S MIRACLES OF HEALING."

LETTER FROM REV. DR. T. W. BELCHER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a short notice of a book of mine on "Our Lord's Miracles of Healing," which has only just now reached me, the reviewer, in his solitary professional criticisim, calls my attention to a "commentary" on page 164, which, he says, "is contradicted by the experience of every surgeon, and the authority of every book, and the treatment of every hospital."

These are strong words, and as he has publicly called my attention to them, will you kindly allow me to bestow it on them in your columns?

The only "commentary" or opinion of mine on page 164 is contained in these words, which follow the mention of a case published in the *Dublin Quarterly Journal of Medical Science*, I think in 1864: "The healing of Malchus's ear (the miracle then under discussion) cannot have been effected by surgical means. If clean cut off, the part separated was dead, and vital reunion by human means was impossible."

Now, as "every" surgeon, and book, and hospital are quoted against this opinion, there need be no loss for an authority. I very respectfully ask, then, what the books, hospitals, and personal experience of Fergusson and Erichsen testify on this subject?

Further, many ears must have been "clean cut off" in cavalry charges during the Indian wars of our own time. What say living military surgeons as to the *fact* of vital re-union in such cases?

I ask this much, not to question the reviewer's right of criticism, for I have reviewed many a medical book myself, but to improve an enlarged edition, in which I propose to embody several criticisms and suggestions received from clerical and medical scholars.

On the greater and theological part of the reviewer's criticism I need not remark, for "Trench on the Miracles" suffices. But it may be well to add a fact which will go far to remove the reviewer's "doubt" that I have given a reasonable amount of study and consideration to the subject.

This edition, though the first published, is the *seventh* printed. Its predecessors were privately printed in issues of twenty copies each, and were sent by me and others to men whose judgment was valued for their perusal and review. Most of their criticisms and suggestions have been under your reviewer's notice in the present volume, which is the first of its kind published in England, and the result of ten years' collection of notes.

No one is more sensible of its numerous defects than myself; but as it is shown, on page 84, that no small part of it appeared

in substance in the *Dublin Quarterly Journal* so long ago as 1864, as well as in a medical treatise, which in 1867—if I recollect rightly—received your reviewer's commendation, it is plain that, in so far, no want of due study can be fairly imputed.

Allow me, in conclusion, to say that I feel most unworthy of the complimentary terms in which your reviewer has so kindly written of me personally. I am, &c.,

Torpoint, Cornwall, July 16. T. W. Belcher.

Note on the Union of Severed Parts of the Body.

*** The fairest way of enabling our readers to judge whether our criticism of Dr. Belcher's book is just will be to copy the entire passage to which we referred ("On our Lord's Miracles of Healing," p. 163 *et seq.*):—

"*Chapter X. The Healing of Malchus's Ear.*

"It is scarcely necessary to say that the healing of Malchus's ear cannot be accounted for on any surgical theory. The ear may have been cut clean off, or it may have hung by a portion of skin. In any case it could not be healed at once and on the spot, especially when we consider the barbarous nature of the surgery of those times.

"It is well known to non-medical persons that when once a member of the body is cut off, and the continuity of tissue completely destroyed, reunion is out of the question. Yet, as there have been some apparent exceptions to this, it may be well to give a case which fell within my own knowledge. A young man at work in a dockyard missed his downward stroke with an adze, and cut across the toes and instep of his right foot. A surgeon who was looking on at the time, and who published an account of it, found that the second toe was literally amputated. 'The thinnest bridle of skin from the sole of the foot prevented its complete separation.' This connecting medium was so thin that it did not include a muscular fibre. 'It was, in fact, nothing more than a thin shaving of the thickened cuticle of the sole.' By dint, however, of well applied surgical apparatus and constant care, reunion was established in the fifth week after the accident.

"This case, which is a rare one, will serve to prove that the healing of Malchus's ear cannot have been effected by surgical means. If clean cut off, the part separated was dead, and vital reunion by human means was impossible. If, however, the injury in any respect resembled that in the case quoted, as it may have done, from our not being told that the Saviour touched anything but 'his ear'—he is not said to have reset a part of it which fell off—yet even here the cure was miraculous. Any piece of skin, as in the case above, would have contained that vitality, and those vessels, microscopic though they be, which would render reunion barely possible. But such reunion could not have been accomplished at once by any man. The injury itself was accompanied, no doubt, by profuse bleeding, and, even if reunited, *that* could not be stopped at once. And so there would not be 'healing.' This is one of those miracles which defy all attempts at explaining away on medical grounds or on popular fallacy, so that they who admit the truth of the Gospel narrative in any sense can do nothing but accept this story as true."

We may observe first that the Evangelist in stating that "He touched his ear, and healed him," gives no hint as to what was healed; whether a simple cut, or the wounded surface left by the cutting off the ear. The simple statement of the Evangelist is enough for any Christian. Anyone who believes the greater Miracle of the Incarnation—anyone, in fact, who can recite the Apostles' or Nicene Creed—need feel no doubt nor surprise at any one of the miracles of healing recorded in the Gospels. They come as matter of course. On the other hand, to anyone who denies Christianity, any appeal to miracles in support of it is worthless. One objection to Dr. Belcher's work *in toto* therefore is, that it deals with a class of facts which Christians accept as indisputable, and on which they need no confirmation of the faith; whilst as for outsiders, the best argument from miracles is worthless, whilst an unskilful mode of handling the subject does but create new doubts without removing old ones.

Now, we do affirm that Dr. Belcher has committed a perilous indiscretion in appending to the simple Gospel narrative a commentary, in which he contends for the doctrine that "when once a member of the body is cut off, and continuity of tissue completely destroyed, reunion is out of the question;" and that "if clean cut off the part separated was dead, and vital reunion by human means impossible;" and that a thin strip of cuticle would contain "vitality" and "vessels." If this were true it would add no confirmation to the Gospel narrative; but being, as we affirm it to be, contrary to experience, it tends in the case of a sceptic to confirm his doubt upon the whole of Dr. Belcher's body of notes, and upon that set of their subject-matter.

That parts of the body "may be clean cut off," and yet "vital union" be perfectly effected, was, we thought, an accepted fact. As an instance at hand, we may mention the case recorded by Bailey, of Thetford, in the *Edinburgh Medical and Surgical Journal*, July, 1815, in which the last joint of a finger, after having been cut off for an hour and a half, was reunited. Hunter's transplantation of teeth is familiar to most of us; and now that ulcers in every hospital are treated by the transplantation and engrafting of little snicks of skin, to find the possibility of such a thing denied in a work intended for the confirmation of the faith is surprising. We could, if it were our place to do so, point out many passages in which this book is more calculated in our opinion to beget doubt than to allay it; but we must confine ourselves to a vindication of our criticism on this passage, and express our regret at having to speak so of a work whose author and object we so highly esteem.—Ed.

THE COLLEGE OF SURGEONS AND THE CONJOINT SCHEME.

Letter from Mr. George Busk.

[To the Editor of the Medical Times and Gazette.]

Sir,—I should be obliged by your allowing me to correct a misapprehension into which your reporter, and consequently, it would seem, you yourself have fallen, with respect to what I said on the occasion of the Fellows' Dinner regarding the College and the Conjoint Scheme.

I by no means intended to convey that I myself, or the Council generally, anticipated any *serious* diminution of the income of the College in consequence of the carrying out of the Scheme. I was simply desirous of vindicating for the Council of the College a claim (amongst others) to the approbation of its Fellows and Members, on the ground that, notwithstanding the apparent risk of a pecuniary loss, which *some*—though, as I and most others think, without sufficient ground—fear may be considerable, the Council had deemed it right in furtherance of a great public object, and in consonance with what it believes to be the general voice of the Profession, to incur this risk. The Council, however, is too deeply impressed with its responsibility as the custodian of the great national and professional museum committed to its charge, and towards the maintenance and augmentation of which the members of the College, in money alone, have contributed more than a quarter of a million sterling, knowingly to incur the risk of such a diminution of its resources as would materially affect its ability properly to discharge its duty in this regard towards the public and the Profession. Nor, in my opinion, is there reason to fear that this will be the case; but, on the contrary, to hope that, with unimpaired resources, the Council of the College will be enabled to maintain the efficiency of the establishment in all respects, whilst at the same time it will have shown its entire sympathy with the wishes, and its earnest desire to promote the highest interests, of the Profession. I am, &c., George Busk.

32, Harley-street, July 14.

METROPOLITAN ASYLUM DISTRICTS AND AUTHORITIES.

[To the Editor of the Medical Times and Gazette.]

Sir,—At a time when the better organisation of public medical aid throughout the kingdom is the subject of so much discussion, and has such important bearings upon sanitary measures, it would be a great advantage to the physicians and surgeons of the provinces, and indeed to all who take an interest in the question, to learn something definite and explicit as to the working of the Metropolitan Poor Act, 1867, and its amendments, especially on the following points:—

1. The number of districts which have been formed by com-

bination of the metropolitan unions or parishes, specifying the population and the number of parishes in each district.

2. The composition of the boards of management, and how the managers work with the several boards of guardians.

3. The number of asylums or hospitals which have been provided for the sick and infirm and for the insane, and in what districts; and to what extent existing workhouses have been adapted to these purposes.

4. How the institutions are officered, and how the medical officers are remunerated.

5. Whether there has been any general distribution of different classes of paupers in different workhouses (under clause 50), and how such classification succeeds.

6. What are the financial results.

Also, as to the provision for out-door medical relief; whether "dispensary committees" have been appointed, and in how many districts; and how these committees work with the boards of guardians, and with their medical officers; and whether the regulations made by the Poor-law Board and the Local Government Board are satisfactory.

A short historical sketch of the administration of this Act would be of immense service just now, and if any of your contributors would favour your readers by preparing such a sketch, while Mr. Stansfeld's Bill is under consideration, the result might be very beneficial. The asylum managing boards, as new authorities, made out of the old authorities for special objects, afford an instance of that kind of reform which has been asked for in the provinces.

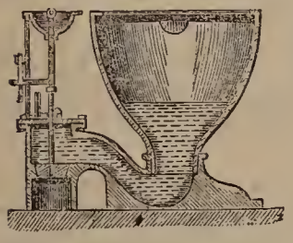
I am, &c.,

July 13. A Provincial Physician.

NEW INVENTIONS.

PAWSON'S WATER-CLOSET.

Annexed is a drawing of a new patent valve closet, with double trap, the invention of Mr. W. Pawson, plumber, etc., of 87, Westgate, Grantham, Lincolnshire. The above closet is fitted either with a regulator or valve, and will, therefore, be found to suit the rules of the different water companies. It moreover has the advantage of being capable of being fitted on to the existing soil-pipe, thus causing no disturbance in the drains. The valve, seat, and trap are complete in one piece, and with the basin are made of the best Wedgwood ware or iron enamelled. The closet possesses the great advantage of effectually preventing the escape of any back effluvia, and has the superiority over other closets inasmuch as there is no float or delicate indiarubber valve, which so frequently gets out of order, and is the source of incalculable annoyance to the householder. There is no pan or container in Pawson's closet, and the valve being solid, and placed on either the drain or the soil-pipe, no accumulation of foul air can take place, and a sufficient quantity of water always remains in the basin. The height of this water is regulated by a syphon-pipe from the top of the cylinder in which the piston-rod works, which is connected with the soil-pipe; and from the apex of the syphon-pipe another small pipe, carried to the roof or any convenient spot outside the house, conveys away any foul air from the cylinder. Thus is secured the absolute perfection of ventilation, to which all who have tried the closet can thankfully testify. The price, in white or printed ware, with enamelled iron trap, is 75s. Every part is so simple and so strong that disarrangement is almost impossible.



OBITUARY.

FELIX W. ISHERWOOD, M.D. St. And., M.R.C.S.

The quiet villagers of Hayes, Middlesex, were much moved on Tuesday fortnight by the death of Dr. Isherwood. Eleven years ago he went to Hayes a perfect stranger, but he gradually won his way to the confidence of all with whom he had to do. Dr. Isherwood's last professional visit was to a woman who had been "done to death" by her husband. At the inquest and before the magistrates another medical gentleman supplied his place, and it was known that he was very ill. With that utter want of thought for self he had crawled down to see if any life yet remained in the poor woman, and when he arrived he was unable to stand. After this he rapidly grew worse. The highest medical knowledge and aid were sought, but in vain, and now everyone in the parish feels the loss of a personal friend. To the poor he was a firm and judicious friend, and unwearying in his endeavours to help them. He was unmarried, was Medical Officer of the Hayes and Northolt District of the Uxbridge Union, and late Resident Surgeon of the Western General Dispensary, London.

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—At the monthly examinations, held on July 8, 9, 10, and 11, the Licence to practise Medicine was granted to—

Brereton, Samuel.
Burney, Walter C. Skardon.
Esmonde-White, Henry Plunkett.
Frazer, Robert Fair.
Irvine, John Armstrong.
Moore, Ayres.
Nolan, Joseph John.
O'Brian, Terence.
Reid, John Baker.
Ross, Richard Edmond.

The following obtained the Midwifery Diploma:—

Brereton, Samuel.
Doherty, Hugh, M.D. Harvard Univ., Boston (Mass.).
Esmonde-White, Henry Plunkett.
Irvine, John Armstrong.
Kerr, Elias William.
Moore, Ayres.
Reid, John Baker.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 16th inst., and, when eligible, will be admitted to the Pass Examination:—

Casson, Harwood, student of University College.
Craven, Robert M., of University College.
Evans, Edward T., of St. Bartholomew's Hospital
Greenwood, Thomas P., of University College.
Gunn, Robert M., of the Edinburgh School.
Hallett, Henry A., of the Aberdeen School.
Hamerton, George A., of St. Thomas's Hospital.
Hanken, Giles L. L., of University College.
Hentsch, John P., of St. Thomas's Hospital.
Hovell, Thomas M., of the London Hospital.
Hullard, Arthur, of University College.
Jackson, Arthur A., of the Birmingham School.
Jenkins, Aneurin, of the Dublin School.
Jones, Edgar A., of the Bristol School.
Jones, Richard S., of the Dublin School.
Kempe, J. Arthur, of University College.
Lawrence, James, of Belfast.
Lepper, Robert J., of the Edinburgh School.
Mears, Robert, of the Edinburgh School.
Ockenden, Arthur J., of Guy's Hospital.
O'Reilly, Walter H. J., of Belfast.
Perkins, John, of St. Mary's Hospital.
Prees, William M., of the Glasgow School.
Stephens, Charles, of the Liverpool School.
Swanwick, Eustace M., of University College.
Tayler, F. Charles, of the Westminster Hospital.

Fourteen candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their anatomical and physiological studies for three months At this meeting of the Court Mr. Henry Hancock, the recently elected President, took his seat, with the Vice-Presidents, Messrs. T. Blizard Curling and F. Le Gros Clark.

The following candidates passed on the 17th inst.:—

Betty, Samuel G., student of University College.
Blanch, Henry, of St. Bartholomew's Hospital.
Carter, Francis R., of the Leeds School.
Clift, Martin Luther, of St. Bartholomew's Hospital.
Cumming, William R., of St. Mary's Hospital.
Farnell, Henry D., of University College.
Gosling, Charles E., of the Birmingham School.
Hastings, George, of St. Bartholomew's Hospital.
Houlbrook, Edward, of the Leeds School.
Hutchinson, Joseph B., of the Liverpool School.
Jones, Percy O., of Guy's Hospital.
Jones, William M., of Guy's Hospital.
Lewis, George S., of Guy's Hospital.
Lloyd, Morgan, of Guy's Hospital.
Marmon, James, of the Liverpool School.
Newman, John J., of Guy's Hospital.
Orr, James W., of St. George's Hospital.
Rogers, Hildyard, of the Leeds School.
Saberton, Frederick W., of Guy's Hospital.
Simpson, Walter S., of the Leeds School.
Smalley, Herbert, of King's College.
Strong, James, of University College.
Thomson, Peter J., of University College.
Wear, Arthur T., of St. Bartholomew's Hospital.

The following candidates passed on the 18th inst.:—

Badcock, John H., student of University College.
Barker, Henry M., of St. Bartholomew's Hospital.
Bathe, Henry H., of St. Bartholomew's Hospital.
Bissill, Arthur K., of St Bartholomew's Hospital.
Canbie, Charles S., of the Dublin School.
Carter, Albert, of Guy's Hospital.
Crossman, John, of St. Thomas's Hospital.
Davis, Harry, of University College.
Elliott, Frederick H., of University College.
Gilmour, John H., of St. Thomas's Hospital.

Hawkins, Alexander F., of the Leeds School.
Hughes, Hugh H., of King's College.
Jones, James T., of St. Thomas's Hospital.
Lucas, Thomas D'Arcy, of McGill, Canada.
McCullagh, Thomas A., of Guy's Hospital.
Newton, Edward S., of Guy's Hospital.
Paley, James H., of Guy's Hospital.
Paxon, Herbert E., of the London Hospital.
Raye, Thomas M., of St. Mary's Hospital.
Sparrow, Walter W. B., of the Birmingham School.
Stockwell, George P., of St. Mary's Hospital.
Turle, Arthur, of St. Thomas's Hospital.
White, Edward A., of University College.

Forty-four candidates out of the 117 examined, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their anatomical and physiological studies for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 11, 1872:—

Barber, Oliver, Sheffield.
Forder, Joshua Lewis Wm., Mauritius, East Indies.
Low, Robert Bruce, Edinburgh.
Reid, Frank, Torrington-square.
Riley, Francis Leigh, Sydney, New South Wales.
Sculthorpe, Alfred Milward, Tamworth.

As an Assistant in Compounding and Dispensing Medicines:

Baynes, James, Hull.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Bingham, Samuel, Guy's Hospital.
Jelley, Richard, University College.
Lindsay, William V., St. Mary's Hospital.
Llewellyn, Rees Ralph, London Hospital.
Talbot, Russell Main, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

GAILEY, EDGAR, L.R.C.P. Edin., L.R.C.S. Edin.—Medical Officer for the Leekfrith District of Leek Union, Staffordshire, *vice* Richard Cooper, L.K.Q.C.P.I., M.R.C.S. Eng., L.S.A., deceased.

MILLNER, EDWARD, L.F.P. & S. Glasg., L.S.A. Lond., L.M.—Medical Officer for the Rainford District, Prescot Union, Lancashire.

SAVAGE, GEORGE HENRY, M.D., L.R.C.P., M.R.C.S., L.S.A.—Assistant Medical Officer to Bethlehem Hospital.

MILITARY APPOINTMENTS.

MEDICAL DEPARTMENT.—Assistant-Surgeon Edwin Wilkes, from the Royal Artillery, to be Staff Assistant-Surgeon, *vice* William Snowdon Headley, M.D., who exchanges; Assistant-Surgeon Robert Nasmyth M'Pherson, from the Royal Artillery, to be Staff Assistant-Surgeon, *vice* Parker Smith, M.D., who exchanges.

BIRTHS.

DURHAM.—On July 10, at 82, Brook-street, Grosvenor-square, W., the wife of Arthur E. Durham, F.R.C.S., etc., of a son.

GOODING.—On July 12, at Heath Lodge, Blackheath, the wife of Ralph Gooding, B.A., M.D., A.K.C., of a son.

KNIGHT.—On July 10, at Shorleycroft, Keswick, the wife of Alexander A. H. Knight, M.D., of a daughter.

JONES.—On July 16, at 10B, St. Thomas's-street, Southwark, the wife of Sydney Jones, M.B., F.R.C.S., of a daughter.

WRIGHT.—On July 11, at Wellingborough, the wife of Brampton Wright, M.D., of a son.

MARRIAGES.

ANDREWS—WEALL.—On July 13, at St. Stephen's Church, Hampstead, James Andrews, M.D., of Camden-road, to Margaret, only daughter of Benjamin Weall, Esq., of Hampstead.

HEMPHILL—CHISHOLM.—On July 10, at St. Mary's, Bryanston-square, Charles William Hemphill, Lieutenant 26th Cameronians, son of the late Major-General Hemphill, to Eliza Webster Julia, second daughter of A. B. Chisholm, M.D., late of Lansdown-place, Cheltenham.

LONG—HEWSON.—On July 10, at the parish church of St. Mary, Stafford, Charles Frederick, second son of Peter Bartholomew Long, Esq., of Ipswich, to Susan, elder daughter of John Dale Hewson, M.D., of Coton Hall, Stafford.

SQUIRES—SIMPSON.—On April 23, at the residence of the bride's father, William Westbrooke Squires, M.D., M.R.C.S., of Nelson, to Catherine Jane, second daughter of William Simpson, Esq., of Lower Moutere, Nelson, New Zealand, and late of Meadowfield, Milburne, Inverness, North Britain.

DEATHS.

BARRETT, B., M.D., at his residence, 2, Dingle-hill, Liverpool, suddenly, on July 13.

BULLOCK, JAMES LAWRENCE, M.R.C.S. Eng., House-Surgeon to the East London Hospital for Children, drowned in Lake Neuchatel, aged 22. Also his brother, the Rev. Frederick Bullock, of Christ Church, St. Leonard's-on-Sea, aged 26, sons of the late J. B. Bullock, Esq., of The Elms, Great Berkhampstead.

CALTHROP, WILLIAM CHARLES, M.R.C.S., L.S.A., at Withern, of asthma and heart disease, on July 14, in his 53rd year.

DIXON, MATILDA CARRIE MARIA, only child of Thomas James Dixon, L.R.C.P. Edin., L.S.A., at Richmond-road, Barnsbury, N., on July 14, aged 11 months.

HIRE, Dr. GEORGE FREDERICK, at the residence of his brother, W. H. Hire, M.D., New Orleans, of dysentery, on July 10, in the 56th year of his age.

PYLE, JOHN, F.R.C.S., at 59, Oxford-terrace, Hyde-park, on July 10, aged 68.

RICKARDS, WALTER ARTHUR WOLFRAM, infant son of Walter Rickards, M.D., at 9, Cavendish-place, Cavendish-square, on July 9.

ROBINSON, EDITH GREEN, infant daughter of Frederick Robinson, M.D., Scots Fusilier Guards, at 47, Lupus-street, St. George's-square, on July 14, aged nearly 4 months.

SPARROW, ROBERT MCARTHUR, Sub-Lieutenant R.N., eldest son of the late Dr. Robert Pennington Sparrow, of Southsea, at the Naval Hospital, Halifax, after a few days' illness, on June 25, aged 21.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Resident House-Surgeon. Candidates must be M.R.C.S. Applications, with testimonials, to the Secretary, on or before July 26.

BRADFORD INFIRMARY.—Junior House-Surgeon. Applications, with testimonials, to C. Woodcock, 65, Market-street, Bradford.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Committee of Management, Queen's-road, Brighton, on or before August 5.

DEVONSHIRE HOSPITAL, BUXTON, DERBYSHIRE.—House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to Joseph Taylor, Secretary, on or before July 24.

DORSET COUNTY HOSPITAL.—Honorary Physician. Candidates must have taken their regular professional degree in some University of the United Kingdom, or be Fellows or Licentiates of the College of Physicians. Applications, with testimonials, to "The Chairman of the Committee," Dorset County Hospital, Dorchester, on or before July 31.

GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, 18, BRIDGE-STREET, MANCHESTER.—Resident Medical Officer. Must be duly registered. Applications and testimonials to be sent in on or before July 22.

HEREFORD COUNTY AND CITY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to the Medical Superintendent, on or before August 5.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

KILDALTON, ISLAY.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen.

LAMBETH PARISH.—Resident Medical Officer and Dispenser for the Workhouse. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to W. B. Wilmot, Clerk to the Guardians, on or before July 22.

LEEDS PUBLIC DISPENSARY.—Junior Resident Medical Officer. Candidates must possess at least one legal qualification (registered). Applications, with testimonials, to John Horsfall, 31, Albion-street, Leeds.

MANCHESTER ROYAL INFIRMARY.—Indoor Physician's Assistant. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Weekly Board, on or before July 24.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification. Applications, with testimonials, to J. Barras, Hon. Sec.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—Physician. Candidates must be registered as Fellows or Members of the Royal College of Physicians of England. Applications, with testimonials, to the Secretary, before August 6.

ROYAL ISLE OF WIGHT INFIRMARY, RYDE.—House-Surgeon. Applications, with testimonials, to the Secretary, on or before July 29.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—Resident Medical Officer. Applications, with testimonials, to Ernest Morgan, Secretary, 20, John-street, Adelphi.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Particulars may be obtained from S. S. Wigg, Esq., Honorary Secretary, 33, Gordon-street, Gordon-square.

SAMARITAN FREE HOSPITAL.—Surgeon to the Out-patient Department. Applications, with testimonials, to the Secretary, on or before July 24.

SKIRLAUGH UNION.—Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to Thomas A. McCoy, Clerk to the Guardians, Beverley, on or before July 25.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Applications, with testimonials, to the Hon. Secretary, on or before July 29.

STOURBRIDGE DISPENSARY.—House-Surgeon and Secretary. Candidates must be M.R.C.S. Eng., L.R.C.P. Lond., or L.S.A. Lond. Applications, with testimonials, to the Secretary on or before July 30.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WEST LONDON HOSPITAL, HAMMERSMITH-ROAD, W.—Surgeon. Candidates must be Fellows of one of the Royal Colleges of Surgeons. Applications, with testimonials, to T. Alexander, Secretary, on or before July 26.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Basingstoke Union.—Mr. J. P. Lewis has resigned the Basingstoke District; area 13,656; population 7061; salary £85 per annum.

East Preston Union.—Dr. Hills has resigned the First District; salary £100 per annum.

Glanford Brigg Union.—Mr. E. G. Baron has resigned the Ulceby District; area 14,708; population 2897; salary £37 per annum.

Louth Union.—The Withern District is vacant; area 19,934; population 3158; salary £57 10s. per annum.

Nottingham Union.—Mr. F. Lill has resigned the Second District; area 960; population 41,886; salary £120 per annum.

Shipston-on-Stour Union.—Mr. T. S. Swinson has resigned the Mickleton District; area 11, 152; population 1870; salary £30 per annum.

APPOINTMENTS.

Elham Union.—John Hackney, M.R.C.S. Eng., L.S.A., to the Hythe District.

Eton Union.—George F. Masterman, M.R.C.S. Eng., L.S.A., to the Burnham District.

Fylde Union.—John Porter, M.R.C.S. Eng., L.S.A., to the Blackpool District.

West Ashford Union.—Wm. F. Johnson, M.R.C.S., L.S.A., to the Third District.

Dr. Ede, who has been for twenty-seven years Medical Officer of the Islington Workhouse, has tendered his resignation to the guardians on account of continued ill-health. The resignation has been reluctantly accepted.

It is notified that the Hampstead Small-Pox Hospital was closed last Saturday, there being no further need for its continuance.

Dr. Hare, Philadelphia, ices beef-tea, and has found it of the greatest benefit.

Académie de Médecine.—M. Tarnier has just been elected a member in the vacancy of the Section of Accouchements caused by the death of M. Danyau.

The Edenderry Board of Guardians have, with the sanction of the Poor-law Commissioners, increased the salary of the Medical Officer from £100 to £120 per annum.

One George Field, a horse proprietor of Kentish Town, has been fined by the Bow-street magistrate £10 and costs for permitting a horse suffering from glanders to leave his premises.

The death-rate (says the *New York Times*) was as high as 32 per 1000 of the population in New York in the first quarter of the present year. The death-rate of New York, in fact, during the past three months of the year was actually greater than that of either Bombay or Calcutta, and was but slightly less than that of Madras.

Dr. McLean, of Portland Prison, is now lying dangerously injured by an assault committed upon him by a convict. The Doctor had refused to prescribe for the man on the ground that he was not ill. This enraged the prisoner, who, as the Doctor was descending the stairs, threw a small form at him, which struck him on the head.

Testimonial.—Dr. Edward Malins has received, on the occasion of his leaving Birmingham, from his patients and friends at Cradley-heath, a handsome memorial of their esteem, consisting of a silver salver, claret jug, and three goblets, with an illuminated address.

The Paris Faculty of Medicine.—The chair of Operative Medicine, rendered vacant by the death of M. Dénonvilliers, is not the only one that will have to be competed for. There is also that of Comparative Medicine, which has never been filled since the death of Rayer, but which M. Brown-Séquard has occupied temporarily *chargé de cours*. He has now resigned, and M. Vulpian, the present Professor of Pathological Anatomy, demands permission to change his chair for the one of Comparative Medicine.

The Horton Infirmary, Banbury.—The commodious and costly Infirmary, presented to the inhabitants of Banbury by Mr. John Henry Horton, Great Queen-street, Cheapside, London, was formally opened on Wednesday by the Bishop of Oxford. The Infirmary, which has been named after the founder, as a token of gratitude on the part of the town, stands in thirteen acres of land, abutting the Oxford turnpike road, about a mile out of Banbury, and commands some charming views across a piece of country beautifully undulated and wooded. The situation is a remarkably healthy one, and in every way adapted to the purposes to which it has been applied. The total cost of the ground and building—both given by Mr. Horton—is £10,000. Mr. C. H. Driver, of Victoria-street, Westminster, was the architect.

Commemoration-day at King's College.—The grand day at King's College this year passed off admirably. Excellent speeches were delivered by the Rev. the Principal, Cannon Barry, the Bishops of Ely and Manchester, and Mr. Walter, M.P. The medical and other departments seem to be working admirably.

Royal College of Surgeons Examinations.—At the primary examination for the diploma of Membership of the Royal College of Surgeons, which was commenced on Saturday last, 117 candidates presented themselves, against 109 in the corresponding period last year. We understand that no less than 54 had been previously rejected, and some more than once. The following were the questions submitted at the written examination on the 13th inst., viz.:—1. Describe the internal iliac artery, stating its point of origin, length, direction, and relations; then enumerate its branches in the order in which they arise, and give the course, relations, and distribution of the internal pudic artery. 2. Describe the muscular tissue of the heart, including an account of the general arrangement of the fibres, their minute structure, and their mode of action as contrasted with that of other involuntary muscles. 3. Describe the metatarso-phalangeal articulation of the great toe, and the tendons in connexion with it, in their relative positions. 4. Enumerate the various forms of cartilage, describing the minute structural characters of each, and mention the joints in which interarticular cartilages are found. 5. Describe the superficial veins of the hand and forearm, and give the course and relations of the cephalic and basilic veins. 6. Explain the effect of complete division of the spinal cord between the second and third cervical vertebræ in one of the higher animals. For the "pass," or surgical and pathological examination, commencing this day (Friday), the candidates were also in excess of those at the close of the last session.

Finances of the Royal College of Surgeons.—From the annual report of the receipts and expenditure at the Royal College of Surgeons from Midsummer-day, 1871, to Midsummer-day, 1872, it appears that the former amounted to £12,627 17s. 8d., and the latter to £12,038 7s. 7d., leaving a balance at the bankers of £589 10s. 1d. It appears that the large sum of £10,123 2s. was received in fees paid for the several diplomas of the College. By rent of chambers adjoining the College, £984 13s. 10d.; dividends on £36,000 amounted to £1053; elections to the Fellowship, Council, and Court of Examiners, £157 10s.; interest on trust funds, including Mr. Erasmus Wilson's donation of £5000, only produced £288 0s. 6d. The question arises whether the College funds may not be more eligibly invested, and with security as good as "the modest Three per Cents." In analysing the disbursements it will be seen that the largest item was that of fees paid to the members of Council, Courts, and Boards of Examiners amounting to £4672 3s. 4d. The next largest sum appears in salaries and wages in the three departments (college, museum, and library), £3311 12s. 5d.—not by any means an extravagant sum when the large working staff of officers and servants are considered. "Jeames Plush," who inquired of his fellow servant "What is taxes, Thomas?" will learn that at the College of Surgeons taxes represent the large sum of £1109 2s. 3d. paid in rates, taxes, and Government stamps, exclusive of those for postage. Pensions amount this year to the diminished sum of £409 17s. The members of the College may be congratulated on the increasing prosperity of their *Alma Mater*; but how long, as we last week inquired, this is likely to last, the conjoint scheme, if carried out, will show.

The Sanitary Committee of the Town Council of Bolton have unanimously recommended the appointment of a Medical Officer of Health, who is to devote his whole time to the duties of the office, at a salary of £300 per annum.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A. B.—There is no evidence that electricity in any form will restore these functions. Rest from excitement, chastity, cold bathing, and tonics should be persevered with. Do not believe one word of the advertisements. Electricity is not life.

A Correspondent suggests that Mr. Ayrton had better employ himself with abating the nuisance of open gratings in the street ventilators to the common sewers at Blackfriars and other parts of London. Mr. Ayrton, it strikes us, need not go far to look for a nuisance.

Status of the Apothecary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your columns to-day I read a very intelligent reply to the ruling of the county court judge, Mr. Macnamara. Beyond a doubt the ruling is correct. The Act of 1858 did not repeal that of 1815; and at the present day the apothecary enjoys by far the most clearly defined position in the Profession. The only point which seems to have escaped the notice of our writers on this subject is the right of the Dublin apothecary. Prior to the passing of the Medical Act in 1858 he certainly had no status in England. What, now, would be the comparative value of the Irish apothecary as compared to the London licentiate? You will oblige an old reader by inserting this in your next number. I am, &c., Παθος'.

Liverpool Medical Institution, Mount Pleasant, Liverpool, July 13.

Craniotomy under Difficulties.—In England, in spite of the fact that the practitioner has easy access to his instruments, that he can usually have a consultation and the support of his medical brethren as witnesses of the necessity of the operation, the performance of craniotomy is always looked upon as involving the most painful responsibility. What must it be in remote parts of the colonies, where the practitioner has perchance neither instruments nor assistants? If he do not perform the operation the poor patient, if she survive, may suffer irreparable injury from sloughing; if he do operate we hope his reward may be different from that which has befallen Mr. Jackson, according to the letter of our Australian correspondent. When the Profession in Australia becomes stronger, we shall hear doubtless less of the feuds amongst its professors.

Professional Amenities.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would you kindly favour me with your opinion, in your "Notes, Queries, and Replies," on the following case:—A man was stabbed in several places in a row during the night, but managed to get home and went to bed. I was sent for in the morning, and dressed all the wounds, and took particular notes of the case. Four hours after I left my patient, a doctor, who was sent from Greenock to see the man, arrived, and, to my utter astonishment, took off all the dressings, opened the wounds, and probed and measured them anew. This I did not know till afterwards. Suppose the case to terminate fatally, would the defence not have good cause to complain of such interference on the part of the medical man?

I am, &c.,

Port Glasgow, July 16. A Ten Years' Reader.

Chloralum.—"Medicus," who lately sent us a short essay on disinfectants (see "Notes, Queries, and Replies," *Medical Times, and Gazette*, June 29, 1872), wishes us to add that in the hurry of writing he did scanty justice to chloralum, to which he ought to have given a high place amongst that class of disinfectants which act by retarding or suppressing decomposition. Its powers of acting on offensive gases already evolved are slight, but he believes that when applied to places or things already clean and sweet it will effectually keep them so.

W. B. will find what he wants in Dr. Norman Chevers's "Manual of Medical Jurisprudence for India." The injurious effects of certain grains and legumes is there shown by a large collection of authorities. New rice is very unwholesome, and is forbidden in gaols; it produces dysentery. The better the rice, the longer it requires to be kept. Wheaten flour adulterated with inferior ground rice produces great abdominal irritation. The use of the seeds of the *lathyrus sativus* is said to produce muscular palsy both in man and beast. The ill-effects are greatly increased if the seeds be eaten with the skins. The use of urhur or *cystisus cajan* is believed to be a cause of leprosy.

Mr. Ayrton again.

The following letter has appeared in the *Standard*:—

"Sir,—The following may interest you as an example of the "ripping-up" propensities of Mr. Ayrton, from which no one, great or small, who has the misfortune to belong to his department can at any time consider himself safe:—In February, 1870, the then medical attendant to the men employed in Kew Gardens suddenly received a communication from the Board of Works that after March 31 next his services would no longer be required, 'owing to the small number of cases of illness' among the men. Believing there was some mistake, the doctor stated, in reply, that from his register it appeared that during the past twelve months 71 out of the 100 men who were entitled to his services had received professional attendance of, on an average, nine days each at his hands, and requested a reconsideration of the case. But all the answer he got was that the Board had considered the circumstances, and saw no reason to alter its decision. The doctor, having no influential friends to take up his case, was accordingly 'ripped up,' as a contemporary terms it; and, with remarkable consistency, a few weeks after this, a medical man in a neighbouring town was appointed to attend on the 'small number of cases of illness.' These are the plain facts, and I have the documents to prove them. Comment is unnecessary. Be it observed that the medical attendant to the Kew establishment had the charge of rather more than 100 men, whom he must, if needful, visit at their own homes in the neighbouring towns and villages—for very few live at Kew—and to whom he must supply and send the requisite physic for the munificent sum of £30 a year.—I enclose my card, and am yours obediently, Observer."

Dr. Timothy Pollock, the Honorary Secretary of the City Orthopædic Hospital, Hatton-garden, has sent us the last report of that institution. He was induced to do so in consequence of reading an article in the *Medical Times and Gazette*, in which reference was made to the injurious influence of special hospitals. The report sets forth the reason why the hospital to which Dr. Pollock is attached should be named and supported as a *special* hospital. The following extract is from the "Report":—

"During the past year 1189 patients have been admitted and received the benefit of treatment at this Hospital, making the total number of admissions since its establishment in June, 1851, 20,617. Here we have the proof of the need and great blessing of such an institution to those who labour under the double misfortune of poverty and physical deformity; and the Committee take this opportunity of drawing the attention of the governors and public to the marked difference between orthopædic and other special hospitals. In the latter the class of patients applying for relief are treated on the general principles of Medicine and Surgery; but at the orthopædic hospitals the class of patients who apply for relief apply to be treated not only for some bodily ailment, but also for some accompanying bodily deformity, and it is the treatment of the bodily deformity which gives the distinctive character to the institution. This (the characteristic part of the treatment), to be successful, consists of the adaptation of skilfully arranged mechanical appliances, to be adjusted and readjusted according to the varying condition and progress of each individual case, an occupation too tedious for a surgeon in a general hospital, and too important to be left to the pupil."

Anti-Vaccination.—It would seem from the tactics resorted to by the anti-vaccination clique that their cause is becoming somewhat desperate. One of their last means of arresting punishment for non-vaccination is outrageous, if not unlawful. The Guardians of Islington having lately put into force the law compelling parents to have their children vaccinated, the following handbill has been extensively circulated in the parish:—

"Rough Music.—Whenever any person is fined or imprisoned for any offence (so-called) under the Vaccination Acts, let the neighbours treat every magistrate and guardian implicated in such vile persecution with an hour's 'rough music' each night so long as the imprisonment lasts, or for a fortnight where a fine is imposed. Half a dozen stout fellows with marrow-bones and cleavers, frying-pans, kettles, etc., walking up and down past the house, with a good strong voice to shout out at every pause, 'Who shut up Jones?' or 'Who fined Smith?' would make a stir, get into the newspapers, and shame the persecutors from similar disgraceful proceedings in future."

How to Save People from Bleeding to Death.

We have received the following communication and woodcut from Mr. Webber, F.R.C.S. He proposes that all children shall be taught the course of the great arteries, and the mode of compressing them with the tourniquet, so as to be able to save life in naval or military warfare, accidents in shooting, etc. He proposes that the course of the arteries shall be shown by a peculiarly marked suit of clothes:—

"Mr. T. Moore, a patriotic townsman and tailor, of King-street, Yarmouth, has cheerfully contributed a shooting jacket and trousers on which I have had delineated in narrow red ribbon the course of the principal artery of each upper and lower extremity, and the places indicated by black spots where the current of each respective vessel may easily be controlled by the application of a small, very portable, and inexpensive tourniquet (similar to the 'Field' tourniquet shown in the illustrated catalogue of Maw and Co., London), which should be at all times the *sine quâ non* of the sporting costume.

"The accompanying outline presumes an acquired knowledge of the course of the artery in each extremity. The round dots on the lines of demarcation, the spots where the vessel can be easily compressed by the pad of the tourniquet; the dotted line marks the course of Poupart's ligament; the +, the midway point where the artery as it emerges from the pelvis can be controlled by the thumb or the bowl of a key padded; T, the pocket for the tourniquet; ○○, the ordinary pockets of the jacket; H H, the flat space on each leg between the ham-strings where the pad of the tourniquet would have effect, as also at the bend of the elbows.

"It appears from the information kindly afforded me by the intelligent and able Medical Officer of the Admiralty that many of the gunners, and some others connected with the naval service, are instructed in the use of the tourniquet, and other means of ministering to urgent necessity, and that tourniquets manufactured by that department of the State are strewn about the decks during sanguinary conflicts with belligerents. But as shells, shot, and other missiles of warfare are not prone to pay deference to the instructed in particular, and are as likely to knock over the knowing, and to leave the ignorant and incompetent to look helplessly on, why should not every one on board, and elsewhere, be similarly schooled and qualified to deal with emergency?

"It will not be denied that there is no knowledge so vividly alive to object or duty as that which is stereotyped on the memory of early youth. Hence it is that I have ventured to suggest that the service be made an item of education.

"I send you a woodcut of my A B C (a Briton's costume)."

Corrigendum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Not having seen a proof of my article, "Remarks on Affections of Hearing in Cases of Disease of the Nervous System," several errors have passed uncorrected, most of them, however, obvious—for example, the words "irritable" and "irritability" should be "unstable" and "instability." Since the article was written I have read St. John Roosa's paper "Hemiplegia occurring in coincidence with Chronic Suppuration of the Middle Ear" (*Transactions of the American Otological Society*, July, 1870). I find that he has there reported *two* cases. In one the aural disease was of the same side as the hemiplegia; in the other of the side opposite. I am, &c., J. Hughlings-Jackson.

Pityriasis *alias* Scurviness.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—For the greater part of my life I have enjoyed excellent health, and have indulged largely in the bath, the tub, and the use of Knight's "pale primrose soap" so much commended in your columns. During all this time my skin was smooth as satin, and free from any speck. But evil times came; I was ill and weak. During my recovery, whilst brushing my hair, I felt something give way in one inguinal canal, and I have been obliged to wear a truss. Moreover, I have been ordered to wear a swathe of flannel round my loins, and illness and fatigue have greatly lessened my power of stripping and washing, whilst I can only tolerate cold water in the warmest weather, so by degrees I have slided into the ranks of the half-washed. One effect is the roughness of thighs caused by the accumulation of petty pellets of sebaceous matter in the hair-follicles. But a worse is pityriasis—the eruption of circular spots, which increase and coalesce, on the pit of the stomach, and wherever the skin is thin, at first red, then brown with raised red edges, and always itching. For this malady I tried first furious washings with ordiuary pale primrose soap; no effect. Next I tried the strongest medical carbolic soap; effect comforting at first, as shown by decrease of itching, but no effectual stop put to the eruption. Then I tried a lotion of corrosive sublimate in alcohol; effect good, but transient. Lastly, the citrine ointment, diluted with two parts of simple ointment. The effect of this was marked and rapid, but the newer the spots the more quickly they got well. The oldest spots take a long time.

I am, &c., Fact.

COMMUNICATIONS have been received from—

Dr. Copeman; Dr. R. Gooding; Messrs. Barraud and Jerrard; Mr. Taylor; Dr. S. W. D. Williams; Dr. Rumsey; Dr. Neild; Mr. Busk; Mr. Stern; Dr. W. W. Squires; Dr. Burke; Mr. Norton; Mr. T. C. White; Rev. T. W. Belcher; A Ten Years' Reader; Dr. Bakewell; Mr. W. J. Bullock; Pro Bono Publico; Dr. McRae; Dr. Malins; Mr. J. Chatto; Mr. Wasdale Watson; Dr. Bruce; Dr. W. H. Broadbent; Professor Flower; Dr. J. Hughlings-Jackson; Mr. A. P. Fiddian; Dr. J. S. Bristowe; Mr. T. M. Stone.

BOOKS RECEIVED—

Report of the Metropolitan Board of Works, from June 30 to December 31, 1871—A Physician's Sermon to Young Men, by William Pratt, M.A., M.D., L.R.C.P.L.—Statements relating to the Home and Foreign Trade of the Dominion of Canada; also, Annual Report of the Commerce of Montreal for 1871, by W. J. Patterson, Secretary Board of Trade and Corn Exchange Association—Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques, tome xv., directeur de la rédaction le Docteur Jaccoud—Ueber Geist und Leben in der Medicin, by Dr. J. M. Leupoldt—A Treatise on Heart Disease, by Francis W. Moinet, M.D., F.R.C.P.E.

PERIODICALS AND NEWSPAPERS RECEIVED—

New York Medical Journal—Medical Temperance Journal—Chemist and Druggist—Australian Medical Journal—Monthly Review of Dental Surgery—The Scotsman.

APPOINTMENTS FOR THE WEEK.

July 20. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

22. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

23. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

24. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

25. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

26. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Quekett Microscopical Club, 8 p.m. Annual Meeting and Election of Officers. Dr. L. S. Beale, F.R.S., will deliver the Presidential Address.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 13, 1872.

BIRTHS.

Births of Boys, 1082; Girls, 1090; Total, 2172.
Average of 10 corresponding weeks, 1862-71, 1981·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	658	627	1285
Average of the ten years 1862-71	706·2	635·9	1342·1
Average corrected to increased population	...	...	1476
Deaths of people aged 80 and upwards	...	...	42

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	3	1	1	1	6	..	1	1	19
North ...	751668	9	5	4	...	17	2	1	...	33
Central ...	333887	...	9	...	...	6	..	1	...	31
East	638928	7	6	2	...	16	1	5	2	35
South... ...	966132	7	7	5	2	13	1	3	2	30
Total	3251804	26	28	12	3	58	4	11	5	148

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·673 in.
Mean temperature	63·1°
Highest point of thermometer	81·4°
Lowest point of thermometer	49·5°
Mean dew-point temperature	55·7°
General direction of wind	S.W.
Whole amount of rain in the week	0·71 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 13, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending July 13.	Deaths Registered during the week ending July 13.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2172	1285	81·4	49·5	63·1	17·28	0·71	1·80
Portsmouth ...	115455	12·1	68	45	75·2	49·4	61·3	16·28	1·04	2·64
Norwich	81105	10·9	51	31	82·5	50·5	62·7	17·06	1·28	3·25
Bristol	186428	39·8	113	70	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	44	27	74·1	43·5	59·8	15·44	2·72	6·91
Birmingham ...	350164	44·7	235	131	75·2	46·6	60·6	15·89	1·41	3·58
Leicester	99143	31·0	58	35	82·2	44·0	62·2	16·78	2·71	6·88
Nottingham ...	88225	44·2	46	26	82·1	43·0	62·9	17·17	3·43	8·71
Liverpool	499897	97·9	316	209	69·7	50·0	58·0	14·44	3·80	9·65
Manchester ...	352759	78·6	237	136	...	...	...	...	...	...
Salford	127923	24·7	85	46	72·5	43·0	58·6	14·78	5·80	14·73
Oldham	84004	20·2	50	33	...	...	...	...	...	...
Bradford	151720	23·0	95	67	77·2	49·5	61·6	16·44	2·02	5·13
Leeds	266564	12·4	174	118	75·0	47·0	60·7	15·94	3·13	7·95
Sheffield	247847	10·9	153	96	72·5	45·0	60·7	15·94	3·86	9·80
Hull	124976	35·1	96	56	77·0	45·0	59·4	15·22	3·10	7·87
Sunderland ...	100665	30·4	86	43	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	94	49	66·0	45·0	54·9	12·72	1·12	2·84
Edinburgh	205146	46·3	116	62	67·0	43·7	57·1	13·94	2·05	5·21
Glasgow	489136	94·8	310	197	72·5	45·1	58·2	14·55	3·20	8·13
Dublin	310565	31·9	150	140	71·9	43·0	58·1	14·50	0·45	1·14
Total of 21 Towns in United Kingd'm	7393052	34·0	4749	2896	82·5	43·0	60·0	15·56	2·46	6·25

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·67 in. The highest was 29·77 in. on Friday evening, and the lowest 29·54 in. on Sunday evening, the 7th inst.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

CARLSBAD and FRIEDRICHSHALL versus VALS and VICHY.

Sir HENRY THOMPSON on "CALCULOUS DISEASE." See the "Lancet" of January 13th, 1872.

EXTRACT.—"Thus such patients are often better for a time after a visit to Vichy, but as a rule are not permanently benefited. I am satisfied, after observation on the spot, and on the effect of the waters (*Vichy* and *Vals*) here, that they only temporarily mitigate the complaint, and do not cure it. Now, the principle on which the waters of Friedrichshall and Carlsbad are beneficial is, that they produce activity in all the digestive functions; and thus waste matters, which have been hitherto thrown out as uric acid by the kidneys, are eliminated in some other form. And thus it is that, if it be necessary to send these patients abroad, I prefer very much Carlsbad to Vichy, provided always that the subject of a Carlsbad course must not have become too weak, as for a time it makes a demand on the strength not well supported by a feeble person. Generally, however, this is not at all the condition of those who are passing uric-acid gravel. Happily, also, for most people, our purpose can be attained as well at home. I believe that a short course of Friedrichshall first, followed by Carlsbad, or a combination of the two, produces the best results in these cases. This method has at all events been more successful with me than any other. Such a course should be continued, according to circumstances, for six or eight weeks."

CARLSBAD and FRIEDRICHSHALL WATERS can be obtained of any respectable Chemist or Mineral Water Dealer, or direct from the undersigned.

Prices delivered in London, or free to country carriers in London ... { CARLSBAD ... ... 45s. per case of 50 quarts, or 12s. per dozen quarts. FRIEDRICHSHALL ... 40s. ,, 30 ,, or 16s. ,, ,, Ditto ... 55s. ,, 60 pints, or 12s. ,, pints.

INGRAM & CO., 35, BUCKLERSBURY, LONDON, E.C.,

Wholesale Agents for the United Kingdom;

IMPORTERS OF PULLNA, MARIENBAD, SELTZER, KISSINGEN, VALS, VICHY, AND ALL CONTINENTAL WATERS.

A Liberal Discount to the Medical Profession. Price Lists and Pamphlets on application.

Natural Mineral Waters of Vals, Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton; R. Ellis and Son, Ruthin; and the Natural Bromo-Iodine Water of Woodhall Spa, Lincolnshire.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

BEER IN BOTTLE.

WHITBREAD & CO.'S LONDON COOPER, STOUT, & ALES.

Whitbread & Co. are the ONLY large Brewers who Bottle their own Beer.

Prices and full particulars can be obtained at the STORES, 277, GRAY'S-INN-ROAD, W.C.—ROBT. BAKER, SOLE AGENT.

J. P. LAROZE'S SYRUPS

Are elegant palatable preparations of various medicaments in common use, and are highly recommended by the Medical Profession in France, and adopted by the public at large.

SYRUP of BITTER ORANGES (an anti-nervous tonic, regulating the functions of the stomach and intestines).

SYRUP of BITTER ORANGES and of BROMIDE of POTASSIUM (sure sedative in diseases of heart, respiratory and digestive organs, neuralgia, sleeplessness in children).

SYRUP of BITTER ORANGES and of IODIDE of POTASSIUM (strumous, tubercular, cancerous, rheumatic, and syphilitic affections).

SYRUP of BITTER ORANGES, QUASSIA, and PHOTO-IODIDE of IRON (green sickness, leucorrhœa, disorders of menstruation, anæmia, rickets, &c.)

LONDON DEPÔTS: BARCLAY & SONS, Farringdon-street. WILCOX, 336, Oxford-street. JOZEAU, 49, Haymarket.
NEW YORK—FOUGERA. QUEBEC—GIROUX & CO. MONTREAL—DEVINS BOLTON.
Sold in PARIS by J. P. LAROZE & CO., 2, Rue des Lions St. Paul.

SILVER MEDAL AWARDED 1867.—JUROR 1862.

MORSON'S PREPARATIONS OF PEPSINE.

MEDICINAL PEPSINE

(Poudre Nutritive, or "Pepsine Acide Amylacée" of the French Codex)

Contains the active digestive principle of the gastric juice, purified and rendered permanent and palatable. Dose—15 to 20 grains.

PEPSINA PORCI,

A concentrated and NEUTRAL preparation of Pepsine, free from any disagreeable taste or smell. Dose—5 to 10 grains.

☞ These preparations of Pepsine are carefully examined and tested by a professional Chemist, and certified to answer to the tests indicated. Every bottle containing the preparations named, and bearing the Trade Mark of T. MORSON AND SON, is sold with a guarantee to that effect.

PEPSINE WINE, PEPSINE LOZENGES, PEPSINE GLOBULES,

Are convenient forms for the administration of Pepsine.

Manufactured by T. MORSON & SON, Pharmaceutical Chemists,

31, 33, AND 124, SOUTHAMPTON-ROW, LONDON, W.C.

ORIGINAL LECTURES.

CLINICAL LECTURES ON THE TREATMENT OF ANEURISM.

By THOMAS BRYANT, F.R.C.S.,
Surgeon to Guy's Hospital.

Lecture II.(a)

Gentlemen,—In my last lecture I considered the different modes of treating aneurism by flexion, pressure, and the application of a ligature to the afferent artery of the sac. I explained, or rather demonstrated by specimens, the pathological processes by which a cure was to be effected, and you will remember that these processes were identical in character with those at times adopted by Nature in the rare examples of natural cure that have been met with. I pointed out to you how Nature effected a cure in aneurism by causing coagulation of the blood in the sac; how in cases of a chronic cure a distinctly laminated clot was formed, and in examples of a rapid cure a clot indistinctly laminated. I showed to you how these results were to be secured by surgical means applied to the artery supplying the aneurism or the afferent vessel. I illustrated, moreover, my remarks by cases, successful and the reverse. You will remember, also, that I told you that in all slowly forming aneurisms of the extremities the treatment by flexion was to be employed when possible—flexion and pressure combined, or pressure alone; that of all forms of pressure the digital was to be preferred; and that next to digital, instrumental pressure was to be selected, what is now known as elastic pressure being its best form. But where the treatment by flexion and pressure had failed, the application of a ligature was to be had recourse to, and that in traumatic and rapidly forming aneurisms the weight of evidence went to prove that the primary application of a ligature was the best means. I told you, moreover, that these means were not applicable to all cases, and that they could only be applied when the afferent vessel was within the reach of the surgeon's art.

I propose to day to consider the treatment of aneurisms so placed, and to see what our art can do under such adverse circumstances.

But before we pass on to consider what our art can do in such cases, let us stop briefly to see what is to be learnt from the processes of Nature herself; and, without going into details, I may state that sufficient evidence exists to justify Poland's assertion (Guy's Hospital Reports, 1871) that "indirect compression on the distal side of the sac—on the efferent vessel—has been met with as a spontaneous source of cure in some rare instances of aneurism of the subclavian artery." Hodgson's case of a soldier is the best one to illustrate this point. It was a case in which a large aneurism of the aorta coexisted with a small one of the subclavian artery, and the aortic aneurism had so compressed a portion of the subclavian artery beyond the subclavian aneurism as to have caused its obliteration. The small aneurism was nearly filled with layers of coagulum, and the subclavian artery, from the point where it emerged from this little sac, was completely filled with a firm ligamentous substance. You may accept this case, therefore, as a typical one of a natural cure of an aneurism by pressure upon the efferent artery; and you must have remarked that the cure had been effected by the same pathological process as has been recorded in all cases of cure by obstruction of the efferent—by the formation of clot in the aneurismal sac.

Let us now proceed, then, to see how the surgeon can imitate this natural cure; what hints we can glean from the contemplation of the fact that an aneurism can be cured by the occlusion of the efferent artery—for there is surely no reason why art should not imitate natural processes—why surgeons should not so assist Nature to effect a cure—why, mechanically, the surgeon should not so apply pressure in one of its forms to the distal side of the aneurismal tumour as to close the efferent artery, and thus artificially cause the deposition of a fibrinous clot in the aneurismal sac similar to that already described to have been deposited by means of the accidental pressure of the subclavian artery beyond the subclavian aneurism; and I think I shall be well able to show you that such a result can be obtained. The first evidence I propose to adduce shall be a pathological one, the second clinical.

The pathological is represented by this preparation: a more beautiful and valuable one I do not know, for it shows as clearly as facts can show that an abdominal aneurism can be mechanically filled with clot, even to its occlusion, by means of mechanical pressure applied to the efferent vessel for only a few hours; and that such a clot seems to be as well formed and of a like nature to that deposited by the obstruction of the afferent artery. It suggests, also, a mode of treatment by which many aneurisms may be treated that are beyond the reach of other surgical means, and well supports the theory and practice which were suggested and applied by Brasdor and Wardrop—namely, the application of a ligature to the distal side of the aneurism.

The details of the case have been laid before the Medical and Chirurgical Society (April 8, 1872). On the present occasion it will be enough for me to tell you that the aneurism was one of the cœliac axis, and that the consolidation you see in the sac was the consequence of pressure by means of Lister's abdominal tourniquet for sixteen hours, the man dying from peritonitis, the direct result of some contusion of the peritoneum from the pressure of the tourniquet.

I will now give an example of Wardrop's operation, or the application of a ligature to the subclavian artery for aneurism of the innominate, the carotid being left alone—Wardrop's operation consisting in the application of a ligature on the distal side of the aneurism, leaving a large arterial trunk between the aneurism and the point of ligature, whilst Brasdor's operation consists in the application of a ligature to the efferent artery itself beyond the aneurism, with no branch between. It was suggested by Brasdor, but first successfully applied by Wardrop to the carotid artery, and is doubtless a good operation. I shall give you some facts by-and-by to support this assertion.

Aneurism of the Innominate Artery—Ligature of Subclavian (Wardrop's Operation)—Recovery.

[Reported by Mr. E. Hicks.]

James S., aged 33, was admitted into Guy's Hospital, under Mr. Bryant's care, on August 7, 1871, with an aneurism of the innominate artery. He was a healthy carter, a resident of Bolton, in Lancashire. He had always had good health, never having had syphilis or rheumatism. Eighteen months ago, when lifting a heavy box with his arms raised, and supporting it with his neck and shoulders, he felt a pain in the right side of his neck. He thought little of it; but within a few days he felt a pain in his right arm, and a sensation after using it as if his hand was asleep. He then observed a swelling above the right collar-bone, which pulsated. He went into the Manchester Infirmary for five months, and subsequently into the Bolton, where a weight of lead of about two pounds was fixed over the part. This did, however, he says, no good.

On admission, a soft expansive pulsating swelling, rising from behind the right sterno-clavicular joint, is to be seen. It clearly involves the sternum and sternal end of the clavicle. It runs well out of the chest, and pulsates freely. The patient has a slight cough, and at times difficulty of deglutition. There is no distinct aneurismal bruit. The second sound of the heart is very loud in the tumour. The right radial pulse is small. The man was ordered to keep his bed and to have ice applied to the tumour.

On August 19 Mr. Bryant applied a ligature to the right subclavian in the third part of its course—using a carbolised gut ligature. No difficulty was experienced in the operation; a large vein, which was wounded as it entered the internal jugular, was ligatured. The wound was closed and covered with lint soaked in the compound tincture of benzoin, cotton-wool covering the arm. He passed a good night after the operation. He has still a little cough. No rise in temperature.

August 22.—Slight pulsation to be felt in right brachial artery; none in radial.

23rd.—Slight bleeding took place in the wound, and again six hours later. It was stopped by ice.

24th.—All the dressings were removed yesterday. Wound discharging (from the only spot that has not healed) some broken down blood. Ice to be kept on. The man says he feels quite well; takes food kindly.

25th.—The wound discharges very little now. The tumour is certainly smaller and harder; it pulsates very feebly.

September 6 (seventeen days after the operation).—A sphygmographic tracing was taken from the radial artery.

11th.—The man was up, the parts having consolidated; wound healed. Tumour decidedly smaller and harder, and pulsating very feebly.

22nd.—The man left the Hospital convalescent. He was to return after the lapse of a few months to have the carotid ligatured should the aneurism have increased.

(a) Delivered March 20, 1872. Reported by Mr. Henry Clarke, Student.

I must not, however, rest satisfied with the mere personal experience I have to give—it is good, there can be little doubt, and enough to warrant the inference that the forms of practice indicated are worthy of thought and of practical application; but I can back it up by some good recorded experience of others. I can refer you to a case of Edwards's published in the *Lancet* for 1858, in which distal pressure was applied to the carotid and subclavian arteries of a lady, aged 50, for aneurism of the innominate. It was applied by means of an instrument (for a description of which I must refer you to the original paper) kept on for three months; and at the end of that time the tumour, from having been the size of an apple, and soft, came to that of a nut, and hard, all pulsation in it having ceased with all other symptoms.

The case of aneurism appeared to have been cured by means of pressure applied to the efferent vessel.

I can tell you also that out of seven recorded examples of Brasdor's operation upon the carotid for carotid aneurism, four recovered—one of Wardrop's, one of Bush's, one of Wood's (of New York), and one of Colson's; out of three for carotid and innominate aneurism, one—Evans's case—was alive thirty-four years after; out of fourteen cases of ligature of the carotid on the distal side for innominate aneurism, five were cured—one of Wickham's, Fearn's, Scott's, and two of Pirogoff's; and of the two cases on record similar to that I have just recorded of my own, in which the subclavian was ligatured for innominate aneurism, one—Wardrop's case—was alive two years after, and Broca's survived six months.

I must tell you, however, that five out of six of the cases of simultaneous distal ligature of the subclavian and carotid arteries for innominate or aortic aneurism proved fatal, although Heath's case lived four years after the operation.

Now, gentlemen, I think you will agree with me that these facts, pathological as well as clinical, are enough to prove that the treatment by pressure, and, on this failing or being inapplicable, by ligature upon the efferent artery of an aneurism, is an operation which holds out very good hopes of securing a fair amount of success—of success, also, in a class of cases that, under other circumstances, must be left alone, for they are beyond the reach of the surgeon's art. I mean certain examples of abdominal aneurism and of aneurism of the innominate and first part of the subclavian and common carotid arteries. In aneurism of the common iliac and external iliac it may also be of value.

There is, however, one other point which the successful treatment by pressure upon the afferent and efferent artery of an aneurism brings prominently forward, and that is the use of some other expedient by which the circulation in the vessel may be temporarily arrested; for although digital and instrumental pressure are good, they cannot always be employed, and it would be well if some other practice could be adopted which would act upon the same principle. John Hunter doubtless had this in mind when he adopted the practice of applying a temporary ligature to an artery for the cure of aneurism; and Sir A. Cooper and Mr. Travers tried to further it by some experiments upon animals. But the practice never found its place in Surgery, and yet there must surely be something in it; for if by the mechanical pressure of a finger or instrument upon an artery leading to or from an aneurism the mechanical closure of that aneurism may be secured by means of coagulum, surely the same end may be as confidently looked for by the use of some temporary ligature or other occluding medium.

It is possible that in Lister's antiseptic catgut ligature this temporary occluding medium may be found; for by means of it it appears that an artery may be occluded as effectually as by any other ligature, and that, as the gut subsequently dissolves, no irritant is left around the artery to set up an ulcerative action for its discharge that may neutralise the good the application of the ligature had effected.

With the same object the artery constrictor I now hand round, of Dr. S. Fleet Speir, of New York, appears to me to possess a value of no little importance. I do not say that the instrument itself is perfect, for I do not think it is; but the principle upon which it acts is a good one, and worthy of adoption. The instrument with an essay obtained a prize from the Medical Society of New York in 1871 (*vide Medical Record*, New York, April 1, 1871). I have made many experiments with it on the dead subject, and find it does all its inventor claims for it; it produces a division of the inner and middle coats of the artery and their valvular incurvation or invagination—in fact, doing for an artery in continuity what torsion does for a divided one. I have used it but once on the living subject—upon the brachial artery—and it answered well.

I cannot allow myself to say more upon this important point; but I feel strongly that if from the pressure of an artery—afferent or efferent—for only a few hours an aneurism may be cured, the same result may not unreasonably be looked for by the adoption of other temporary means of occluding a vessel, such as some temporary ligature, catgut or otherwise, or the application of some instrument like, or acting on the principle of, that of Dr. Spiers; for I can well see that by the use of such an instrument or means many cases of aneurism are to be treated in which pressure cannot be employed, and the use of the permanent ligature which has to ulcerate through a vessel, and all its dangers, may be dispensed with altogether.

I believe that in this direction much will be done in the next few years, and I leave the thought to some of the active minds I see before me for future development.

LECTURES ON THE PRINCIPLES OF THE TREATMENT OF FEVER.

By Dr. LIONEL S. BEALE, F.R.S.,
Fellow of the Royal College of Physicians; Physician to King's College Hospital.

Lecture VI.

Action of Alcohol.

Chemical Action of Alcohol.—It seems to me that we should not ignore the probable chemical action of alcohol upon important constituents of the blood. It is scarcely possible to believe that the large quantity of alcohol taken by many patients does not influence the permeating properties of the fluid part of the blood, and cause some chemical alteration in the soluble constituents which belong to the albumen class, besides exerting a local action upon soft and rapidly growing bioplasts. Many of the so-called *tonics* have the property of coagulating albuminous fluids and solutions of extractive matters. Preparations containing tannin, the mineral salts—such as the sulphate and sesquichloride of iron, nitric and hydrochloric acids, and a host of other substances employed as remedies, that will occur to everyone—possess this property, and render solutions containing albuminous and allied matters less permeable, perhaps by increasing their viscidity. The favourable action of such remedies may be due to their direct influence on the fluid constituents of the blood. They, no doubt, also cause a reduction in the rate at which blood corpuscles are destroyed, and at the same time they tend to render the walls of the bloodvessels less permeable to fluids.

But, of all the remedies we possess, I believe alcohol acts most rapidly in this way, and in particular cases most efficiently. The properties alcohol possesses of hardening animal tissues and of coagulating albuminous fluids are well known; and these properties must not be forgotten when its effects in the animal body are discussed. Of course, when absorbed by the blood of a living person, alcohol does not actually *coagulate* the albuminous matter; but it probably renders it less fluid, and reduces its permeating property. Alcohol interferes with the disintegration of blood corpuscles; and in cases where this is going on very rapidly, and where fluid is passing through the vessels in considerable quantity, in consequence of the thin vascular walls themselves being stretched and rendered too readily permeable to fluids, alcohol is likely to be of service; but where these changes are proceeding very rapidly, and the patient's strength is fast ebbing, it may save life.

We may therefore explain the beneficial action of alcohol without assuming that it is a food, and contributes directly to the ordinary process of nutrition. Nay, if it merely filtered through the bloodvessels, and left the body by different emunctories as fast as it was introduced, we could account reasonably for the good effects we frequently observe when alcohol is given in certain forms of disease.

Action of Alcohol upon Growing Bioplasm.—If there be a little abrasion of the cuticle, around which the skin looks red and angry, the neighbouring tissue being hot, swollen, and painful, the capillaries distended so as to produce bright redness, it will be found that the occasional application of a drop of alcohol to the affected part will in the course of a single hour produce great changes. In and around such a spot, it is quite clear that we have not *diminished*, but *increased* action. Numerous small particles of living bioplasm ("cells") are receiving an unusual quantity of

soluble nutrient substances, and are in consequence multiplying rapidly in the deep layers of the cuticle. The bioplasts of the nerves, capillaries, and connective tissue of the cutis are larger than they were in the healthy state; the living matter is growing, dividing and subdividing into smaller portions, which will grow and again divide and subdivide. In the capillaries, and just external to them, are numerous white blood-corpuscles, varying in size from small points to particles having the ordinary dimensions of these bodies. These, like the living bioplasts of the tissue, are rapidly increasing in size. The capillaries are gorged with blood, and the thin walls of many of them are stretched to the utmost. Now, what happens when a drop of alcohol is applied to such a sore? Momentary pain, followed in the course of a few minutes by great relief, or complete cessation of pain, and diminished vascularity. But how does the alcohol bring about these striking changes? If alcohol be added to any serous fluid, as is well known, the albumen is precipitated. If delicate masses of bioplasm are placed in alcohol, and afterwards examined under the microscope, everyone knows that they will appear "very granular," and they will have become shrunken and altered much in form; and it will be found that they will resist disintegration by pressure to a greater extent than in their natural state. By the action of alcohol the surface of a wound is much altered, and it soon becomes covered with a dry crust. This results from the hardening effects of the alcohol. Some of the rapidly growing particles of bioplasm are quite destroyed, while others become surrounded with an envelope of hardened matter, which prevents the possibility of their absorbing nutriment and giving rise to new particles, and growing and multiplying as rapidly as before. Not only so, but the permeating power of the nutrient fluid itself is reduced by the tendency of the alcohol to coagulate it. The most superficial of the particles of bioplasm would be destroyed by alcohol, though not so quickly, perhaps, as they would have been by the actual cautery, nitrate of silver, sesquichloride of iron, sulphate of copper, etc.

Of the Action of Alcohol on the Vessels of an Inflamed Part.—Next comes a more difficult question for consideration: How does the alcohol cause the vessels of the inflamed part to contract, and permit the flow of less blood through them? If we press upon the distended vessels of an inflamed part, as is well known, the blood is driven out of them, and the skin becomes quite pale; but the moment the pressure is withdrawn, the redness recurs, and exhibits *precisely the same tint* as before. From this it is clear, not only that the capillaries are unduly distended, but that the calibre of the small arteries through which the blood is distributed to them is much larger than in the normal state. Besides this, we are able to prove by this simple experiment that the vessels may be maintained for a long time of a given calibre. Such a state of things can only result from a certain regulated but definite influence upon nerve-centres which govern the calibre of the small arteries. The temporary change induced in the nerves can be maintained at one definite degree for a considerable time. In this way the quantity of blood permitted to flow though the capillaries in a given time is regulated and varied within certain limits. The mechanism is such that a small artery is made to assume and to retain for a longer or shorter period a different calibre, although this may be momentarily altered by artificial means.

Now, I believe that the alcohol passes through the walls of the capillaries, and acts directly upon the nerves, which I have shown are distributed just external to them.(a) By these *afferent* nerves the nerve-centres are influenced, and in consequence the intensity of the current transmitted by the vaso-motor nerves of the small arteries is modified. That alcohol affects the nervous system very readily is proved by its remarkable effects upon healthy persons. Can we then believe that in extreme cases of low disease, in which the nervous phenomena appear almost as in the healthy state, while the patient takes more than enough alcohol to intoxicate a healthy man, that the alcohol exerts no influence whatever? True, that in many cases, so little is the ordinary action of alcohol manifested, a patient may be taking an ounce of brandy every hour, and a bystander would not believe he was taking alcohol at all. Yet surely no one would maintain that therefore the alcohol is powerless and produces no more effect than so much water or any perfectly inert substance. That alcohol will produce delirium in health, and remove or prevent the occurrence of delirium in an exhausted state of the system, are facts, but they cannot be fully explained in the present imperfect state of our knowledge concerning the action of nerve-centres and nerves, especially the nerve-centres which control vascular phenomena.

Action of Alcohol upon Bioplasm outside Vessels in Pneumonia.—I propose now to consider what is actually going on in pneumonia, and shall endeavour to account in some measure for the beneficial action of alcohol in bad cases of this disease. The air-cells of the lung are filled with multitudes of living actively growing particles of bioplasm which have passed through the vascular wall with the serum, and are now absorbing nutrient pabulum at a very rapid rate; and probably, as these particles increase in number, an increased proportion of pabulum is diverted from all parts of the body to the "focus of inflammation," where they are multiplying. We *know* positively that a determination of common salt does actually take place to this spot; and it is, therefore, perfectly reasonable to infer that other matters are in the same way diverted from their usual destination, and absorbed here, instead of being used up in the ordinary changes occurring in the normal state. (Med.-Chir. *Trans.*, vol. xxxv., 1853.) I have already spoken of the pabulum which in a fluid state transudes through the stretched walls of the bloodvessels, and feeds the particles of bioplasm which in inflammation lie just outside them. Not only are the capillaries more readily permeated by reason of the stretching and consequent thinning of their walls, but the fluid in the bloodvessels possesses a greater tendency to permeate animal membrane; so that it would seem but reasonable to consider whether anything can be done to diminish this by altering the character of the fluid itself.

Let us now consider how alcohol acts upon the elementary parts of the living organism; and in order to render the arguments upon which my views are based intelligible, it will be as well to direct the reader's attention in this place to some points which may have been already referred to more than once in these lectures.

In the treatment of a sore upon the surface of the body, the means we adopt in order to promote the healing process check the free and rapid growth of the bioplasm. The commencement of the healing process is associated with more slow nutrient change. In the same manner what we desire to effect in the treatment of internal inflammations and the feverish state, is to check the undue growth of bioplasm which is proceeding in the blood in certain parts of the body, and in the "inflamed" tissues or organs. This bioplasm can only be reached through the blood. And it can be shown that the remedies which have been proved by experience to be of value in the treatment of such cases possess the property of checking the redundant growth of bioplasm, and can be taken up by the blood and distributed through the body without losing their properties. Now, in many extensive internal inflammations, such as pneumonia and pericarditis, it seems to me probable that the alcohol taken up by the blood really acts directly upon the morbid bioplasm growing and multiplying so very rapidly just outside the capillary vessels, and checks the process. It will be asked, upon the theory I have ventured to propound, How is it that the alcohol acts upon the morbid and not upon the healthy structure? But this question is not difficult to answer. The healthy cells, being surrounded by a thick protective covering, or embedded in a matrix (cell-wall, intercellular substance), are not affected by it; while the morbid cells, growing so fast that time is not allowed for the production of a hard external envelope, are fully exposed to the free action of soluble matters which transude from the blood. These, therefore, undergo the changes already described, and are caused to increase more slowly, while many are destroyed. In the growing cells in the air-cells of a hepatised lung, then, there is no evidence of *deficiency* of *vital* power; and the remedies which act favourably really seem to act not by *increasing vital power*, but by diminishing *the rate at which vital changes are proceeding*—in fact, by causing particles of bioplasm which were living *too fast* to live *more slowly*, and by causing *the death* of many of them.

Author's View supported by many General Facts.—This explanation of the action of alcohol is in harmony with many broad facts familiar to all. By it we may account for the shrivelling of the hepatic cells, the shrinking of the secreting structure, and the increased hardness and condensation of the entire liver, which result from the continual bathing of the gland-structure by blood almost constantly loaded with alcoholic poison. It explains the gradual shrinking and condensation of tissues which occur in persons who have long been accustomed to excess. The tendency to increased formation of adipose tissue which occurs in many of those who live generously, and seems to be augmented by alcohol, may be

(a) See *Archives of Medicine*, No. xiii. Philosophical *Transactions*, 1863. *Monthly Microscopical Journal*, January, 1872.

explained upon the same view, and the stunting in growth which follows its exhibition to young animals is also accounted for.

Action of Alcohol upon the production of Heat.—In a slight catarrh in a healthy man, six or eight ounces of alcohol did not lower the temperature, which however was only 100·7 (Parkes and Wollowicz). This fact cannot be advanced as an argument against the value of alcohol in cases of fever and internal inflammation. In slight febrile disturbances there is no doubt whatever not only that alcohol in large quantities does no good, but that it does positive harm, by exciting the heart's action unduly and tending to produce narcotism. In very low states of system, however, albuminoid matters are fast escaping from the blood, the blood corpuscles are undergoing rapid disintegration, *and the living matter or bioplasm* of the vessels of the neighbouring tissues and of the blood is growing very quickly. The changes referred to are associated with a rise in bodily temperature. Alcohol, as has been shown, tends to modify all these phenomena. And I believe that by further research in the same direction we shall succeed in giving a full and thoroughly satisfactory explanation of the action of alcohol in lowering the body heat in severe attacks of fever.

Summary.—The observations upon the action of alcohol on the "cells" or elementary units of the tissues justify us in concluding that its beneficial influence in very bad cases of disease is due in part to its action upon the pabulum and its tendency to render albuminous solutions less permeable, and partly to its direct action upon particles of naked and living bioplasm. Alcohol reduces the permeating tendency of the serum; it checks the disintegration of blood corpuscles; it prevents the rapid growth of living matter; and it interferes with or modifies chemical changes taking place in organic fluids. When these changes are proceeding very rapidly, the capillary circulation beginning to fail, the heart's action becoming very weak and fluttering, and the strength ebbing fast, alcohol may save life.

In conclusion, the local and general action of alcohol may be shortly summed up as follows:—

1. In external wounds, and in internal diseases where alcohol acts beneficially, the good result is in part at least due to the alcohol checking the *increased action* already established.

2. Alcohol does not act as a food; it does not nourish tissues. It may diminish waste by altering the consistence and chemical properties of fluids and solids. It cuts short the life of rapidly growing bioplasm, or causes it to live more slowly; and thus tends to cause a diseased texture, in which vital changes are abnormally active, to return *to its normal and much less active condition.*

3. In "exhausting" diseases, alcohol seems to act partly by diminishing very rapidly the abnormally increased growth of bioplasm. The quantity required will depend upon the extent to which the changes alluded to have proceeded. In extreme cases half an ounce of brandy, or even more, may be given for a time (in some cases even for several days) every half-hour; and there is reason to believe that in desperate cases life is sometimes saved by this treatment.

Practical Conclusions.—Lastly, I shall venture to repeat here the conclusions I arrived at many years ago concerning the great value of the alcoholic treatment of low fevers and inflammations. Increased experience has afforded further confirmation of the correctness of the statements made in the paragraphs below. I do not, of course, refer to slight cases of fever, pneumonia, etc., in which no stimulant whatever may be required, but to *very severe cases of disease* only.

1. In what appeared hopeless cases, as much brandy as the patient could be made to swallow (an ounce and a half to two ounces in an hour) has been given for several hours in succession, and then as much as thirty ounces a day for several days, not only without producing the slightest intoxication, vomiting, or headache, but the treatment has been followed by recovery.

2. I would adduce the fact that a man not accustomed to drink, when suffering from acute rheumatism, complicated with pericarditis with effusion, pneumonia at the base of one lung, and pleurisy on the opposite side, has taken twenty-four ounces of brandy a day for eleven days; the tongue being moist and the mind calm during the whole time. While under this treatment, inflammatory products were absorbed, and the general state of the patient much improved.

3. I have been compelled to give a very weak child, weighing less than four stone, twelve ounces of brandy a day for ten days, while suffering from acute rheumatism with pericarditis and effusion. This quantity did not produce the slightest tendency to intoxication, or exert other than a favourable effect upon the disease. The patient did not begin to improve until the quantity of brandy, gradually increased, had reached the amount stated.

4. I would state that among the general conclusions I have arrived at, after carefully watching more than one hundred serious cases of acute disease treated with large quantities of stimulants, are the following:—*That intoxication is not produced; that delirium, if it has occurred, ceases, or is prevented from occurring at all in the course of the case; that headache is not occasioned; that the action of the skin, kidneys, and bowels goes on freely; that the tongue remains moist, or, if dry and brown, often becomes moist; that the pulse falls in frequency and increases in power; that respiration is not impeded, but that, where even one entire lung is hepatised, the distress of breathing is not increased, and it appears that the respiratory changes go on under the disadvantageous circumstances present as well as if no alcohol had been given.*(b)

The conclusion from all this is, most certainly, that alcohol does not do harm in fevers and acute inflammations; that it does not produce intoxication in persons suffering from exhausting diseases; and that large quantities (from twelve to thirty ounces) may be given in cases which appear very unlikely to recover, and sometimes the patient will be saved. The conviction is forced upon the observer that, in desperate cases, these large quantities of alcohol are directly instrumental in saving life, not by *exciting or stimulating to increased action, but by moderating actions already excessive*, and at the same time by causing the heart to contract more vigorously, and so continue to drive the blood through the impeded capillaries.

ORIGINAL COMMUNICATIONS.

REPORT OF A

CASE OF DOUBLE MONSTER,

WITH AN ACCOUNT OF THE INTERNAL ARRANGEMENTS, AS SHOWN FROM A POST-MORTEM EXAMINATION OF THE BODY.

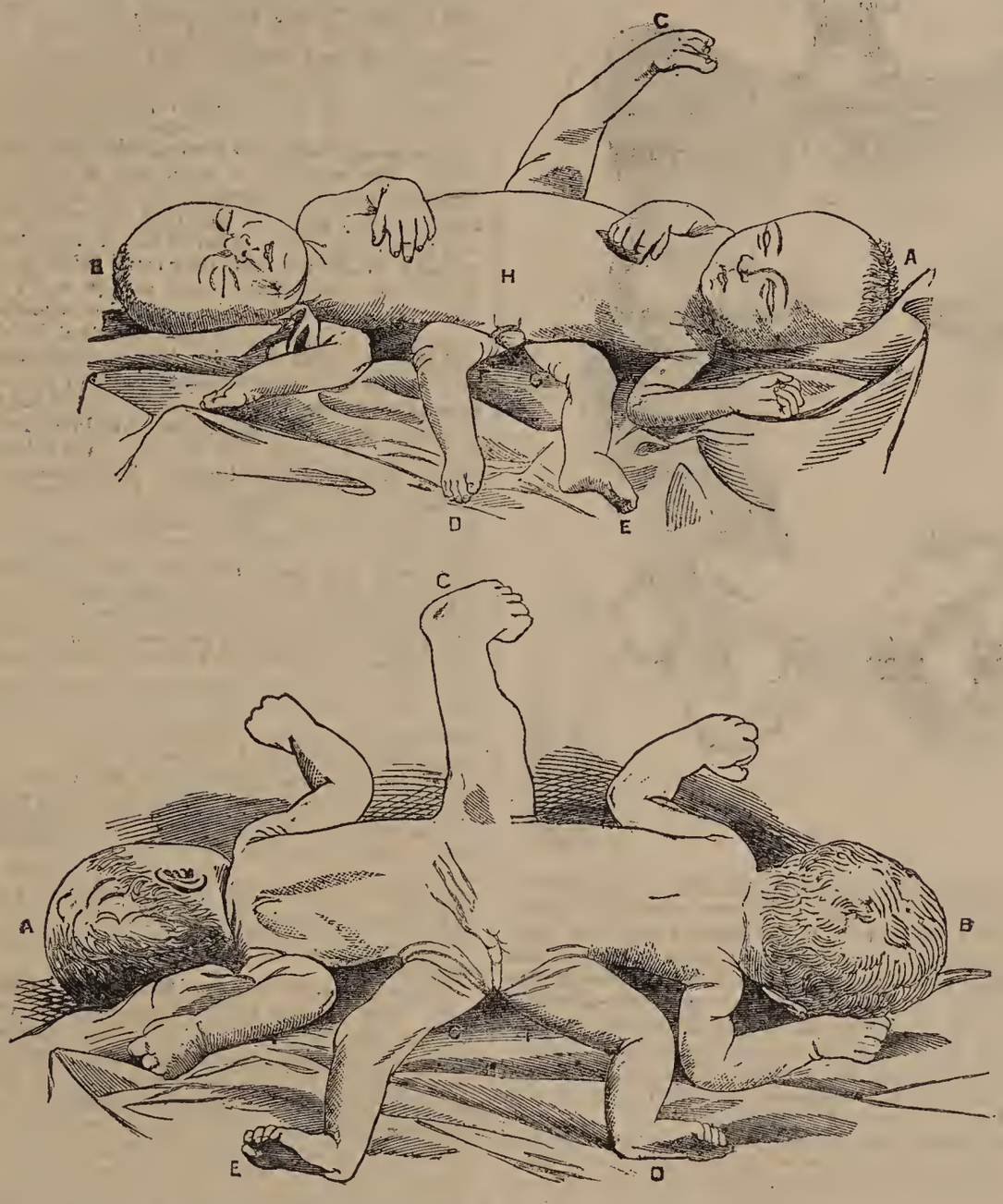
By WASDALE WATSON, M.R.C.S. Eng. and L.A.C. Lond.

The case being an intricate one, I must refer to the letters upon the photographs and drawings, fearing I might confuse myself and others without some such guide in the rather detailed description, which I think will be read with interest by many of my professional brethren; the pictures are very correct representations.

On the morning of June 10, 1872, I was requested to visit Mrs. D., the wife of a hairdresser in this town; she was stated to be in labour of her ninth child. I arrived at the house at 8.30 a.m., ascertained she was taken ill at 3 a.m., but, being a month before her proper time, she did not think at first it could be labour. The liquor amnii escaped at 6 a.m.; at 9 a.m. the os uteri was fully dilated, presentation normal, first position, pains irregular and feeble, and continued so nearly two hours, when the head, A, was expelled, requiring but little effort. At least twenty minutes elapsed before any further expulsive power occurred, but when it did it was continued and very violent, the result being the birth of the double monster, which had the appearance of eight-months children; total weight, eight pounds and a quarter; length from top of head, A, to top of head, B, twenty-two inches. Respiration was immediately established, and both cried vigorously. A was born first; the double leg, C, was under its right arm, the two legs, D and E, were doubled up across and above the umbilicus, H; F and G represent the position of two very distinctly formed vaginæ—urine frequently passed from the urethra of the one marked G; the double leg, C, had ten toes blended together, two tibiæ, two fibulæ, and two patellæ upon it, but only one femur, as will be seen delineated in the drawing of the pelvic bones, to which I will presently refer. The placenta was thrown off immediately, it was single, but very large, and the post-partum hæmorrhage was so profuse as to produce fainting twice. In the course of an hour the uterus contracted firmly, from which time the mother has gone on uninterruptedly well. I now examined the united children more carefully: they were fully developed to about the centre of the body, where the two coalesced without the least noticeable indentation or mark of any kind showing where the union was exactly situated (the front and back

(b) *British Medical Journal*, 1863.

views in the photographs show this very well). They both took some spoon food, and from the first A was the strongest. In about three hours B began to show signs of dissolution, and, as they seemed to be distinct beings, but united, they were baptised. The most remarkable and almost incredible part of the story remains to be told. Six hours after birth, B to all appearance died; respiration ceased and the heart's action stopped, the half of the body (including the left half of the leg, c) became livid, the jaw dropped, was tied up, and that part was for six hours covered over as dead. A continued to take food when offered. The chance of separation occurred to my mind, but the tie seemed so inseparable (added to which the anus was imperforate) that I banished the idea. B at this time was dead to all intents and purposes, but, watching it for a short time, I discovered the fact that it had again commenced to move, and imperfect respiration was set up. It soon passed into a state of tranquillity again. About every fourth hour, after the same thing occurred in a greater or less degree: the muscles of the face acted and produced distortion of the features, the tongue protruded

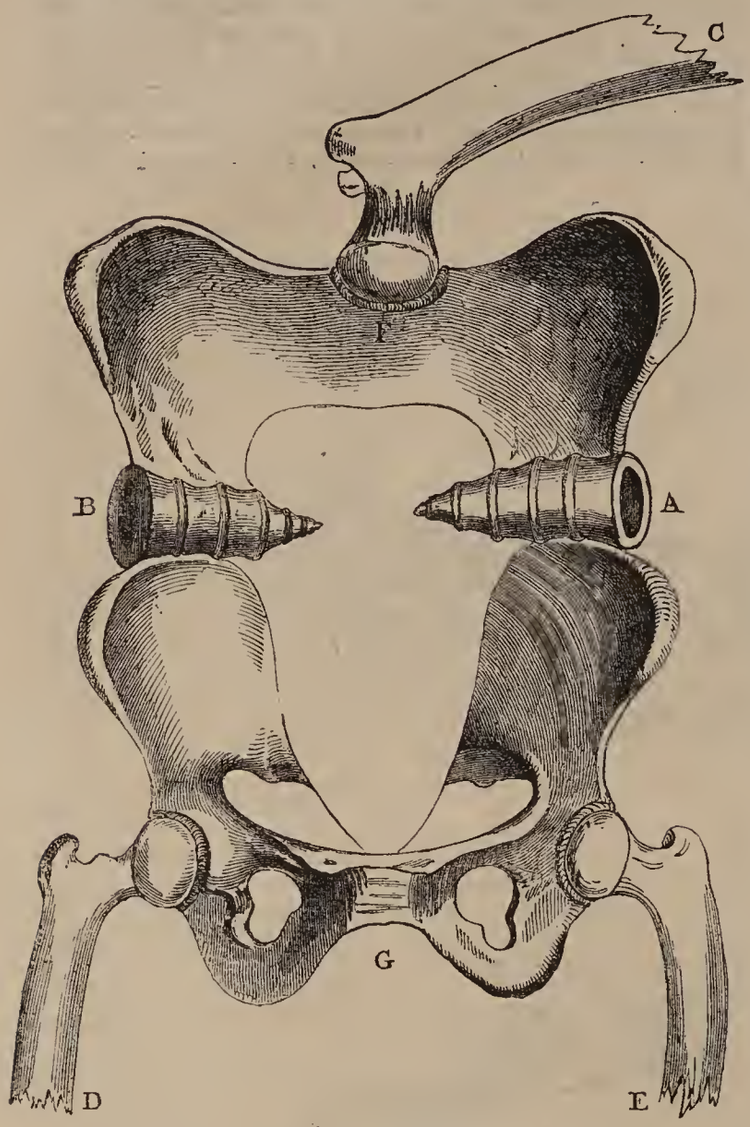


and was retracted several times, vigorous attempts at breathing, and visible pulsation in the carotid artery upon both sides. About twenty-six hours after birth A began to show indications that she must succumb, and her breathing became gradually more impeded until an hour before death, when, after a violent and loud cry, the nervous force seemed so immediately communicated to B that it struggled violently, most of the livid hue passed away, respiration continued regular for twenty minutes or more, and it cried with considerable sound; but the action of the heart not being re-established, the efforts were futile—a severe and very well marked convulsion definitely put an end to B, and about half an hour afterwards A had three fits successively, and then ceased to breathe, the heart's action continuing for some ten minutes later, when it died, as nearly as possible thirty hours after birth. At one time, twenty-six hours after birth, the vitality seemed so intense in B that I immersed it in very hot water, as it really seemed to want only the heart's action re-established to make them live. The want of perforation to which I have before alluded I believe to have been the sole cause of death, from the state of the interior of the body revealed at the post-mortem examination.

My assistant and a practitioner of the town witnessed the astounding phenomena to which I have just alluded with equal, if not greater, surprise than myself.

Sectio Cadaveris, made twelve hours after death.—Bodies(?) well nourished, and large for eight-months children. On opening each thorax the heart and lungs of both were found healthy, but the lungs of B were congested; the livers were united laterally, but were quite perfect; the stomach and bowels were perfect in each, until the termination of the ileum, when both blended into one colon, which was enormously distended with meconium, lacking the normal exit, had which been natural, I detected no other reason why they should not have lived. The spleens were normal, and properly situated; the supra-renal capsules and kidneys were right, except the left kidney of B, and that was at least two inches from its capsule, and deep down at the point F in the curiously formed pelvis, of which I have sent a drawing taken in pencil by a friend who is a novice at anatomical drawing, but who nevertheless has succeeded well in conveying to the mind a very good idea of the actual appearance. The bladders were perfect, and united by a small tube; there was urine in both, but no

separate outlet to the one near to the letter F. The uterus and appendages to that side were small, but perfect; to the opposite side all was natural and larger than the other, a vagina leading up to the os, and the hymen perfect.



I cannot comment much upon this remarkable case, only to mention that the mother was most desirous to see the "Two-headed Nightingale" who was in the town some time ago. She did *not* see her, but was much interested in looking at one of the large placard drawings of her, which she saw in the early part of March. On June 10 she was confined—a month before her time; so in March she would be just five months gone. I question the possibility myself, but she is very positive about the effect she felt at the time and ever since. On my telling her the child was deformed, she asked immediately if it was like the "Two-headed Nightingale."

Copies of the photograph, in large or small sizes, may be had of Mr. Villiers, photographer, 8, Commercial-street, Newport, Monmouthshire, who took great pains to secure a good picture.

Newport, Mon.

PUERPERAL DISEASES TREATED WITH TURPENTINE.

By E. COPEMAN, M.D., F.R.C.P., F.R.C.S.

(*Continued from page* 4.)

Case 11.—Mrs. B., aged 26; confined with her first child on December 12, 1862. Her labour was very tedious, owing to a narrow outlet of the pelvis, requiring the use of the forceps, and the perineum was ruptured. On the following day her pulse rose to 100, and on the 14th she had pain in the uterine region, the abdomen became tumid, and the pulse rapid; and, although there was no history of any decided rigor, it was feared that puerperal mischief was going on, and a few doses of turpentine were given.

On the 15th she had a turpentine enema, but she had no relief from the bowels; and the next day, the symptoms remaining the same, she had a second enema, which was followed by three motions, and then an opiate was given at bedtime. The lochia stopped, and the milk, although not gone, was less in quantity. There was also an unhealthy smell from the vagina, which was well washed out with warm water. I did not see her again, but was informed by her Surgeon that, by continuing the treatment, and after several days of uncertainty as to the result, she at last made a good recovery.

Case 12.—Mrs. B., Harleston, aged 22. Summoned hastily in the middle of the night on February 6, 1863, to this lady, who had been confined with her first child about ten days before. Her labour was easy and natural, and she went on well until the 31st, when she passed a large clot, which the nurse described as very offensive, and this was followed by rather severe loss. She had also at the same time a shivering fit; and a recurrence of this had taken place once or twice a day up to the time of my seeing her, each chill being followed by a hot and sweating stage, and accompanied with sickness and a rapid pulse. The secretion of milk was plentiful, the lochia had diminished since the hæmorrhage on the 31st, and had almost ceased when I saw her. I arrived at five o'clock in the morning, and found her with a pulse at 135 or more, but with a cheerful manner, wondering how they could think it necessary to send for another medical man, and at first sight appearing less ill than I expected to find her. There was no abdominal swelling or tenderness, no headache, milk secreted, lochia almost stopped and scarcely at all offensive, but very glutinous, so that each napkin had hair upon it pulled away by its removal. I found the vagina hot, and the cervix uteri tumid, but there was no pain or tenderness. Her tongue was but little furred, but inclined to be dry. She was said to look much thinner; her skin was warm; her mind undisturbed. Still there was something very wrong about her altogether, and before I left she had another shivering fit, with slight sickness. It lasted a shorter time than some of the former ones, and during the time her pulse was over 140, and her countenance looked anxious and depressed. She had been taking quinine and as much support in the way of wine and beef-tea as her stomach would bear. We agreed to give her port wine freely, and two grains of quinine every four hours, to cover the abdomen with a turpentine stupe, and, when the fit was over, to administer a turpentine enema, followed by an opiate, if restless. I longed to give some turpentine internally, but the tendency to sickness seemed for the present to preclude it.

The account the next day was as follows:—"7 p.m.: There has been no return of sickness. Soon after you left the reaction was greater; skin hot; pulse 135; respiration 22. On my visit at noon she was again better, quiet, cheerful, and comfortable; skin warm; pulse 125; respiration 20. At 4 p.m. I administered the enema, which produced a copious evacuation, inclined to be knotty, but otherwise healthy. Pulse then 120; respiration 20; but both were somewhat accelerated by the operation."

Her surgeon wrote again to report as follows:—"7th, 7.20 p.m.: Mrs. B. had another and rather more severe shivering fit last evening, which lasted about half an hour, and was followed by vomiting, prostration, and rapid pulse. The tonic was vomited, as well as everything she took. I applied a mustard poultice, and gave soda-water and brandy, and, when she had somewhat rallied, fifteen drops of liq. opii sedat., after which she became quiet, slept at intervals, and took nourishment. The pulse last night, when I left her after the attack, was 145, this morning 125, and this evening just now 120. No hurried respiration; she has not had a rigor to-day, nor any vomiting since last night. As she expressed a wish for some champagne, I gave permission, with directions that the port wine must not be omitted. Mrs. B. lost a brother with low fever some years ago, and they all have a tendency to it when ill."

"10th.—7 p.m: I received your polite note this morning, and am sorry I cannot give so satisfactory an account of our patient as I should like. She has not had a return of the chills since the evening before last, but is much weaker. This morning she was very prostrate; pulse 125, and feeble. She had passed a comfortable night, without sickness, but the bladder had not been relieved since my visit on the previous evening. I applied fomentations, and gave a little gin instead of brandy; and finding on my next visit—three hours after—that the bladder was getting full, I passed a catheter, and drew off a pint of high-coloured urine. Her tongue just before this was dry and brown, but it is again moist and tolerably clean; her pulse varies from 125 to 128. She is just now rather hot; tongue moist; respiration 29; countenance rather anxious. A turpentine enema has produced another evacuation of good colour,

plentiful, and rather lumpy. She will be glad to see you again to-morrow morning."

11th.—I saw her at about noon to-day, and stayed with her three hours; she was rather better than earlier in the day, from having had a nutritive injection of broth, etc., which comforted her. She had taken small quantities of milk and lime-water, champagne, brandy, and soda-water, but generally rejecting them after a time when a certain quantity had been put into the stomach, except the champagne and her quinine mixture, which had not returned. Countenance and general expression better than when I last saw her; pulse 120, and rather firmer; no more chills; no headache or confusion of thought; still required the catheter; abdomen not tender, but vaginal discharge, although small in quantity, possessing the peculiar smell of puerperal disease. She was sick while I was there, vomiting milk and whatever else she had taken for several hours, but without the slightest effort or previous nausea. I longed to give her turpentine, and, as she was sick without it, I thought it right to give it a trial. We therefore gave her half a drachm with a little brandy and a few drops of Battley, and she took it without difficulty. The stupes were continued as well as the vaginal washings. She was not sick again before I left, neither had the nutritive injection returned; and from her general appearance I hoped, with the aid of turpentine, she might recover. She could not continue the port wine.

12th, 6 p.m.: From her surgeon:—"Yesterday morning she had a slight chill, not followed by sickness but by gentle heat and profuse perspiration, at the end of which her pulse was 100, soft and not very feeble. Soon she became warm, pulse 120, and in the evening hot with pulse 125, and about 9 p.m., whilst I was passing the catheter, a more decided chill came on, when the pulse became very feeble and too rapid to count; after this she was sick. We gave a nutritive enema (beef-tea and wine), after which she rallied. I emptied the bladder and left her warm, but feeling very weak; pulse 135. She has slept pretty well since, taking milk and lime-water, wine, soda-water and brandy, as before; has not been sick, and her pulse is now very feeble and about 100. As the chills have returned since I wrote to you before, and there have been no symptoms to determine local mischief, I have given quinine again in increased quantity. May I give turpentine too? for she says she misses her tonic. The peculiar smell is very much less." I wrote in answer that I should certainly continue the quinine, and the turpentine externally, as also in the form of enema should anything be required for the bowels, but that I thought if there were no local symptoms we might dispense with it internally, although if abdominal or uterine pain came on I would resume it at once.

16th.—Surgeon: "I am sorry to give a very bad report of our patient to-day. She seemed much the same until yesterday morning, when she was seized with violent pain in the epigastrium, catching the breath, which I thought diaphragmatic. A dose or two of ammonia, opium, and ether, with turpentine fomentations, relieved her pain, and she breathed tolerably; her countenance, however, was very anxious, and last night cough set in and decided pneumonia. I gave early this morning a half-drachm dose of turpentine, which relieved her very much, and was the only thing she had retained for some hours. I have repeated it every four hours, but she seems to be sinking; respiration 40, pulse 150, clammy perspirations, and increased prostration. I don't know what more we can do. She takes no nourishment but wine, and we can hardly get that down now." The patient died next day, and I regret to say a post-mortem examination was not allowed.

Case 13.—Mrs. S., aged 33, the mother of six children, the last born on Thursday, October 10, 1867. The labour was natural, but on the following day she had a shivering fit, followed by rapid pulse, hot skin, and severe abdominal and uterine pain. On Saturday she had pain in the left groin and calf of the left leg, and in the evening I was called to see her. I found her skin very hot and pulse very rapid—145 or more; local discharge offensive, but the abdominal pain had been very much relieved by turpentine, which had been given internally, and also applied externally to the abdomen. There was no abdominal swelling, but some tenderness in the iliac regions. Her bowels had been well relieved in the morning. Head not affected, vagina hot and tender, and she complained of severe pain in the lower part of the back; there was also some tenderness in the left leg on passing the hand over the calf, for which we recommended turpentine flannels. She also continued to take one-drachm doses of turpentine three times in twenty-four hours, and it was applied freely to the abdomen.

October 13.—Skin cooler, and pulse 130; lochia offensive; vaginal washings used twice a day with a little of Condy's solution; head clear and manner good; pain in leg much relieved, and very little pain in the abdomen; no sickness. To take sp. tereb. ʒj. twice a day, and an anodyne if required. Beef-tea and a little port wine occasionally.

15th.—Took ext. opii gr. j., and had a quiet night, and yesterday had her bowels relieved by a turpentine enema. Pulse still 130, and skin very moist with perspiration. Abdomen neither tumid nor tender, but blistered by the turpentine. She complained of sore throat, and we found the fauces and uvula aphthous. Ordered more wine, a gargle with chlorate of potass, tr. ferri sesqui. mxx. ter in die, and an opiate at night if required.

16th.—Skin more natural, and pulse a little less frequent. Had some uterine pain in the night, followed by coloured lochia and the expulsion of a few small clots; discharge very little offensive. Vaginal washings and other treatment continued, with the exception of turpentine internally, as her stomach rather rebelled against it.

17th.—Last night she became very restless, and her surgeon was obliged to stay with her several hours in the night to endeavour to keep her quiet, which he effected at last by making her inhale chloroform, after which she had some comfortable sleep, and is quite rational and quiet this morning. No pain either in abdomen or leg. Bowels relieved two or three times yesterday, but not too much. Breasts a little tender, but not enlarged. Lochia muco-purulent and not coloured to-day. Throat better; pulse 120. Tongue slightly furred and reddish at the edges, but better than yesterday. To continue the tinct. ferri sesquichlor., adding tinct. hyos. mxx. to each dose.

18th.—Pulse 108; tongue cleaner. Had a quieter night, but is very desponding. She complains of pain, or rather dull aching, from just above the pubes to the sacrum, and there is still muco-purulent discharge from the vagina. Ordered a linseed poultice sprinkled with laudanum over the pubic region.

19th.—Pulse 96; tongue cleaner. Less abdominal and sacral uneasiness. Had a good night, but is desponding, and thinks herself no better. As she had no relief from the bowels yesterday we advised another turpentine enema (half a pint in quantity), with forty drops of laudanum, and to be kept up as long as she could bear it, hoping still further to relieve the sacral pain of which she yet complains a little. Discharge muco-purulent, but much less offensive. Treatment and vaginal washings continued.

20th.—In better spirits and almost free from pain. Pulse 120. Tongue cleaner, but she complains so much of dryness of the mouth that we discontinued the steel and gave her quinine. Bowels acted well yesterday. It appears that after each of her confinements she has had an inclination to despondency.

21st.—Had a quiet night, but did not sleep much. Is again in low spirits, but pulse down to 108 and tongue quite clean. Last evening I thought there was more fetor in the room, and this morning there is freer muco-purulent discharge of an offensive character, but no pain in abdomen or legs, very little (and that only occasionally) in the back, and no tenderness on pressure. The stomach has lately been so tractable that we gave turpentine again, hoping thereby to improve the quality of the blood.

22nd.—Sensorium rather disturbed and discharge still offensive, but no chill or abdominal pain. Pulse 120; tongue clean. Only quinine given to-day.

23rd.—Had a restless night, and in the morning became more desponding, and refused both medicine and food, saying it was of no use, she was too wicked to have anything done for her; also that it was not right to try to save her life, and other such-like expressions. In the course of the day she became violent, and endeavoured to strangle herself with the sheet, and it became necessary to handcuff her for an hour or two. In the evening she was quieter, but still very unwilling to take anything. Her bowels were not relieved yesterday or the day before, so a calomel powder and turpentine enema were given to-day, which brought away a healthy but lumpy motion. I found her lying on her side, and she answered my questions rationally. Pulse 108, not weaker; tongue clean. She appeared upon the whole to have rather more general strength.

24th.—Had two or three attacks of mania in the night, but slept at intervals after a dose of morphia. We found her this morning in a sullen, obstinate state, refusing both medicine and nourishment. Pulse 108; tongue clean; skin warm;

lying on her side and sensible, but answering questions unwillingly. She positively refused beef-tea, but we prevailed upon her to drink a wineglassful of milk. Bowels not sufficiently open; discharge much diminished and less offensive. To have an enema in the evening if required.

26th.—Pulse 108; tongue clean; abdomen rather full; no relief. A turpentine enema produced in the course of the day a good motion. For the last two days she has passed her water in bed, and will scarcely answer questions or put out her tongue, and when she does put it out it takes her almost as long to return it. I think and hope there is now more or less of the hysterical element in her case, and that her chances improve.

27th.—Takes food a little more willingly, but still passes urine in the bed, and dislikes to be disturbed; pulse 120; very little discharge from the vagina, and that not offensive. Took a dose of morphia last night, and is to have a turpentine enema again to-day.

28th.—More awake this morning, and asked a question or two about herself. Pulse 120; tongue clean; has passed water once in the bed-pan. She had two grains of calomel yesterday, and another turpentine injection this morning, which is still retained. No pain anywhere, but sensorium dull. Had a potash and rhubarb draught in the course of the day, and two large enemata, but no relief from the bowels followed, nor did the injections return. We have for several days felt a fulness in the abdomen, which we attribute to a collection of fæcal matter in the colon.

29th.—Had a restless night until 5 a.m., when she was quieted by an opiate and got some sleep. Sensorium still very dull, and it is difficult to get her to speak; has a good deal of perspiration, and looks exhausted. Pulse 120; would not put out her tongue. Having still the impression that the bowels were loaded, and finding her hands and wrists almost in a state of tonic spasm, as if from intestinal irritation, we introduced a long tube a foot or more up the bowel, and injected three pints of soap-and-water, with two ounces of castor oil, and half a pint of brandy; the result of which was that it soon returned, bringing a good many lumps of fæces with it, and was speedily followed by large quantities of pulpy fæces and wind, which she expelled with a good deal of force; but, although sensible of the uneasiness produced by the tube, she was not roused sufficiently to answer any questions. We tried to get down some egg, milk, and brandy, and hoped the large evacuation would after a while produce a good effect.

30th.—Passed an uncomfortable day, refusing food and disliking any disturbance. In the evening we drew off a pint and a half of high-coloured urine, which seemed to relieve her.

31st.—Had a quiet night and slept comfortably without an opiate; bowels not relieved and very little water passed. Has taken about a pint of milk-and-eggs since last evening, and occasionally answers a question. Pulse 96, and a little stronger. Took no medicine yesterday. She is evidently a little better.

November 1.—Quiet night; taking food a little more readily; looks better this morning, although it is difficult to get her to answer questions. Pulse 96; bowels not open; catheter. Ordered an injection of three pints of gruel and two wineglasses of brandy.

2nd.—Two full injections yesterday were followed by large evacuations of healthy fæcal matter, and, although somewhat exhausted with it, she brightened up a little and took milk, turtle-soup, etc., with less resistance. Pulse under 100; slept quietly without an opiate. To have a nutritive enema, with brandy, once in the day.

4th.—A long tube was passed again to-day, and several pints of gruel injected, which came away highly coloured with fæcal matter, together with some pulpy fæces; no scybala. She had a quiet night; is very listless this morning, and when induced to put out her tongue it remains some time before she retracts it. Objects to light, and dislikes being roused to answer questions. Passes water freely. Repeat the nutritive enema, with brandy.

6th.—A little more awake to-day, and takes food rather better. Pulse 84; has a good deal of mucous discharge from the mouth. Nutritive enema daily.

8 h.—Took a senna draught on the 6th, which acted three times. Slept quietly last night, and answers questions better. Pulse 72, feeble; tongue cleaner than yesterday, when it looked aphthous, and we ordered a borax and citric acid gargle. Has taken more freely the last twenty-four hours. We gave her one grain of quinine and fifteen minims of tincture of perchloride of iron twice a day, as there seemed to be a little blood in the urine and also slight exudation from the mucous membrane of the mouth.

9th.—Still some blood in the urine. General condition a little improved.

11th.—Sat up yesterday in her bed for breakfast, and entered into conversation more readily. As there had been no further relief from the bowels, some castor oil was given, which produced three motions, the first being large in quantity and large in size also. She was rather griped in the night, and did not sleep well, but talks in a more natural manner this morning, and takes more nourishment.

13th.—Was not so well last evening. Had a shivering fit in the middle of the day, followed by fever, and her pulse got up to 120. Seemed to have some intestinal irritation either from the effect of the castor oil or from having eaten a mutton chop. Has still a firm impression that she is too wicked to live, and ought not to take food to preserve her life. Her friends think her sinking, but I hope they are mistaken. It appears that she sat up on the side of her bed for half an hour yesterday, which probably produced some exhaustion. She is more composed this morning, and lies upon her side, and her pulse is 108. To continue the steel and quinine.

14th.—Passed a very comfortable night; pulse now 72; tongue clean; bowels not relieved since the 11th. Nutritive enema with brandy continued; has taken food more freely since yesterday.

15th.—Much the same; pulse not more frequent, but languid; bowels not open; has no pain; tongue clean. Ol. ricini ℥ij. stat.

18th.—Is better this morning than I have seen her yet. The oil acted satisfactorily, and she takes more solid food; pulse 72; spirits better, and mind collected.

25th.—During the last week she has been taking food more regularly, and sitting up a little while every day. She has also had one or two very large solid motions, occasioning some trouble and exhaustion in the effort to expel them. She continues steel and quinine. Urine quite clear; no discharge; general health improving, but she has still gloomy thoughts on religious subjects, and a degree of melancholia which proves her mind to be still in a somewhat disordered state.

I was not required to visit her again. She soon recovered sufficiently to leave home for change of scene and air, and gradually regained health and strength.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

SYPHILIS TRANSFERRED TO MOTHER THROUGH DISEASED OVUM.

(Cases under the care of Mr. BRYANT.)

Case 1.—*Cellular Membranous Ulcer of Leg—Syphilitic Disease of Tongue after many Miscarriages.*

Charlotte S., aged 34, a married woman, came under my care on March 13, 1867, for a syphilitic cellular membranous ulcer of the leg of nine months' standing, the ulcer having been the result of the softening down of an indurated swelling which had existed for two years. The sore was clearly cellular membranous. The woman had had nine children, or rather nine conceptions. The first was a living child; the next five were born dead at the sixth or eighth month; the last three were born alive. The youngest child was 3 years old. Since its birth the woman had had a sore tongue. She had had also a sore throat for seven years, this disease appearing during her pregnancy with the seventh child. There was no history of any local syphilitic disease. Under quinine and the iodide of potassium a rapid recovery took place. I did not see the husband of this woman, and consequently could not get any history of syphilis. The disease was apparently given to the woman through her offspring, which were rendered syphilitic probably through the father.

Case 2.—*Syphilitic Tongue of three years' standing in a Woman who apparently had been infected by her Husband, who had had Syphilis two years before Marriage.*

Mrs. L., aged 29, came under my care on April 4, 1867, for extensive disease of the tongue of a specific nature. She had been married eight years, and had had five children. The first child had had a "sore bottom and eruption"; the second and third were born prematurely at the seventh month, dead; the last two were born alive, and had not shown any symptoms of

syphilis. The woman had had a skin eruption, which appeared six weeks after the birth of her first child, eight years previously, and lasted nearly one year. Under treatment she recovered, and remained well up to three years since, when the disease of the tongue appeared, and since that time it had been more or less troublesome. Her husband had had syphilis two years before marriage, but had never had any symptoms since. The woman had never had any local disease. Under tonics and iodine, with the local application of the nitrate of silver, a good recovery followed.

Case 3.—*Syphilitic Keloid in Cicatrices of Cellular Membranous Sores, etc.*

Amelia B., aged 47, came under my care on March 8, 1866. She had been married for twenty-six years, and had given birth to five living children and had had five miscarriages. She had never had any disease affecting her genital organs. Her husband had had syphilis some years before marriage. For about two years after her last miscarriage she had suffered from sores all over her body. They were clearly of a cellular membranous nature by the cicatrices; for six months these cicatrices had been becoming hard. She came to me with marked keloid of the cicatrices, and cellular membranous ulcers on the legs and surface of the body. Her general powers were very feeble.

The iodide of potassium and syrup of the iodide of iron were given in quassia three times a day, and in two months the ulcers had healed. The "keloid," however, was no better.

Case 4.—*Specific Eruption over Face and Body following many Miscarriages.*

Ann W., aged 35, came under my care on February 12, 1866, for a tubercular eruption of her face of some months' standing, and of her leg of three years'. She had been married for fifteen years, and had never given birth to a living child. She had had seven miscarriages in ten years, the last being five years since. They all occurred about the third month. Her husband had had syphilis before marriage, but had been free from all indication of the disease for several years before. She had never had any local indications of disease of any kind. For some years her general health had been failing. Iodide of potassium and iron did this woman a great deal of good, and she left nearly well.

In this case it would appear as if the woman became infected through the ova, no symptoms appearing in her person till her general health had become materially deteriorated by seven miscarriages.

Case 5.—*Cellular Membranous Ulcer in Foot and Leg.*

Mary W., aged 41, came under my care on February 1, 1866, for a large cellular membranous syphilitic ulcer on the foot and leg of one year's standing. She had also the depressed irregular cicatrices of similar sores on both knees which had existed seven years before. She was a married woman, and knew that her husband had had syphilis before his marriage; but for two years previously he had been quite well, and had never shown any indications of disease since. She had been married twenty years, and before marriage was very healthy. Her first child was born alive, and is still living and healthy; the second was born alive, but died in the third month; the third was born dead at the seventh month. Three miscarriages followed at the third month. After these she first had ulcers in the leg. Under the iodide of potassium and iron this woman convalesced.

From the history of this case it would appear as if the syphilitic poison gradually became intensified in the woman after each conception, and at last culminated in her by giving rise to syphilitic disease in her own person. The woman appeared to have become infected through the ova, each succeeding conception showing more marked indications of syphilitic disease.

Case 6.—*Cellular Membranous Ulcer on Leg.*

Caroline B., aged 27, who had been married for seven years, came under my care on May 25, 1865, for a large cellular membranous ulcer of a syphilitic nature on the right leg. It had existed for several months, and had followed her last confinement, nine months since. This patient had never had any symptoms of local syphilis, nor any other of constitutional syphilis; she had suffered, however, from numerous miscarriages, and had had four living children. The first child was a healthy one, but died, aged 2. She then had five miscarriages at the third month. A living child followed, but this died at the second month. Four miscarriages then succeeded, after which a third child was born. A fourth also followed, and after the birth of this the ulcer appeared. The third child had a sore bottom after birth; the fourth is healthy. Under five-grain doses of the iodide of potassium and iron the woman gradually recovered. The husband of this woman was not seen.

Case 7.—*Cellular Membranous Ulcer on Leg.*

Sarah W., aged 30, a married woman, and the mother of one child, aged 6, which was born one year after marriage, came under my care on March 13, 1864, for a cellular membranous ulcer on her left leg of six years' standing. It was clearly syphilitic, and was associated with the depressed irregular cicatrices of similar sores on the right leg. There was no history of any syphilitic affection of the genital organs, nor of any other specific symptom. She had not had any miscarriage. The ulcers on the leg, however, came on after the birth of her only child. Iodide of potassium and iron were given, and a rapid recovery followed.

WEST LONDON HOSPITAL.

RETENTION OF URINE FROM FRACTURE OF DORSAL VERTEBRÆ—DEATH.

(Under the care of Mr. TEEVAN.)

[The following is extracted from notes by Mr. Read, former House-Surgeon]:—

W. W., aged 28, labourer, was admitted September 12, 1868. Is a well-made, healthy-looking man. A few hours before his admission, whilst at work up a tree, cutting off some branches, he had the misfortune to fall off, and, turning over in his descent, he struck the ground with his back, a distance of some thirty feet. He states that he heard and felt a distinct crack in his back. When admitted his lower limbs were completely paralysed and devoid of sensibility. Reflex movements could be produced by tickling the soles of the feet. Penis in a state of priapism. Crepitus was detected in the regions of the upper dorsal vertebræ. Pulse small and quick; respiration 30. The patient was put on a water bed, and the bladder relieved twice a day with the catheter.

September 13.—Passed a good night, but has been very sick after taking food.

15th.—As the patient's bowels had not been opened since his admission, a drop of croton oil was given in the afternoon, and a few hours later a free motion was passed. From this date the bowels were opened involuntarily. The patient remained in much the same state till the end of the month, when he got a low form of bronchitis, and died, on October 2, from asphyxia produced by the accumulating mucus which he was unable to expel.

On examining the spinal column, the spines of the first and second dorsal vertebræ were found broken off, and the laminæ of the third, fourth, fifth, and sixth were fractured on either side of the spines. There was but little displacement. The cord was soft and diffluent.

Royal College of Surgeons of England.—The following were the questions given at the examination for the diploma of Membership of this College on July 19 and 20:—Surgical Anatomy and the Principles and Practice of Surgery (July 19):—1. What is chimney sweepers' cancer? and where does it usually occur? Describe the appearance, microscopic characteristics, and treatment of the disease. 2. Describe the origin, course, and relations of the anterior tibial artery; and the operation for arresting hæmorrhage in punctured wound of this vessel in the middle of the leg. 3. State the different morbid conditions which render lumbar colotomy necessary. Describe this operation and the parts successively divided in performing it. 4. What are the diseases of the testicle in which you would perform castration? Describe this operation, the parts cut through in their order, and the derivation of the arteries divided. 5. State how fracture of the humerus at the elbow-joint is usually produced, and by what signs you would distinguish it from dislocation of the radius and ulna backwards at the elbow-joint. 6. What is cataract? Give its different forms, and the operation appropriate for each variety.—Principles and Practice of Medicine (July 20):—1. Describe a case of phthisis from the commencement of the disease to its termination. Give the physical signs and symptoms which may occur during the different stages of the complaint; also the appropriate treatment. 2. For what diseases might enteric fever be mistaken? and how would you distinguish them? 3. Name the drugs in the British Pharmacopœia used as diuretics. Give the indications for the employment of each, with their doses.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JULY 27, 1872.

THE PUBLIC HEALTH BILL IN COMMITTEE.

The rapid passage of Mr. Stansfeld's Public Health Bill through Committee of the House of Commons has evidently been a matter of surprise to a number of persons. The only point in the Bill which was at all seriously contested was that of whether boards of guardians should be constituted sanitary authorities or whether there should be a new sanitary county board established, consisting of county magistrates and representatives from the boards of guardians. The arguments in favour of boards of guardians, and, in the case of boroughs, town councils, were, in the first place, that they already exist, legally constituted authorities. With all the faults of boards of guardians—allowing them to be too frequently actuated by a niggardly economy, by a too exclusive regard for the interests of the ratepayers, and a too sensitive dread of increase of rates—yet there is no doubt that they are a class of functionaries who confer an enormous amount of unpaid-for benefit on the community. We believe that the majority of boards of guardians throughout the kingdom are actuated by a simple desire to do their duty, and to hold the balance fairly between the ratepayer and the pauper. There is no question that they give to the duties of their office a large amount of time and unrequited labour. In the next place, Mr. Stansfeld's concessions remove many of the objections which experience of boards of guardians might suggest to their being invested with the functions of sanitary authorities. The facilities for borrowing money at a moderate rate of interest for sanitary improvements will relieve them from the necessity for parsimony, and as half the stipends of the Medical Officers of Health and of the Sanitary Inspectors are to be defrayed from Imperial revenue, there will be little or no addition to local taxation for the purpose of meeting the working expenses of the measure. Then the Bill proposes that a committee of the guardians, which may include *ex officio* guardians, shall really constitute the sanitary authority, and the whole is to be under the superintendence and supervision of the Local Government Board. On the other hand, the proposal to form a new authority, in the shape of an untried county board, where every "Squire Western" would find the opportunity of maintaining his opinion or a pretext for airing his crotchets—and labourers' cottages are examples of the bucolic standard of hygiene—is simply to reject an existing machinery, which, although not perfect, is capable with proper checks of doing the work, for one which has never yet been tried, would probably work no better, and might possibly prove far more ineffective. Moreover, the enormous area over which a county board would have to extend its supervision is a consideration which stamps the proposal as Utopian. These arguments had their due weight with the House of Commons, and the result was that seven members only went into the lobby in favour of an amendment which would have taken the power of sanitary control from the boards of guardians. A majority of seventy-seven in favour of them shows conclusively that those few members of the House of Commons who care more about the health of the people than their dinner—for the division was taken at dinner-time—were convinced that Mr. Stansfeld's proposal was the best practical solution of the question.

The one creation of the Bill is that of Medical Officers of Health and Sanitary Inspectors throughout the country. The Medical Officers of Health may, and probably will, in the majority of cases, be the Poor-law Medical Officers. We congratulate these gentlemen upon the vista of improvement in status and stipend, and the higher class of duties which Mr. Stansfeld's measure opens to them. We have no doubt that they will prove themselves worthy of the confidence reposed in them by the Legislature, and that special care will be taken by them, as a class, to maintain a high standard of qualification for their duties. The proposal to make the first appointment for five years, which was carried in Committee, cannot reasonably be objected to. The Medical Officers will be eligible for re-election, and they must trust their chances to the influence of a conscientious discharge of their duties on local and public opinion.

Another principal point of interest contained in the measure as it emerges from Committee is the transfer which it makes of superintending power over the metropolitan water companies from the Board of Trade to the Local Government Board. The recent drought at Bermondsey, and the divided authority which the questions asked in the House of Commons on the subject brought to light, ought to reconcile the greatest opponents of centralisation to this change. It is to be hoped that the Local Government Board will prove themselves worthy of the trust and extension of power granted to them by Mr. Stansfeld's Bill. We have no fear that the medical department of the Board will fail in its duty. The arguments against centralisation lose much of their force in a country like England, where Parliamentary institutions are in force, and every Minister is responsible to Parliament both for processes and results.

The Corporation of London is to be the sanitary authority for the Port of London, which, we believe, extends from the Nore to Teddington. It says much for the character of Englishmen and the vitality of our institutions that a body which has come down to us from long before the Conquest is proving itself in the present day foremost in all measures of public good. The works which the Corporation in our time has accomplished would in any European city have been held sufficient to render illustrious a dynasty. We have no doubt that the measures taken by the Corporation of the City for the inspection of shipping and the exclusion of disease will be as thorough and as efficient as modern science, public spirit, and a sufficient outlay can make them.

IRISH MILITIA SURGEONS AND THE ARMY REGULATION BILL.

The militia surgeons of Ireland are agitating with spirit their claims upon Government for compensation for loss of emolument in the event of Mr. Cardwell's Army Regulation

Bill becoming law. The Irish Militia Surgeons' Association have issued an important statement on the subject. As this is a question which concerns the militia surgeons of England equally with our Irish brethren, and as the document sets forth plainly and concisely the claims of militia surgeons to the consideration of the Government, we give it entire:—

"1. Militia surgeons hold their commissions for life under various Acts of Parliament.(a)

"2. Their duties are—To attend the members of the permanent staff of their respective regiments; to inspect recruits wherever and whenever called upon to do so, and give opinions in writing as to their fitness or unfitness to serve in the force; to inspect those members of the staff and volunteers whose period of service has expired, and who wish to rejoin; to inspect volunteers coming up for training or embodiment, and see that they are in good health, fit for service, and free from contagious disease of any kind; to be present with the regiment during the training or embodiment.

"3. The pay of militia surgeons is derived principally from a capitation allowance for attendance on the members of the permanent staff and their families, and from the fees received for the medical examination of recruits, etc. In addition, the militia surgeon receives the same pay as surgeons of the line whenever his regiment happens to be called out for training, and, in Ireland at least, this is a most uncertain and unreliable source of income, as it occasionally happens that many years elapse without there being any training; previously to 1871, there was no training for five years. When training does take place, the surgeon's income from all sources may be roughly estimated at from £150 to £200 per annum. It should also be remembered that the surgeon has to provide himself with a very costly outfit, and has to share in all the mess expenses.

"4. The militia surgeons submit that they have always done their duties efficiently, and given satisfaction to their commanding officers.

"5. In many instances they relinquished their private practice, and went with their respective regiments on active service abroad, or on garrison duty in distant parts of Great Britain and Ireland.

"6. It is now proposed to deprive the militia surgeons of the chief portion of their emoluments, for, under the New Army Regulation Act, their services will *only be required during the training*. Thus the chief bulk of their pay, derived from the inspection of recruits and from attendance on the permanent staff, is to be taken away from them without any compensation whatever.

"7. In January, 1863, a circular memorandum was issued, directing that militia surgeons should in future reside at the head-quarters of their respective regiments. In compliance with this order many surgeons relinquished the private practice and appointments they had obtained in one locality, and removed to new homes at the head-quarters of their respective regiments.

"8. Under the new system the militia surgeons will be called upon again to leave their homes and give up their private practice, and be present at the training or embodiment at the new depôt centres. By this arrangement the surgeon's private practice, if he have any, and its emoluments, cease altogether; and should he hold some public appointment, such as a dispensary or hospital, he must (if allowed to do so by the authorities) provide and pay a substitute during his absence. For this increased expenditure and pecuniary loss the pay during the training is quite inadequate.

"9. Many militia surgeons, relying on the permanency of their appointments, have neglected to seek other professional posts, and will be cast adrift on the world should this contemplated measure be passed into law.

"10. It is contrary to all precedent, and contrary to the spirit of the Legislature, that any class of servants of the Crown, holding permanent appointments, should, without even any alleged dereliction of duty on their part, be deprived of the greater portion of their official income without compensation.

"11. In case the Government persist in abolishing the chief portion of their emoluments, the militia surgeons submit that they are entitled, in all equity and justice, to fair compensation."

We think that English militia surgeons will co-operate heartily and vigorously with their Irish brethren in demanding compensation from the Government in the event of Mr. Cardwell's Bill becoming law. There are many precedents for compensation under somewhat similar circumstances—such, for instance, as certain officers in the Court of Chancery, whose offices were abolished in 1842; officers whose appointments were lost in consequence of the Irish Church Act, 1870; and of proctors on the reform of the Ecclesiastical Courts.

(a) See Militia Acts, 42 Geo. III., cap. 90, sec. 78.

FATALITY OF CHOLERA IN HOT CLIMATES.

We have a book on our table which is well worth the attention of the physician, the economist, and the politician, especially at the present time, when the cholera cloud looms threateningly at no great distance. It is by Dr. Pellarin, a retired surgeon of the French army, and treats of a double subject—of the general hygienic condition of hot climates, and of the cholera; and it is full of the wisest lessons, both as to the manner of propagation of cholera and the means of checking it, and as to the conditions which render populations peculiarly susceptible of its ravages.(a)

The cholera epidemic which serves Dr. Pellarin as the base of his observations, was that which ravaged Guadaloupe in 1865. Under the name Guadaloupe are signified two adjoining islands in the West Indies—one called Grande Terre, the other Guadaloupe proper. The latter has a series of mountains; the Grande Terre is flat; the level and inhabited parts of each are the swampy detritus thrown up by the sea, and in the larger island the detritus of the mountains. The Grande Terre is composed of alternate layers of sand and clay, and has no rivers; its inhabitants use for the most part rain-water preserved in tanks, because the abundant supplies detained by the clayey strata are too brackish and impure for drinking. The island of Guadaloupe proper, being mountainous, has a rainy season, and abundance of streams, which run into the sea on the eastern side, as is the case in South America. These streams abound in earthy and organic matters, and are both scanty and impure in the dry season.

The population of the islands consists of about 13,000 whites, 9000 East Indian coolies, 90,000 negroes, and 30,000 mulattoes. Dr. Pellarin describes the coolie importation as unsatisfactory in all senses—scarcely remunerative to the importer, and fatal to the coolies. With regard to the negroes, he abhors slavery or the notion that one man can be the property of another; but he equally detests the modern humanitarian *doctrinaire* notion that all men are equal. Absolute political equality between the white and black races, in a climate unfavourable to the white, means supremacy of the black and extinction of the white—a consequence which speculative philanthropy perhaps never took into account.

As for acclimatisation of the white races in the tropics, Dr. Pellarin looks on it as a myth. The individual withers and dies early. The race must perish unless it amalgamate and be transformed into the creole. Such an amalgamation, says Dr. Pellarin, is shown to be *natural* by the two tests of love and fecundity. By these magic rings he says nature evokes that most beautiful type of woman, the creole, out of two races, one of which must perish if left to itself. If there have been faults in these unions, he can only say with his namesake Dr. Ch. Pellarin, *Felix culpa!*

The picture which Dr. Pellarin gives of the food, clothing, dwellings, and hygienic surroundings of the Guadaloupe population is painful. The food is scanty and poor, and he protests earnestly against the opinion maintained commonly, and even by a scientific hygienist like Michel Lévy, that a poor diet suffices for a hot climate. On the contrary, he argues that the greater the struggle for life—and this struggle is tenfold intensified in hot climates—the ampler should be the store of conservative forces, and amongst these good diet and wine take the first place. If concentrated nitrogenous articles be unsuitable—which may be admitted—there should be a large compen-

(a) "Hygiène des Pays Chauds. Contagion du Choléra, demontrée par l'Epidémie de Guadaloupe." Par A. Pellarin, Docteur en Médecine, Médicin Principal de la Marine, etc. Paris: J. B. Baillière et fils. 1872.

sation in the way of saccharine and mucilaginous substances, of which ripe fruit constitutes the type. Ripe fruit is not a cause of dysentery. The diet of the poorer classes and of the coolies, of salt fish or salt pork with rice or bread or manioc, is notably deficient in quantity, stupidly monotonous, and often of bad quality. The clothing of the labouring population is absurdly managed, and insufficient for health and cleanliness. Often, says Dr. Pellarin, he has seen medicines abundantly supplied to families where cholera was passed from one to the other by the use of scanty and infected linen. When to all these conditions we add insalubrious habitations, unwholesome water, and a marshy soil, so that fever and dysentery are permanent institutions, we have shown a population fit to be mown down by the cholera scythe. The dysentery is clearly shown, by experiments on soldiers, to be caused by impure water, and to be prevented by the selection of a purer source.

Here, then, we have all the elements necessary for a fatal epidemic, and most especially a water-supply habitually contaminated by the excreta of the population, whether through the streams, or through the rain which at first falling always becomes impregnated with poisonous dust. Hence some persons have affirmed that the cholera was not imported into Guadaloupe, but self-generated out of the noxious elements always present. It is against this doctrine that Dr. Pellarin argues, and most convincingly. He shows that, although propagated by existing conditions, the cholera was imported; and the moral is, that communities who wish to save themselves will take precautions against importation, or, if this cannot be, will at least provide energetically for the isolation and disinfection of the earliest cases. It is significant that the first indigenous case in the larger island of Guadaloupe was that of a washerwoman.

HEATSTROKE AND SUNSTROKE.

The recent high temperature and the notices of death by sunstroke in New York have created in the minds of the public a certain interest with regard to the condition to which these names have been applied. Moreover, in the recent deaths in New York it was noted that a very considerable proportion of them occurred between midnight and six o'clock in the morning—a period during which there is little sun, and what there is is weak in point of heat-force.

In fact, the word "sunstroke" is very nearly a misnomer. Certainly cases of sudden death do occur from exposure to the full power of the sun's rays, especially if no care has been taken to protect the head and keep the body cool; but these cases are not nearly so numerous as those which take place within cover.

The condition is really one of what we now call hyperpyrexia—*i.e.*, excessive bodily temperature—from exposure to heat. The bodily temperature goes on increasing; by-and-by it reaches the point of danger, and ultimately that of certain death. It is only very recently that this has been made quite clear to us; but, being made clear, it explains much that was previously unintelligible.

Turning to the accounts we have of the malady from India, we find the first account of it in 1834. A field officer's funeral was to take place at Madras. The men of the 68th Regiment were turned out in the afternoon to attend the funeral in stocks and buttoned coats. Several men fell down in the ranks, and three died; but eight or nine were brought into Hospital that same evening and some next day. On them the effect was gradual, not immediate.

The fatal march of the 43rd Regiment from Jubbulpore to Calpee affords a terrible instance of mismanagement and many examples of heatstroke. The regiment had to encamp, at the hottest season of the year, in the bottom of a valley with almost perpendicular sides. The temperature here was from 110° to 115° Fahr. in the largest tents, and 127° in the smaller. The temperature at night was as much as 105°. The men were carried stricken with the heat into the hospital tent at all hours of the day and night. Two officers and eleven men died.

When the 19th Regiment was stationed at Barrackpore many cases of sunstroke—sixteen in all—occurred. It was noticed by Mr. Longmore that the season was not only unusually warm, but that there was little difference between the day and the night temperature, owing to radiation from the soil after nightfall, the season being unusually dry. This skilful surgeon, too, pointed out that the condition was much more likely to occur in a contaminated atmosphere—such as of a barrack-room. The reason of this is not far to seek. As pointed out in the case of the 43rd Regiment, the smaller tents had a higher temperature than the larger—that is to say, those were the most contaminated which were most heated by heat given off from the human body, and so these were most likely to give rise to excessive bodily heat.

Now apply the same ideas to our cities. In the narrow courts and alleys, where no ventilation is, it is hardly possible to believe the amount of heat in the rooms unless you have experience of it. In these places, where human beings are crowded together, when the heat of the day has been left behind, uncooled by rain or watered streets, with the heat of cooking superadded, and finally the bodily heat of the inmates it is not surprising that by two or three in the morning the heat is greater than at midday. It is, besides, a well-ascertained fact that weakening influences—as intemperance, bad living, or exhaustion, such as are likely to operate most on the inhabitants of these places—are powerful predisposing agencies to over-heat.

Moreover, it has been noted in almost all cases which come on gradually that for some time before the heatstroke developes itself the individuals have lost the self-regulating power which most men possess with regard to heat. They have ceased to perspire. As is well known, a human being can stand a temperature which will cook a beefsteak, provided the skin is freely open, and there is free transpiration: it is only when this ceases that there is danger.

The phenomena of excessive bodily temperature are better known to us in connexion with disease than with regard to heatstroke. The hyperpyrexia of typhoid, rheumatic fever, and pneumonia have all been carefully studied. With regard to them we know that a temperature of 105° Fahr. is a grave symptom, as indicating extreme gravity in the malady; but if the temperature goes beyond 106° we have another element of danger superadded—we have the high temperature itself; for it may broadly be said that a temperature of 109° is incompatible with life, or, at all events, recovery.

In these cases of excessive bodily heat it is frequently noted that, supposing the disease be acute rheumatism, the perspiration, which is commonly so marked a sign of the malady, abruptly ceases, and the temperature begins to go up. The increase once begun goes on rapidly, until within a few hours the case has passed from the doubtful to the hopeless stage, and nothing can be done. But fortunately later research has shown the value of treatment in this doubtful stage. Dr. Wilson Fox and others have shown that by directly attacking the bodily heat, by abstracting it by means of cold water, iced cloths, and the like, the temperature of the body may be reduced to a degree compatible with life, and convalescence ensues.

In dealing with heatstroke the same principles must prevail. We must first of all determine the bodily temperature, and from it we must judge of the means to be used. In cases of heatstroke there is every likelihood that the individual will have more power of balancing temperature than in rheumatic fever, and so means less violent may be had recourse to. In both the cold bath should be the first thing to be used, but the period over which it is continued need rarely be so long in heatstroke as in the high temperature of fever. Most probably a cold bath, then a wet pack with cold sheets round the body,

blankets over these, and ice to the head, will suffice in heat-stroke to restore the self-balancing power—that is, perspiration; for in both that and fever the first sign of permanent benefit is the restoration of the secretion of the skin. But should that not be restored—should the temperature still keep up—there must be no hesitation. Cold is the only means of lessening bodily heat at our disposal, and it must be freely employed.

In all probability we have to thank the violent storms and the abundant rain for the absence of heatstroke from among ourselves at the present moment.

THE WEEK.

TOPICS OF THE DAY.

It will be in the recollection of the readers of our Parliamentary reports that towards the end of last May a question was asked in the House of Commons by Lord Garlies on the subject of a reprimand which Surgeon-Major Logie, of the Royal Horse-Guards, had received from the Commander-in-Chief or from the Head of the Medical Department, for making a report on the bad state of the drains in the Windsor cavalry barracks. We hear that the whole subject is to be made the subject of special inquiry by a commission consisting of an officer of the head-quarter staff, an officer of engineers, and an officer from the Medical Department. We believe that Surgeon-Major Logie's report was confirmed by two surgeons and other independent witnesses, and that he receives the support of persons resident in the locality, and of officers of high standing in the army.

The drainage of Windsor Castle is being reconstructed on a complete scale. The sewage from the Palace, and from Frogmore House, is to be conveyed by earthen pipes to a field upon the Ham at Old Windsor, where it will be utilised.

The Calcutta correspondent of the *Times* announces that Lord Northbrook has offered a gold medal to the Bengal Medical College for the best essay on the causes of a fever that has for long prevailed in Burdwan. The district of Burdwan is said to be very poor, destitute, and malarious.

The Council of the Royal Botanic Society have held a special meeting in reference to Mr. Ayrton's treatment of Dr. Hooker at Kew. It was moved by the Marquis of Bristol, seconded by Colonel Platt, and unanimously resolved—

"That the Council of the Royal Botanic Society of London desire to express their deep sympathy with Dr. Hooker in his present position as Director of the Royal Gardens at Kew, and they earnestly hope that nothing that has hitherto occurred will induce him to resign an office which he has filled with such advantage to the country and with so much honour to himself."

It was moved by Sir Charles Wheatstone, seconded by Mr. Sheppard, and unanimously resolved—

"That the Council of the Royal Botanic Society of London, having the fullest confidence in Dr. Hooker as the Director of the Royal Gardens at Kew, venture to express their hope that Mr. Gladstone will give his personal attention to the important object of preventing the public from being deprived of Dr. Hooker's valuable services. His scientific attainments and practical knowledge, as evinced in his directorate, have been of the highest order, and the Council of the Royal Botanic Society would, therefore, learn with great regret that any steps had been taken calculated to endanger the connexion of Dr. Hooker with the Royal Gardens at Kew, or his control in scientific matters connected with his office."

The newspapers relate the case of a lady, Miss Elizabeth Hough, aged 55, who died a quarter of an hour after being stung by a bee. An inquest on the body was held by Dr. Diplock. The deceased was on Friday in her garden inspecting her bees, when she suddenly called to the gardener that she had been stung. The gardener went to her and removed a bee that he found in her hair. She became unconscious, and died in a quarter of an hour. The body was examined by Dr. Maughan, but the only appearance of injury was a good deal of discoloration behind the ear around the sting. Dr. Maughan said there was only one sting, and he thought death was caused by the shock to the nervous system. Major Hough said that in 1870 the deceased, who was his sister, was stung by a bee. The consequences were very peculiar: she became unconscious, and remained so for two hours. The jury returned a verdict of "Death from syncope accelerated by the sting of a bee."

Dr. Savage has been appointed Assistant Medical Officer at Bethlehem.

The distribution of prizes at the Charing-cross Hospital took place last Friday. The chair was ably occupied by Mr. Few. The most notable thing connected with the School is the great loss it has sustained by the death of Dr. Hyde Salter, and the retirement of Mr. Hancock. Mr. Barwell becomes now full Surgeon with charge of beds, and there is a vacancy for an Assistant-Surgeon.

Dr. Pierce Adolphus Simpson has been appointed Professor of Forensic Medicine in the University of Glasgow, in the room of Professor Rainy. Dr. Simpson may be congratulated on having beaten so formidable an opponent and excellent a Medical jurist as Dr. Gamgee. Dr. Simpson is best known by his editorship of the *Glasgow Medical Journal* and an excellent paper on "Hydro-nephrosis."

Small-pox having so far decreased, no more cases are at present to be admitted into the Hampstead Hospital. The place is to be disinfected, and to be utilised for the imbeciles now in the London workhouses. Small-pox cases are to be sent to the Homerton or Stockwell Asylums.

THE WIMBLEDON CAMP.

The meeting did not come to an end without a gun accident and one which might easily have had grave consequences. Within the last quarter of an hour of the shooting a squad of four men were practising rapid firing with the Soper rifle, a weapon which, whatever its other merits may be, enables the marksman to fire no less than sixty-eight shots in three minutes, and to put most of them on the target. In the process the barrel gets excessively hot—so hot that sometimes the soldering of the sights is melted. In this case one of the men had fired about twenty shots when the cartridge which he had just inserted into the breach exploded backwards, wounding him in two places on the left hand, and making three small lacerations round the right eye, in one of which the cap of the cartridge was found embedded. The conjunctiva escaped with a slight scratch. The position of the wounds is accounted for by the attitude of the shooter, who lay on his back, with the butt of the rifle in the right axilla, and the barrel resting on the legs and feet; the left hand being used to insert the cartridges. With an unsafe breechloader this appears to be the safest position, for it can scarcely be doubted that if the eye had been where it usually is placed in firing—within five or six inches of the breech—the result would have been much more serious. Opinions are divided as to the cause of the accident: some attribute it to the powder used (Schulze's sawdust gunpowder, which is said to ignite at a lower temperature than ordinary black powder), others to a faulty cartridge, others to a defect in the mechanism of the rifle. Fortunately the patient suffered so little damage as to be able to return home next day. In his report on the health of the camp, Dr. Temple makes the following statements:—

"The greatest number sleeping in camp during any one night was—of regular troops 938, of volunteers 1869, of police 265, and of camp followers 263. The average number sleeping in camp for the whole period was 2638·8. Weather: The temperature has been cool, the highest recorded by Pastorelli having been 126° (in sun's rays) on July 12, and 78° (in shade) on July 11. A considerable amount of rain fell during the period; the average daily rainfall was ·47 inches. As much as 2·6 inches was registered on the 11th as having fallen during the previous twenty-four hours. The health of those

in camp was very good; none of the diseases call for any remark. The average daily application for medical attendance was 6·41, or at the rate of 2·42 per 1000; last year, which was considered a very healthy year, the average daily attendance was 10·6, or at the rate of 4·5 per 1000. The sanitary arrangements were very satisfactory. On the day of the review there were no accidents. (Signed) W. Temple,

"Wimbledon, July 22, 1872. Staff Assistant-Surgeon."

That they are able to show so clean a bill of health is no small feather in the cap of those who have the management of sanitary matters in a camp whose daily population varies from 10,000 to 20,000, besides those who sleep there. But though if anything goes wrong the doctors seldom fail to hear of it, few people trouble themselves to inquire why it is that things go right. In this case the result may be attributed to the ready co-operation of all the members of the camp staff.

We observe that the winners of the Staff prizes were—1. Earl of Ducie (Lady Elcho's prize); 2. Dr. Mayo, Inns of Court R.V. (Countess of Ducie's prize); 3. Major Barnes, D.A.A.G.

MR. WASDALE WATSON'S CASE OF DOUBLE MONSTER.—LIFE AND DEATH OF THE UNITED CREATURES.

Our columns this week contain a most careful description, by Mr. Wasdale Watson, of what sober naturalists call a double monster, but what would have been a two-headed nightingale had the united creatures lived. The case presents some most singular features. One is the coincidence that the Two-headed Nightingale did actually visit the town of Newport, Monmouthshire, where the mother lived, and that the poor woman affirms that she felt something, and was prepared for the result. However, we will not dwell on this, but may refer to a question of far deeper interest to scientific men, and, above all, to persons such as the Siamese Twins and the Two-headed Nightingale, who are linked in unnatural community of flesh. What is to become of one, if the other dies? No doubt if one dies *right out*, the other must soon follow—the dead blood of the dead individual will mix with and destroy the vitality of the living one's blood. But the history of these Newport twins makes it clear also that if one dies only to a certain recoverable degree, the communion of fresh living blood from its fellow-twin may be the means of bringing it back to life. In this Newport case, one of the conjoined twins (B) died in six hours; breathing and heart-beating stopped, the jaw dropped; and this half of the conjoined twin was dead, cold, and livid for six hours. But B revived twice or thrice, and, twenty hours after apparent death, struggled, breathed, and cried! The explanation of this singular phenomenon is found in the complex nature of death. Sometimes this is absolute, as when the mainspring of a watch is broken, and nothing can set it going again; sometimes it is but potential, as in a watch that has run down, and is capable of being set going again if wound up in time. The case of these twins shows that, in the event of death or threatened death of one of them from mere exhaustion, before the tissues have decayed, and whilst they retain potential vitality, the infusion of the fresh vigorous blood of the other may set the heart beating, or act on the spinal cord, and set the respiratory muscles at work again. It shows by the example of this monster how, in cases of death or apparent death from exhaustion, life may possibly be set going again by transfusion of blood.

BARRAUD'S PORTRAITS OF THE ROYAL SOCIETY.

Messrs. Barraud and Jerrard, of 96, Gloucester-place, Portman-square, have published an engraving of Mr. Henry Barrow's picture representing 123 Fellows of the Royal Society, naturally grouped, and with as little stiffness or artificiality of *pose* as possible. The foremost figure in the centre is Professor Partridge, supported on either side by Mr. Curling and Sir William Fergusson; on the extreme dexter side, George Harley, Tyndall, Beale, Guy, and Bowman; nearer the centre, Flower, Sir H. Holland, Bishop, Bickersteth, and Cobbold; on the extreme sinister side, Richardson, Webster, Sir T. Watson, Dr. Quain. Amongst the portraits are also those of Faraday, Miller, Solly, Salter, and Sir R. Murchison, who have been missed from their accustomed haunts since the picture was printed. We cannot enumerate all the 123, for the identification of whom a convenient "key" has been provided; the names we have given are those recognised frankly at first glance. One great sanitary and scientific authority has reason to complain of the presentment of his features; the far greater majority are distinct and pleasing likenesses.

CITY OF LONDON LYING-IN HOSPITAL.

At the annual Court of Governors of the City of London Lying-in Hospital, held on the 17th inst., it was determined to extend the usefulness of that old-established and valuable charity by instituting "an out-door maternity department," for the purpose of aiding poor women at their own homes. A staff of midwives, medical practitioners, and druggists were appointed to carry out this resolution, which is to come into operation immediately. The patients will be recommended by letters issued to governors upon the plan adopted by kindred institutions. It has been thought desirable that the medical staff, as well as all the other officers employed, should be somewhat remunerated for their services, and not called upon, as is too frequently done, to give them gratuitously. We are confident that the Profession at large will appreciate the liberal sentiments thereby evinced in this matter by those having the management of the hospital funds, and as far as possible support it. By thus acting, the Committee has set an excellent example to other and more wealthy establishments of a like character, by displaying the desire that the members of the hard-worked and frequently ill-requited medical profession should not be expected to give their very valuable services without some *direct* acknowledgment. The area of these new duties is to include the City of London, the parishes of St. Luke, Clerkenwell, Shoreditch, as much of Islington as is bounded by Essex-road to the New North-road, also the districts of Bethnal-green and the Cambridge-road, and a portion of Whitechapel.

SANITARY DIFFICULTIES.

A curious instance of the difficulties, or rather the unpleasantness, which an Officer of Health may sometimes experience, occurred last week at Kensington. Dr. Duffield, in his report to the Kensington Vestry, observes—"Referring to houses in Yeoman's-row, Brompton, where it was said fever was rife—a statement that turned out to be exaggerated—one house was particularly named, and it was therefore especially visited with very disagreeable results to the unfortunate inmates. The landlord assuming, quite erroneously, that some of his lodgers had given me the information, forthwith put the brokers into the rooms of every tenant in arrear with his rent, as unluckily was the case with all but one, from sheer poverty."

HARVEY TERCENTENARY MEMORIAL.

By courtesy of the President and Fellows of the Royal College of Physicians, Pall-mall East, the first meeting of the London General Committee of the Harvey Tercentenary Memorial will be held at the College on Monday next, at 5 p.m.

INDIAN MUNIFICENCE.

The Maharajah of Vizianagram has made the offer of a donation of £20,000 to the funds of the new Medical College at Allahabad.

FROM ABROAD.—SUBCUTANEOUS INJECTION OF ERGOT IN FIBROMA OF THE UTERUS—ACTION OF THE RIGHT AND LEFT PNEUMOGASTRICS ON THE HEART—ODOUR OF THE BREATH IN DIABETES.

In an interesting communication to the *Berliner Klinische Wochenschrift* (No. 25), Professor Hildebrandt, of Königsberg, draws attention to the utility of "Subcutaneous Injections of Ext. Seeal. Cornut. in Fibroid Affections of the Uterns." His attention was first drawn to the subject in 1870 by the case of a Polish woman, 33 years of age. This he narrates with considerable details, for which we have not space. Suffice it to say that she was the subject of a large fibroma of the uterus, of the diagnosis of which there could be no doubt; and that this, of three or four years' standing, yielded to none of the usual remedies which were successively tried. It was therefore determined to have recourse to ergotine injections, with the view especially of moderating the profuse hæmorrhages, and perhaps of forcing the tumour to within an accessible distance of the os uteri. They were thrown into the cellular tissue of the walls of the abdomen covering the tumour daily during a fortnight. They were suspended during menstruation, and after this (which was less painful and profuse) had ceased the patient stated that the tumour had diminished. On measuring it this was found to be the case, and the daily use of the ergot was resumed. From week to week the tumour was found to lessen, until, fifteen weeks altogether having been passed in the treatment, all vestige of it had disappeared.

Such success in a case which had been regarded as incurable naturally led to other trials of this means, and Professor Hildebrandt refers to eight cases, concerning the exactitude of the diagnosis in which he has no doubt whatever. With the exception of two of these cases (in one of which ergot intoxication occurred, and in the other great pain was produced by the injection), they all underwent improvement, both as regards diminution in the size of the tumour and in the accompanying menorrhagia and pain. Dr. Hildebrandt observes that if fibroma or myoma of the uterus is not usually an affection immediately dangerous to life, yet it always entails great suffering upon its subjects, and very often, by the profuse menorrhagia to which it gives rise, induces the extremest anæmia, which not infrequently proves fatal. We must not deceive ourselves with respect to the curative effects which the waters of Kreuznach and Franzenbad, etc., are supposed to exert on uterine fibroids, for, according to the author's experience, such effects are exerted on the accompanying exudation, rather than on the fibroid itself, which at most undergoes only some diminution. Operations, too, in these cases are also very rarely possible, and are always attended with very great danger. We may therefore hail this new means of treatment, as exhibited in these examples, as not only a very efficacious but also as a simple procedure, devoid of danger. A tumour of large circumference, reaching above the navel, totally disappeared, and another, reaching the edge of the ribs and distending the abdomen, became greatly diminished. The diminution of the tumours which took place in four other cases renders it highly probable that complete success would here have been attained also, had not the patients from various causes ceased pursuing a mode of treatment which consumes much time. Of equal importance is the complete disappearance of the profuse hæmorrhages, the debilitating serous discharges, and the severe pains.

These observations do not enable us to speak with any certainty as to the *modus operandi* of the ergot. Probably in part from the contraction of the nutrient vessels of the tumour, and in part from its general compression under the contractile action of the walls of the uterus, the nutrition of the tumour becomes defective, and its degeneration and absorption ensue. The author suspects that intra-uterine tumours will be found more amenable to this action of ergot than subperitoneal, and myoma more so than fibroma. With reference to the mode of employing the ergotin, the following points require attention:—1. The solution, which is thrown in by means of a Pravaz syringe, is composed of three parts of watery extract of secale cornutum to seven parts of distilled water and seven parts of glycerine, this causing much less pain than Langenbeck's alcoholic solution, and not giving rise to any suppuration. It may cause little, somewhat tender indurations, which are long in disappearing; but so little pain is caused by the procedure that the patient is able to return home immediately after the injection has been made. 2. The lower portion of the abdomen is very much more sensitive to the injection than the parts near the navel. 3. At the time of menstruation, as well as shortly before and for a few days after it, slight hæmorrhage follows the punctures. 4. After from ten to fifteen daily injections have been practised, the solution flows out again from the orifices. It is therefore necessary at this time, as well as during menstruation, to apply a piece of wadding, wetted with collodion, immediately after the injection has been made.

Professor Masoin, of the University of Louvain, recently presented a paper to the Belgian Royal Academy of Medicine upon the "Differences between the Right and Left Pneumogastric Nerves as regards their Suspensive Action on the Heart." It is founded upon thirty-seven experiments made on nine different animals, and is elaborately worked out. The conclusions, which the author states his experiments have invariably pointed to, are:—1. The two nervi vagi, or rather the accessory nerves of Willis, do not comport themselves in an identical manner with respect to the heart. The right nerve possesses a much greater power than the left in slackening and suspending the functions of that organ. This preponderance of the right nerve is exerted even when its concurrent is in possession of advantages which would seem capable of assuring it supremacy in the comparison. The rupture of the physiological symmetry of the nervous system is especially remarkable in this case, inasmuch as a nerve of the right side predominates over that of the left with respect to an organ which itself belongs to the left side of the body. 2. Neither the right nor the left nerve exerts its influence on any circumscribed portion of the heart. The coercion of this organ, therefore, emanating from the myelencephalon, operates upon its mass without either pneumogastric possessing an exclusive sphere of action.

In reference to a recent communication made by M. Dubouée to the Société de Chirurgie, "On the Acidity of the Breath met with in Diabetes," M. Gueneau de Mussy states, in the *Gazette Hebdomadaire* of July 19, that for more than ten years his attention has been drawn to this subject. He first noticed a special odour of the breath in the case of a patient who had been diabetic for twenty years. He was struck with its strong odour, it being not merely acid but somewhat alcoholic—somewhat resembling the breath of some drinkers. The patient secreted an enormous quantity of glucose. Since that time he has met with many cases in which this odour was present, and in several of these he has by it been enabled to pronounce upon the existence of diabetes. In one of the cases which he refers to he found that the odour, which had been very marked, afterwards temporarily disappeared when the amount of glucose had greatly diminished. He is of opinion, therefore, that in some cases of this disease this sign may prove of considerable value.

PARLIAMENTARY.—FOOT AND MOUTH DISEASE—THE PUBLIC HEALTH BILL—THE SANITARY CONDITION OF EDINBURGH—INFANT LIFE PROTECTION—IMPORTATION OF CATTLE PLAGUE—THAMES EMBANKMENT BILL—LOCAL GOVERNMENT BOARD (IRELAND) BILL—METALLIFEROUS AND COAL MINES REGULATION BILLS—LICENSING BILL—ABOLITION OF CAPITAL PUNISHMENT.

In the House of Commons, on Thursday, July 8,

Mr. Read gave notice that, in consequence of what he

considered an unsatisfactory answer given by Mr. Forster in reference to the alleged prevalence of foot and mouth disease in the Metropolitan Cattle Market, he would early next session move for the appointment of a select committee to inquire into the operation of the Contagious Diseases (Animals) Act, and the constitution of the Veterinary Department of the Privy Council.

The House resolved itself into committee on the Public Health Bill. Clauses 1 and 2 were passed without discussion.

Mr. Goldney proposed that in place of boards of guardians, county boards formed of county magistrates with an equal number of representatives elected by boards of guardians should have the supervision of the sanitary arrangements of the county. He moved that for the word "urban" the word "county" should be substituted. Mr. Corrance supported the amendment.

Mr. Dalrymple, in reply to some remarks which had been made on a former occasion as to the power which the Bill would place in the hands of the medical profession, expressed it to be his belief that without the aid of that profession sanitary reform would be nowhere. There were some hierarchies which were probably worse than a hierarchy of doctors. There was the hierarchy of engineers, who thought the earth was created that they might operate upon it; and it was even possible to have such a thing as a hierarchy of lieutenant-colonels. He then proceeded to criticise the Bill, objecting to the appointment of boards of guardians as sanitary authorities, and to Poor-law Medical Officers as Officers of Health. He afterwards referred to certain amendments which he had placed on the notice paper, but which he now intimated his intention to withdraw, leaving with the Government the *onus* and responsibility of preparing at some future time a more complete and efficient sanitary measure.

Sir M. Beach thought the Bill eminently unsatisfactory in the choice of local authorities, and was opposed both to town councils and boards of guardians.

Sir C. B. Adderley, on the other hand, was strongly in favour of boards of guardians, which, among other advantages, existed already, and could be set to work at once. If county boards were created they would be split up into local committees, and would, in fact, soon become identical with the boards of guardians.

Mr. Stansfeld, in defending the Union as the unit of administration, denied that the guardians had failed to do their duty, and stated that he had ascertained that the majority of them were prepared to undertake these sanitary functions.

Mr. Hunt objected to boards of guardians, which had been tried and found wanting. He preferred a county organisation.

Mr. Whitbread, one of the Commissioners, supported the plan for taking boards of guardians.

Mr. F. Powell, also a Commissioner, supported the clause; and, Mr. Goldney having withdrawn his amendment, the opinion of the Committee was taken on an amendment moved by Mr. Corrance to Clause 5, which raised the point in a more direct form. On a division, the Committee decided in favour of Boards of Guardians by 84 to 7.

On Clause 10, which gives directions as to the appointment of a Medical Officer of Health and other officers of the sanitary authorities,

Colonel Barttelot proposed to insert, after the words "Officers of Health," "for a period not exceeding five years, but nothing in this Act shall prevent their re-election." He hoped the right hon. gentleman would be able to agree to this amendment, which in his (Colonel Barttelot's) opinion was a very important one, because it would enable boards of guardians to have some power over these officers of health, and would prevent them from doing as they pleased. Many of these gentlemen did their duty exceedingly well, but there were others who did not do their duty in a way satisfactory to boards of guardians. They were good servants, but bad masters.

Mr. Henley supported the amendment, urging the importance of an efficient officer, and the difficulty of satisfying an external authority of the inefficiency of a permanent officer.

Mr. Stansfeld acceded to the amendment, on condition of its applying only to the first appointments under the Act. The functions of the officer being a matter of experiment, it was not desirable to make the first appointments permanent.

The amendment of Colonel Barttelot, modified by Mr. Stansfeld so as to run in these words, "the appointment of the Medical Officers of Health first made after the passing of this Act shall be for a period not exceeding five years," was then put.

Mr. Pell said it appeared to him that the amendment did not include nuisance inspectors as well as medical officers, as originally proposed by the hon. and gallant gentleman.

The words "and inspectors of nuisances" were inserted in the amendment, which in this altered form was agreed to.

The clause as amended was then ordered to stand part of the Bill.

On Clause 12, which permits the guardians, as the rural sanitary authority, to delegate its powers for the current year of its office to a committee composed wholly of its own members,

Colonel Barttelot moved an amendment requiring the Committee to be appointed in the same way as the Assessment Committee was appointed under the Act of 1862. The Assessment Committees, composed of guardians and *ex officio* guardians, worked well, and it was generally found the *ex officio* guardians used their power with advantage.

The amendment was agreed to.

All the clauses up to Clause 41 were agreed to by the Committee with verbal alterations. The Committee accepted the Corporation of London as the port sanitary authority for London. At Clause 41 the Committee was adjourned. An amendment, moved by Mr. Kay-Shuttleworth and accepted by Mr. Stansfeld, provided for the transfer to the Local Government Board of the controlling powers over the metropolitan water companies, which were conferred upon the Board of Trade by the Acts of 1852 and 1871.

On Friday, July 19, in the House of Lords,

Lord Kinnaird called attention to the hygienic condition of Edinburgh, where, he said, the death-rate had increased so much that insurance companies were contemplating raising the rate of insurance. He moved for the last return by the Edinburgh borough engineer.

The Commons' amendments on the Lords' amendments on the Infant Life Protection Bill were agreed to.

In the House of Commons,

Sir H. Selwin-Ibbetson called attention to a case of cattle-plague at Deptford amongst a herd of bullocks from Cronstadt. Mr. Forster said the whole herd were to be slaughtered, and that every precaution was being taken under the head of the Veterinary Department, who had gone to Deptford to see that perfect isolation was instituted.

The consideration of the Public Health Bill in Committee was resumed. The terms of the borrowing clause and the interest to be paid were matters of discussion. Ultimately the Bill passed through Committee.

On Monday, in the House of Commons,

The consideration of the Thames Embankment Bill was postponed by a majority of 154 to 133. The Bill is therefore lost for the present session.

The Local Government Board (Ireland) Bill was passed through Committee.

On Tuesday,

The Metalliferous and Coal Mines Regulation Bills were read a second time in the House of Lords.

The House of Commons went into Committee on the Licensing Bill.

On Wednesday the House of Commons rejected Mr. Gilpin's Capital Punishment Abolition Bill.

MILITARY MORALITY.

(*Note by an Army Surgeon.*)

In discussing this subject it must not be forgotten that the civilian in the full enjoyment of liberty may get drunk as often as he pleases, stop out all night, ill-treat his wife, ruin his family, as well as his own constitution; but as long as he steers clear of the police-court and the newspapers, no one is any the wiser out of his own immediate circle. Probing the matter deeper—referring to Blue-books, to clergymen, and doctors, who are dragged reluctantly behind the scenes—sufficient evidence can be produced to prove that the civilian of similar rank is not the sober, honest, virtuous peasant theoretical philanthropists would depict him. It would be interesting also to know the numbers of the syphilitic cases under treatment in London hospitals. Now, the soldier is always before the public: his offences, convictions, and ailments are carefully recorded and elaborately tabulated. Under strict discipline, if absent, drunk, or negligent, his fault is at once detected. Many offenders are young, thoughtless lads, not yet licked into shape. In a voluntary service some black sheep must always enter. Also, old soldiers who have served under the blazing sun,

and contracted hepatic and other ailments, feel often an intense craving for stimulants, and one glass leads to another. On the other hand, there are shoals of splendid, high-principled, trustworthy, religious men, who, reflecting the greatest honour on her Majesty's service, have to suffer in reputation through the shortcomings of others. Let the civilian exalt the military position, the only way to keep the black sheep out. Give the good soldier an object in life in the shape of knowing that, when old and wearied with service, his countrymen who stay at home at ease will not permit him to starve.

HEAT AND THIRST, AND SOME OF THEIR POPULAR ANTIDOTES.

(By the Author of a "Report on Cheap Wines.")

(*Continued from page* 45.)

STIMULANTS' AID IN QUENCHING THIRST—HOT TEA—AERATED WATERS—GINGER-BEER—PEPPER PUNCH.

I THINK I may appeal to experience and the instincts of mankind, that something more than mere water is required to gratify the compound craving called thirst. *Lew*, or as it is more commonly called *luke-warm* water, supplies the place of fluid, and so far does good, but it is not a true quencher of thirst, whilst from its negative properties, being neither hot nor cold, and so incapable of exciting the nerves of sensation, it has become a byword for everything nauseous, disgusting, and contemptible, both moral and physical. "Because thou art lukewarm, and neither hot nor cold, I shall spue thee out of my mouth," says the Apocalyptic writer. A lukewarm ally is usually more disgusting than an open enemy.

Heat is by no means a bad antidote to thirst, if a liquid be sipped which is hot enough to produce some pungent effect on the tongue. This may be effected by tea or coffee, the surface of which is often sipped at a temperature of 130° or 140°. Of course, if the aromatic, and astringent, and stimulating elements of tea or coffee are present, the nervous exhaustion, of which thirst is a symptom, will be more effectually combated, but even hot water sipped is better than lukewarm. Thirty years ago dyspeptic physicians used to order their patients to sip with their meals water as hot as they could bear it.

But the stimulant effect of cold is far more sought after than that of heat, and is more appropriate. Let it be observed that it is much abused: that ice taken in excess enfeebles the stomach, and that some people are as really intemperate in gulping down unmeasured draughts of cold liquid, for the relief of an unpleasant sensation, as others are in the use of alcoholic drink. To drink to excess for mere pleasure is intemperate, be the beverage what it may.

Next to cold, carbonic acid is the most popular stimulant and the most beneficial. It may be had in natural waters, as the Nassau, Seltzer, and Apollinaris, or in waters aërated under pressure, or in liquids in which it is evolved by fermentation. Of the aërated waters in popular use, some are very vapid; the gas escapes at once on exposure, and the result is hardly more satisfactory than that of pure water. There is an immense difference to the *connoisseur* between such waters as those of Ellis of Ruthin and those which may be got over a confectioner's counter. Perhaps for a mere summer draught it does not much matter; but in the treatment of disease the "seltzer-" or "soda-" water prescribed should be from a good maker, who is careful in the choice of his raw material—the water—and has a first-rate plant for aërating it.

The next and most obvious method of any for evolving carbonic acid is by fermentation; and this method of preparing a popular drink that shall be cold, aërated, subacid, and stimulant, deserves not the contempt with which some may be inclined to regard it as beneath the notice of political philosophers. Given heat and thirst, and a natural tendency to allay their effects, it is to the public interest that drinks shall be readily accessible which are better than water, more refreshing, more quenching to the thirst, containing some alcohol, and yet not enough to do mischief. Such a drink is that beer which ought to be brewed in every household, from white sugar, a small quantity of cream of tartar, a little lemon-juice and peel for flavour, and a liberal allowance of infusion of ginger. Such real fermented ginger-beer is very different from a mere ginger-drink aërated by forcing carbonic acid into it. Sugar, which ferments with yeast, yields carbonic acid in abundance, but alcohol even more abundantly; this may be easily produced from ginger-beer by distillation, and ginger-beer is as strong as any other cheap "small" beer. The carbonic acid is better combined, and more telling to the palate. Then there is the ginger, a good stimulant, which substitutes a grateful warmth on the soft palate for the flabby nauseousness of atonic thirst, and which corrects the faults of a cold acid drink. I am perfectly certain that this drink, well prepared and cheap, would be a serious antidote to the public-house bar in summer.

Some years ago I was Medical Officer of Health of the district, and tried hard to get at the secrets of the "poor man's home"—how they live; what they do with their money; whether the obtrusive almsgiving which is practised does good or harm. Now, the time to see the London working-classes at home, and as they are, is on a Sunday morning, when all the respectable people are at church; and many a Sunday morning from 11 to 12.30 did I expend in these explorations. One such morning I spent chatting with the keeper of a little "general" shop at the back of Grosvenor-square, and was both amused and instructed by the run of custom that was going on all the while—more especially at the number of women, of the class of mechanics' wives, who came in for ginger-beer. "You see, sir," said the mistress of the shop, "that whilst the public-houses is closed, ginger-beer is the only thing they can drink of a morning, and we sell a good deal every Sunday." It were to be wished that they took nothing worse at other times.

There is a modification of ginger-beer called *pepper punch*, the receipt for which I learned from a West Indian family (West Indians, by-the-bye, are famous for their knowledge of gastronomy), and which I have at times found very serviceable in treating persons fond of taking "too much," with atonic stomachs, nausea, thirst, and the like. It is made as ginger-beer, but heightened in piquancy and endowed with a most agreeable flavour by adding some of the green pods of the capsicum. The West Indian receipt, I am sorry to say, orders the addition of about a teaspoonful of rum to each half-pint bottle. This gives it a finish which few ladies can resist; but, although I urge the use of stimulants and of wine in moderation for the more effectual quenching of thirst, yet I am afraid we must draw a line at Pepper Punch, and leave out the rum.

REPORT ON THE

TEACHING OF PRACTICAL PHYSIOLOGY IN THE LONDON SCHOOLS.—II.

2. KING'S COLLEGE.

AT King's College the Professor of Physiology teaches the subject both theoretically and practically, with the assistance of the Demonstrator.

During the winter session Professor Rutherford delivers lectures on physiology and histology. These are abundantly illustrated by microscopical and experimental demonstrations. In addition to the lectures, special demonstrations of microscopical specimens are frequently given to illustrate the histological points, and once a week the more elaborate and difficult experiments—on the functions of the muscular, nervous, and circulatory systems, for example—are repeated to the students in the laboratory. The so-called "systematic" lectures on Physiology are therefore at King's College, as is generally well known, of a thoroughly practical character.

Practical histology is the work of the summer session. The class—this year of some twenty-five students—meets three times a week for an hour and a quarter. As yet it has no special accommodation, and in lieu thereof the dissecting-room is temporarily fitted up with tables and seats. The arrangements are necessarily imperfect, and the laboratory which we believe it is proposed to build will be a most valuable addition to King's College. Each student on commencing his histological work is provided with material and the necessary reagents arranged before him in a neat rack. He brings his own instruments with him, including, if possible, a microscope; but should the microscope be furnished by the College, a charge of one guinea is made for its use during the session. From the simple tissues the students pass on to examine the various organs, making and mounting their own specimens, including sections; but as the latter are usually not worth

preservation, each student is presented with a good specimen of the same object previously prepared in the laboratory. This he mounts and keeps. The work is daily prefaced by a few remarks from the Professor on the tissue to be examined, and these may be more extended if the subject is a difficult one.

Practical physiological chemistry is taught during the winter to second year's students, who meet in the physiological laboratory, and are provided with the usual reagents and with a burette between two—that is, they work in pairs, and do all the experiments double. The urine is the principal fluid examined, both qualitatively and quantitatively. Bile is also thoroughly done, and blood and milk qualitatively. The men also learn to prepare digestive fluids, and each experiments for himself with a portion of the same. Experiments on animals are never given to the ordinary student to do. Professor Rutherford's experience in regard to this point is that such attempts result only in complete failure.

We need hardly add that the physiological apparatus at King's College are both abundant and valuable. The fee for the class is £7 7s. in winter, and £5 5s. in summer.

3. Charing-cross Hospital.

Practical physiology is taught here in the winter session, partly by class demonstration of the more important facts discussed in the lectures, whether physical, chemical, or otherwise, and partly by practical instruction to the individual students in the methods of examining the minute anatomy and intimate processes of the animal tissues and organs.

The former—the class demonstrations—are given once a week by Dr. Silver for an hour or more, and are intended to illustrate the subject under treatment at the time in the theoretical lectures. Microscopical specimens are here exhibited of living and of specially prepared objects; the chemical properties of the various animal constituents are demonstrated by experiments; instruments and models are explained; and, when practicable, experiments are performed on animals.

The practical instruction by the demonstrator, Dr. Bruce, is almost exclusively in histology. The students meet in groups of eight or more in the physiological laboratory, which is just sufficiently large to allow this number to work in pairs at tables facing the windows. To each pair of students one microscope is allotted, the pupils thus working together, and being encouraged to discuss with each other the structure under examination. The tissues and organs are examined in due order—fresh, and, if possible, living specimens being provided as frequently as is practicable. It has been found by experience that there is not sufficient time to teach satisfactorily the methods of permanent mounting. Each student receives instruction one hour a week. The microscopes are provided by the school, and are partly Hartnack's and partly English. The students provide their own instruments for mounting.

Special instruction is given to clinical students in the quantitative analysis of healthy and morbid urine.

The physiological laboratory consists of two small rooms—the one chemical, abundantly stocked with reagents; the other histological, in which apparatus, preparations, etc., are arranged. There is no separate fee for the course of practical physiology, all being included in the hospital and school fees.

THE M.D.'s OF EDINBURGH

AND THEIR POWER TO RECOVER FOR MEDICINE SUPPLIED TO THEIR PATIENTS.

As it is uncertain whether the offer of the judge of the Marylebone County Court to allow an appeal to a superior court in the case of Stevenson *v.* Gliddon will be accepted, and as under no circumstances could the case come on for hearing under six months, and probably would not be decided under nine, it is important in the meantime that the large body of Scotch physicians now practising in this country should be well advised on the point in dispute in the above case. First of all we would premise that the decision of one county court judge is not binding upon another any further than that the judge of one court would scarcely go counter to the decision of the judge of another court without good reason in his own mind, especially where the reputation of his brother-judge stood high in professional estimation. In that respect Mr. Maenamara's decision will carry with it much weight and all due respect.

Let us now look at the facts of the case—they lie in a nutshell. Can a Scotch M.D., registered under the Medical Act, practise in England and Wales as an apothecary? The 31st section of the Medical Act is as follows:—"Every person registered under this Act shall be entitled, *according to his qualification or qualifications* to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for professional aid, advice and visits, and the cost of any medicines, or other medical or surgical appliances rendered or supplied by him to his patients; provided always that it shall be lawful for any college of physicians to pass a by-law to the effect that no one of their fellows or members shall be entitled to sue in the manner aforesaid in any court of law, and thereupon such by-law may be pleaded in bar to any action for the purposes aforesaid commenced by any fellow or member of such college."

And, first of all, in what does the qualification of an apothecary consist? In the words of the Apothecaries Act, section 5: "In preparing with exactness and dispensing such medicines as may be directed for the sick by any physician lawfully licensed to practise physic by the President and Commonalty of the Faculty of Physic in London, or by either of the two Universities of Oxford or Cambridge." Now, what is the qualification of a Scotch M.D.? Certainly not that defined by the Apothecaries Act. His qualification is to practise Medicine, but not to prepare and dispense medicines. But further, by the 14th section of the Apothecaries Act, "It shall not be lawful for any person or persons (except persons already in practice as such at the date of the passing of the Act) to practise as an apothecary in any part of England or Wales unless he or they shall have been examined by the court of examiners, and have received a certificate of his or their being duly qualified to practise as such from the said court of examiners."

But for this Act a Scotch M.D., if the science of pharmacy were included in the charter of incorporation of his college, possibly might be entitled to practise it in England, provided he did not contravene the privileges of the Royal College of Physicians of England; or the respective charters might be deemed to be on an equal footing through the operation of the Medical Act. But unless that Act repeals the Apothecaries Act it appears very difficult to give any but one interpretation to the very stringent phraseology of section 14, and the further penal clause (section 20).

The College of Physicians of England is clothed by charter with most comprehensive privileges, among others that of conferring the right to practise pharmacy, and even surgery; and the exercise of the former has been decided to be no invasion of the privileges of the Society of Apothecaries. (Attorney-General *v.* Royal College of Physicians.) This would at first sight appear to favour the claim of the Scotch physicians, provided such a privilege is included in the charters of their respective schools or universities; but even then, to practise as apothecaries as well as physicians, they must be prepared, if their right be disputed, to prove not only the custom in Scotland, but the inchoate right of their licensing bodies to confer such a privileg—eas the College of Physicians (England) successfully did in the case just referred to. *Primâ facie* they have no such right, and the College of Physicians of England itself would have failed in substantiating its claim but for the proviso in the Apothecaries' Act, saving the privileges of the Royal College of Physicians of England and the Universities of Oxford and Cambridge.

It is possible the law, as it appears at present to stand, may be evaded, and there are not wanting casuists who perhaps would defend such evasion; but the only straightforward and honourable course is to face the difficulty, and if the law in its present state works an incongruity—we will not say an injustice, because there are two sides to the question—an opportunity will probably before long be afforded of revising, not only the Medical Acts, but the whole theory upon which the present system of the various licensing bodies is based. Until then, if the decision of the judge of the Marylebone County Court be sustained, the M.D.'s of Scotland will, by practising as apothecaries, possibly be subjecting themselves to penalties, as well as be disentitled to recover the price of medicine so supplied even to their own patients.

On the other hand, it may be contended that as these graduates only compound, prepare, and dispense medicines prescribed by themselves, and not by the physicians of "the Faculty of Physicians, London, or of either of the two Universities of Oxford or Cambridge," they are not infringing the provisions of the Apothecaries Act. This might be the

whole bone of contention so far as the Society of Apothecaries is concerned; but even if not liable to penalties under their Act, unless the M.D. degree conferred a qualification in pharmacy, the right to recover charges for medicine supplied would still be an open question.

REVIEWS.

Contributions to Molecular Physics in the Domain of Radiant Heat. By JOHN TYNDALL, LL.D., F.R.S. London: Longmans. 1872. Pp. 446.

THIS is a most elaborate and valuable contribution to our knowledge of that special domain of physics with which the name and fame of John Tyndall will ever be associated—namely, radiant heat. This book is replete with the most carefully conducted experimental details, but we can only notice a few of the more salient points.

From the much greater absorption of heat by ozone than by oxygen, the author is induced to consider ozone as a compound body, and not a mere allotropic form of oxygen.

The physical connexion of the phenomena of radiation, absorption, and conduction (p. 46) will be read with much interest, as clearly indicating that the particles of matter are themselves affected by heat-motion. The spectroscope reveals to us that the atoms of different kinds of matter are prone to assume vibrations of certain definite periods which rarely coincide in different substances. If two gases be mixed, but not chemically combined—as, for example, oxygen and hydrogen in the proportions to form water, or oxygen and nitrogen to form nitrous oxide—it might be presumed that the atoms of O and H, or O and N, assuming vibrations of different periods, would interfere with each other's motions, and hence that the absorption of heat would be much less free than when these atoms are chemically linked together, and compelled to adopt a common period of vibration. This result is proved by experiment. The absorption of heat by nitrous oxide was found to be 250 times that of air, both being at a pressure of five inches of mercury. If, then, the particles of ordinary matter are capable of freely receiving and transmitting heat-motion, we cannot perceive any necessity for assuming the presence of the "æther" to which the author constantly refers. In page 245 the author writes in reference to the conduction of heat—"But motion must also be imparted to the æther within the body, and a portion of this motion will be transferred to the adjacent structure of molecules: heat, as a consequence, appearing to penetrate the mass. But, irrespective of the æther, the molecules occupy positions determined by their own attractive and repulsive forces; so that if any one molecule be disturbed it will of necessity disturb its neighbours." Then why call in "æther" to help the molecules to do what it is admitted they can do for themselves? The facility with which any substance adopts the heat-vibration that it is capable of emitting when heated is conspicuous in rock-salt, which, while it transmits nearly the whole of the heat from most sources, intercepts and absorbs a considerable portion of the heat emitted by a piece of heated rock-salt. This phenomenon is precisely analogous to the complete absorption of the yellow sodium-line, in a continuous spectrum, by the vapour of sodium.

The third memoir—on the relation of radiant heat to aqueous vapour, and its application to meteorology and climate—will be found of much interest in relation to climatic influence in health and disease.

A comparison of the conduction and radiation of several metals (p. 247), from which it appears that the best conductor is the worst radiator and *vice versâ*, is highly illustrative of the dynamic nature of heat.

The insusceptibility of the retina to the rays of invisible heat is strikingly shown (p. 293) by a bold and hazardous experiment, which the author judiciously recommends *not* to be repeated. A concave mirror placed behind the carbon-points in an electric lamp converges the rays to a focus a few inches in front of the lamp. The pencil of rays is transmitted through a cell containing a solution of iodine in bisulphide of carbon, which, while it almost entirely excludes the visible rays, so freely transmits the invisible ones, that a piece of platinised platinum foil placed at the focus instantly becomes red hot, and shows a distinct image of the carbon-points. This phenomenon has been termed "calorescence" by the author, by whom it was first observed. The eye being so placed that this powerful focus of heat-rays fell *on* the retina, no sensation of heat was produced.

The large proportion which invisible bears to visible radiations in most sources of light and heat is strikingly evidenced by the fact that while the above solution of iodine intercepts almost the whole of the visible rays, it intercepts only about 5 per cent. of the calorific rays.

The volume is replete with interest to every physicist, but want of space prevents our enlarging on this important subject.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE

PARIS, July 16.

CHENU'S STATISTICS OF THE CAMPAIGNS IN THE CRIMEA AND ITALY—ESSAY ON TRICHINOSIS—M. BARETTA'S MODELS—TILLAUX ON SYMPATHETIC OPHTHALMIA—GUBLER ON GLYCERINE—EUCALYPTUS GLOBULUS.

SOME years since M. Chenu, the well-known statistician, published an excellent work on the Medico-Chirurgical Statistics of the Campaigns in the Crimea and Italy; but as it consists of three large volumes in quarto, and being in consequence somewhat expensive, he has condensed the work, and it now appears in one small volume, so as to place it within the reach of all. The title of this new edition is "De la Mortalité dans l'Armée et des Moyens d'Economiser la Vie humaine." It contains extracts from, and in many cases the reproduction of entire pages of, the above work, in publishing which the author says, in his preface, he feels convinced he will satisfy the wishes not only of his professional brethren but of a very great majority of his compatriots, as from the system of conscription or obligatory service there is scarcely a single family in France that has not a relative in the ranks of the army; and his object, he adds, is to vulgarise as much as possible his ideas as to the best means of economising both men and money. The work is an *exposé* of the vicious system that exists in France of subordinating the medical to the commissariat department, and I would recommend it to the attention of all interested in the organisation of military hospitals and ambulances; as from Dr. Chenu's official position and experience he can speak with some authority on these subjects. Dr. Chenu was principal medical officer of the army, and during the late war was appointed Director-General to the Society for the Relief of the Wounded, to which he is still attached, and is now engaged in drawing up a medico-chirurgical report of the war of 1870-71, which promises to be full of interest, and is intended to bring to light the long-standing defects of the hospital administration of France.

In speaking of Dr. Chenu, I am reminded of an anecdote I think worth relating, and which may be relied upon as authentic, as I have had it from the worthy Doctor himself:—An American gentleman, of about 45 years of age, used during the late war to follow M. Chenu wherever he went, and even in the battles around Paris he was always to be seen by his side. M. Chenu, supposing him to be a simple visitor, or a gentleman who had come to take observations, never interfered with him; but his subordinates looked upon the stranger with suspicion, as they never could find out who he was or what was the character of his visit—they did not even know his name, and he never uttered a word to any of them. Soon after the war, and while one day in the wards of the ambulance established in the Exhibition building in the Champs Elysées, this strange gentleman all of a sudden approached the Doctor, embraced him, and, bidding him farewell, said he would never forget him. He then left for America, where he soon after died, and left the Doctor by will the sum of $2,000,000, partly in specie and partly in plantations; and one of the clauses of the will stipulates that he is to found a small hospital. What an agreeable surprise for the worthy Doctor!

You are aware that the examinations for the M.D. of Paris are wound up by a thesis on a subject selected by the candidate himself. Some of these are extremely interesting. I therefore propose, with your permission, to lay before your readers from time to time short critiques on the best, or those which have received particular notice from the examiners. Dr. Felix Schaan, who has just obtained his degree, has written a very remarkable thesis, entitled "Etude sur la Trichine," and he premises his work thus:—"J'ai choisi pour objet de ma thèse des êtres très-petits, mais qui peuvent engendrer des terribles maladies." The first indication of their existence, our author says, may be found in the Bible, and Moses evidently had this in view when he forbade the use of swine's

flesh. He then gives a description of these parasites, and compares the physiological changes that take place in them to the transformations that may be observed in the vegetable world from the stage of blossom to that of fruit arrived at maturity.

Trichinosis, or the disease produced by these worms in the animal economy, is divided by the author into three stages, which correspond with their ingestion, migrations, and formation into cysts, each being characterised by certain symptoms. The diagnosis, he says, is far from being easy, and can only be arrived at either by its etiology or by the demonstration of the presence of the worm in the muscles. The treatment is divided into prophylactic and symptomatic, and, notwithstanding all that has been advanced by some German physicians as to the efficacy of certain anti-parasitic remedies, the author asserts that when once the worms find their way into the muscles nothing but time will dislodge them.

M. Baretta, the well-known modeller, has very generously given two practical lectures on the art of modelling, and dwelt upon the advantages that might accrue to members of the Profession if they could take models of pathological subjects. He said that no hospital should be without its modeller, as, although pathological specimens are now preserved by different processes, yet they are so modified as not to give any idea of their real condition after a time. This applies also to wax models, and M. Baretta prefers the plaster of Paris; but finding even this defective, he has adopted another process, which, however, he has kept to himself, and we had to content ourselves with simply gazing on a specimen that he exhibited for our gratification. By this new process he has brought models to such perfection as to deceive one, even on the closest inspection, and as a gentleman present observed, in order to satisfy himself that he was not labouring under a delusion, he had to touch the object exhibited. Everyone who has visited Hunter's Museum in London and the Dermatological Museum in the Hôpital St. Louis at Paris can verify the truth of this. It is more especially in skin diseases that this process is invaluable, not only for the purposes of diagnosis, but also as they are not always to be met with, and cannot be so well preserved by any other process.

M. Baretta is the founder of the Dermatological Museum of the Hôpital St. Louis, and supplies Hunter's Museum and other hospital museums in London, Brussels, etc., with pathological models.

M. Tillaux at his *clinique* at the Hôpital St. Louis presented an interesting case of sympathetic ophthalmia in a man about 50 years of age, which occurred under the following circumstances. The patient, who was a mason, had his right eye injured with some cement while at work some three months ago. The eye was much inflamed, and M. Tillaux was afraid of deep-seated disease. The man, however, got quite well, and was discharged with the vision unimpaired. He returned to the Hospital about a month ago, complaining of deep-seated pain in the left eye, which was accompanied with inflammation and a certain degree of photophobia. M. Tillaux removed this eye at once, leaving that which was first affected, and which he said he did to save the latter. He said he preferred entire extirpation to partial removal of the eyeball, as in the latter case one cannot be sure of arresting the disease, or, if arrested for a time, it is apt to return. He was aware that most surgeons preferred removal of the anterior chamber only, for the sake of appearance, as it was alleged that by entire extirpation, the orbital cavity being emptied, there was little or no support for an artificial eye. This objection, he said, was more apparent than real, as a few days after extirpation granulations spring up, and fill up in a great measure the vacuum left in the orbit. The operation consisted of a modification of Bonnet's method. Without slitting up the external commissure, M. Tillaux proceeded at once to divide the muscular and conjunctival attachments, which he did with a pair of curved scissors, the eyelids being kept apart with retractors; then, turning the globe inwards, severed the optic nerve. Three days after the operation, granulations were already to be seen filling up the apex of the orbit, and in a week after the man wore an artificial eye. M. Panas, however, a young surgeon of the same Hospital, performs the operation thus:—He passes a piece of silk-thread transversely through the globe of the eye about its middle; then, drawing the organ forward, divides the conjunctival attachments, and gets at once to the optic nerve, which, with the vessels and muscles at the apex of the orbit, he cuts through with a straight scalpel. This method, he said, he preferred to the others, as he was less liable to be embarrassed by the bleeding which takes place by first cutting through the other ocular attachments.

On the same day M. Tillaux performed three operations for in-growing of the nail. After having produced local anæsthesia by the ether spray, he slit the nail up its middle with a pair of scissors, then tore away each half with the forceps. One of the subjects, a young lad, had already been operated on for the same affection in one of the great toes; but this time it was for the first toe (its next neighbour), which he said was an unusual occurrence, as the disease more frequently returns in the toe operated on.

While on the subject of diseases about the nails, I may mention the treatment employed at the Hôpital St. Louis for onychia, whether syphilitic or otherwise. It consists of an ointment composed of iodoform ʒj., ung. simplic. ʒj.—a most efficacious remedy; and I have seen the above cured by only a few applications, after having resisted every other means. This ointment is also recommended in some of the more inveterate forms of skin diseases—such as lepra, psoriasis, chronic eczema, etc.—and has been found useful as a local anæsthetic for the relief of pain, whatsoever its origin, and in all forms of neuralgia. In this latter affection iodoform has been administered internally in two-grain doses three times a day, and with great success, especially when combined with iron.

At the Hôpital Beaujon M. Gubler has been curing acne by the internal use of glycerine. A young girl, about 16, was lately in his ward suffering from rheumatism. She was also the subject of acne punctata, which had resisted the usual means employed in such cases. M. Gubler, recalling to mind the analogy that exists between the therapeutic action of glycerine and oils, was induced to try the former, and administered it in this case in doses of a table-spoonful morning and evening, and in the course of a few days the acnoid spots had all but disappeared, and the patient, being well of her rheumatism, left the Hospital delighted with the double cure. M. Gubler's theory of the treatment was that glycerine being a solvent of the sebaceous matter contained in the pimples, rendered it more fluid, and consequently more easy to be eliminated. Arguing from this, he thought advantage might be taken of this solvent property of glycerine for the removal or softening of the cerumen which sometimes accumulates to such an extent in the ear as to cause a certain degree of deafness. And lastly, M. Gubler said that glycerine was a most useful therapeutic agent, and ought to be more generally employed in Medicine. It is invaluable in constipation, and he preferred it to the more nauseous and irritating substances administered in such cases.

One of the most useful additions that has been made to the Materia Medica is undoubtedly the *eucalyptus globulus*, the gigantic Australian tree, whose medicinal properties are legion. Every part of the tree is utilised, and its pharmaceutical preparations are numerous and varied. The essence, which has a most agreeable odour, is now employed in Paris in combination with cod-liver oil, in the proportion of one ounce of the latter to five drops of the former. By this mixture not only is the nauseous taste of the oil entirely removed, but the essence being a stimulant is a good adjuvant, and, like all balsams, has been found useful in diseases of the respiratory organs.

GENERAL CORRESPONDENCE.

"OUR LORD'S MIRACLES OF HEALING."

LETTER FROM REV. DR. T. W. BELCHER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me the indulgence of a few lines more in explanation of some of my words, which I think you have taken in a sense different from mine in your remarks of July 20. Perhaps I have not expressed myself clearly enough. You will see that my remarks—which you have so kindly given in full—nowhere deny the possibility of reunion of "parts" of the body. I spoke of "members," and only used the expression the "part separated" in reference to a "member," such as the ear then under discussion. I especially asked for the experience of military surgeons as to the reunion of cut-off *ears*; and will be glad to get some facts about this.

You say that the Evangelist "gives no hint as to what was healed, whether a simple cut or the wounded surface."

Allow me to urge that St. Luke, in the original Greek, does plainly and simply say that what Our Lord healed was what, in the preceding verse, he says was "cut off"—the "ear." And the technical Greek word which, following the Greek medical authors of his time, he here uses (*ἰάσατο, healed*) is the same which he frequently uses elsewhere to signify complete restora-

tion to soundness. This, you yourself are aware, is the meaning of the Greek word; and therefore the suggestion in your remarks that "healed" may have applied to "a simple cut, or the wounded surface left by cutting off the ear" is, I respectfully submit, not "the simple statement of the Evangelist." We never read of Our Lord *half*-curing any one, for in such case He would not have been "the Great Physician." Moreover, "cut off" in the Greek is something very different from "a simple cut." Even if the Greek word did admit the sense of "a simple cut," who that reads the context and parallel passages would imagine that the fiery and impetuous St. Peter, aiming the "first cut" of a swordsman at the occiput of the High Priest's servant (as he probably did, if right-handed), and missing it, would not at least clean cut off the right external ear?

I may not, sir, follow you in your theological remarks, for your objections to my line of argument lie against Paley and other famous writers, and especially against the widely-read Blunt's "Undesigned Coincidences in the Old and New Testaments," rather than against one who is so unworthy to follow them as the writer is; but every clergyman having to do with a populous parish in one of our large cities, must, as a matter of experience, differ from your opinion that miracles are "*a class of facts which Christians accept as indisputable, and on which they need no confirmation of the faith.*" It is sad to say that the high—and, as I think, sound—standard of faith and doctrine which you assume to exist (and, if existing, of course sufficient) is an ideal theory, largely contradicted by the stern logic of fact.

In my own neighbourhood in London I have met with educated "Christians" who questioned everything you hold to be "indisputable" to those who call themselves by the name of Christ, and also, rejecting all authority, scout the notion of a creed of any kind. Your subjective argument, which is enough for you and me, will not affect the many who honestly doubt any more than those you term "outsiders," who have no proof of its existence in us, and therefore repudiate its authority over themselves.

As your remarks may lead some not over close observers to conclude that the writer has a wish rather "to beget doubt than to allay it," allow me to say that I not only profess my belief in the first creed mentioned by you twice daily, and in the second at least once weekly, but—*which is more to your point respecting the Incarnation and its doctrinal consequences*—I use the Athanasian creed as ordered by the Church of England, and believe it too, and teach it to others.

Such being the case, you can judge of the surprise with which I read your remark that you could "point out many passages in which this book is more calculated in our opinion to beget doubt than to allay it."

The pages of a medical journal are perhaps not the best field for this; but if you can, at your convenience, send criticisms on and references to such passages in MS., they shall be duly attended to in the next edition, and you will much oblige, Yours, &c., T. W. Belcher.

Torpoint, Cornwall, July 23.

P.S.—In my former letter I thought I had referred to the date of the review. It appeared on June 22.

METROPOLITAN ASYLUM DISTRICTS AND AUTHORITIES.

[To the Editor of the Medical Times and Gazette.]

Sir,—I will endeavour to afford, to such extent as may be possible in the limits which you will be likely to place at my disposal, the information sought by your correspondent "A Provincial Physician" in reference to the working of the Metropolitan Poor Act, 1867.

Under this Act there has been formed primarily the Metropolitan Asylum District, comprising the whole of the unions and parishes in the metropolis—thirty in number—and having the charge of specially erected asylums for the treatment of fever and small-pox patients and of harmless imbeciles. The board of management consists of forty-five members, elected as representatives by the several unions and parishes, and of fifteen members nominated by the Poor-law Board or the Local Government Board. The managers, whether elected or nominated, hold office for three years, and have thus an opportunity of making themselves thoroughly acquainted with their duties and with the necessities of those with whom they have to deal. They can also initiate and work out a policy of their own in regard to any particular points of management or treatment which may arise, and stay to see and profit by the results. In an annually elected board, as of guardians, if a scheme is started by a few members more advanced or more energetic than their fellows, it is pretty sure, if costing money, to be a ground for their removal at the next annual election, when of course their project is abandoned.

The managers, on the whole, work to the satisfaction of the boards of guardians, though their proceedings are not exempt from healthy criticism by those whom they represent.

Two asylums have been opened for harmless insane—one at Leavesden, near Watford, for 1620 patients; and another at Caterham, near Croydon, for 1672 patients. Notwithstanding this extensive accommodation there is a demand for more beds, there still being in certain of the workhouses cases suitable for removal. Until the requisite additions have been made it will be impossible entirely to clear the workhouses of this class; and so long as any are retained there it continues requisite to keep up a staff of attendants.

For fever cases there is an asylum at Stockwell with 176 beds, and at Homerton with 198 beds, and this space has, I understand, proved amply sufficient, notwithstanding that, during the pressure of the recent epidemic, it was necessary to receive small-pox cases into the fever hospital at Stockwell.

For small-pox cases there are asylums at Homerton and Stockwell with 102 beds each. These are permanent; but there was also provided during the epidemic a temporary hospital at Hampstead, of which the capacity varied from time to time as additions were made. At one time no fewer than 509 patients were received into this building, and so sudden was the influx that between December 1, 1870, and October 12, 1871, 5700 cases were treated. If any testimony to the benefits of Mr. Gathorne Hardy's Act be required, it is found in the above figures. But for the passing of that Act every one of the total number of patients treated by the managers (of which the 5700 were only a part) must have remained either at home or in public institutions crowded with other diseases. What was the total number isolated, and thus made harmless to the rest of the population, we shall learn shortly from a Parliamentary return moved for this session by Sir Michael Beach, who is one of the managers. We shall also learn how many of those treated in these asylums erected for paupers, and paid for out of the poor-rate, were independent persons, whose admittance was dictated by feelings of humanity towards both themselves and the rest of the community.

Besides the temporary hospital at Hampstead, the managers occupied the old Islington Workhouse for convalescent cases, and the *Dreadnought*, lent by the Admiralty, for the same purpose. They were thus enabled, by the early removal of the patient after the passing of the acute stage, to clear the wards for fresh comers.

I do not quite gather from your correspondent's letter the kind of information which he wishes when he asks "how the institutions are officered." That the managers have succeeded in securing the best material of this kind is, I think, shown by the very favourable reports of the Commissioners in Lunacy as regards the imbecile asylums, and by the fact that, with respect to the other asylums, no serious charge has been even preferred, much less proved, against either of the superiors. There were, it is true, charges impugning the management of the Hampstead temporary Hospital, but the decision, which was published by you at the time, after a searching inquiry by the Poor-law Board, showed that the managers and their officers, all things considered, had been remarkably successful.

It may be assumed that the medical officers consider themselves sufficiently remunerated, since they remain at their posts; but it appears to me for many reasons inexpedient to publish the figures which satisfy them.

With your permission I will defer the other points mentioned by your correspondent. I am, &c.,

July 25. Medico-Legal.

PUBLIC HEALTH BILL.

[To the Editor of the Medical Times and Gazette.]

Sir,—Allow me to suggest that a deputation of the Poor-law Medical Officers' Association wait on Mr. Stansfeld to request him to appoint all Union Medical Officers as Medical Officers of Health. Reasons have already been given in your pages why they should be appointed. It would be a just tribute to our Association. Before its formation we never heard of the grievances of Union Medical Officers; now, through the exertions of the late Mr. Griffin, Dr. Rogers, and a few others, supported, as they have been, by the medical press, the Poor-

law Service stinks in the nostrils of every right-smelling man in the country.

I am, &c.,

July 19. UNION MEDICAL OFFICER.

LEGAL INTELLIGENCE.

"INSANITY—HOMICIDAL IMPULSE."

HOME CIRCUIT, LEWES, JULY 18.

(*Before* Mr. Baron MARTIN.)

JOHN JORDAN, a soldier, 39, was indicted for the murder of John Semple, a child. Defence: "Insanity—homicidal impulse." Prisoner was a gunner in the Royal Artillery, who at the time of the occurrence was stationed at a fort at Chinping, near Littlehampton. Prisoner was married, but his wife had deserted him, and lived near Dover. On April 11 the prisoner applied to the non-commissioned officer (M'Clelland) in immediate command of the fort to forward an application to the commanding officer for his removal to Dover. The application was accordingly forwarded. On that very night, however, the prisoner stayed out until nine o'clock next morning, for which he was put under arrest by Bombardier Semple, the father of the unfortunate child. The prisoner had earnestly begged that his irregularity might not be reported to Captain Marshall, the commanding officer, but the bombardier had already reported it to M'Clelland, who said he must report it to the captain, and it was reported accordingly. The result was that Captain Marshall for the present refused the application. After this Bombardier Semple had on more than one occasion to rebuke the prisoner for breaches of duty, and the last occasion was on May 1. On May 5 prisoner went to church with the bombardier and his children, and seemed on very good terms with them all—chatting with the children, and especially with the deceased. After dining with his fellow-gunner, Reddon, the prisoner went to a place where a razor was kept; took it, and went with it where the children were playing. Soon an alarm was given, and upon the bombardier and his wife going to the spot they found the child lying on the grass with his throat cut, and the prisoner running away. Pursued and apprehended, he did not deny the act, but said the devil must have tempted him to do it. Before the magistrates he said—"I have had a great deal preying on my mind. I hardly knew what I was doing. Two years ago my wife went away, and I have had a great deal on my mind ever since. The bombardier, his wife, or family never did me any harm that I am aware of. It was the fort that preyed on my mind; there was not sufficient company nor enough work. If it had been a livelier place and with more company it would have worn off." Up to the time of the act prisoner's conduct had been rational and sensible. He had been some twenty years in the service, and had stripes, which indicated seventeen or eighteen years' good service. It was proved that the prisoner knew and had remarked that the murdered child was its parents' pet. The motive suggested by the prosecution for the act was that of revenge.

Reddon, the fellow-soldier of the prisoner, proved that after dinner the prisoner read a novel for about half an hour before committing the act.

The medical attendant proved that the child's throat was cut from ear to ear, and the razor lay a few yards off. The prisoner had never applied to him for medical advice or assistance. He stated that, although he had not had experience in cases of insanity, there was a form of insanity in which paroxysms came on without any warning visible to persons not skilled or experienced. He spoke, however, rather of maniacs or persons who were known to be out of their mind.

All the witnesses, including Captain Marshall, said that the prisoner always seemed to be in his full senses.

Colonel Calvert, formerly in command at Woolwich, and Major Dunn, who had succeeded him, gave evidence of his former mental depression, that he was placed in hospital at Gosport, where he went to recruit his health, and complained of pains in his head, want of sleep, and loss of appetite. This was corroborated by the notes of Dr. Hogg, of the Royal Artillery, stationed at Woolwich in 1870, when the prisoner was under his care. The notes described him as "suffering from loss of sleep, spirits, and appetite," arising from mental depression. Both Colonel Calvert and Dr. Hogg feared the prisoner might commit suicide.

A man from the hospital proved that two years and a half ago prisoner had been admitted for delirium tremens, had had his head shaved, was blistered, was sleepless, and used to jump out of bed, etc. The learned judge, in summing up, said there was no evidence of any feeling of revenge against the bombardier. The history of the man was that of a man of good character and fond of children. The defence was that the prisoner at the time did not know the nature of the act he was committing. When such impulses came upon men, according to the medical evidence, they were unable to resist them. It would be safe in such a case to acquit the accused on the ground of insanity. The jury returned a verdict accordingly.

Here, then, is the doctrine of *uncontrollable impulse* in a man up to that moment apparently sane, though suffering from mental depression, acknowledged as relieving him from the responsibility of his act.

OBITUARY.

BARNABAS BARRETT, M.D. (LIVERPOOL).

DR. BARRETT was a native of Shrewsbury, educated at the Grammar School, became a pupil of his brother, Mr. Thomas B. Barrett, of Welshpool, afterwards studied at Trinity College, Dublin, where he distinguished himself by gaining in 1850 the junior anatomical prize, and in the following year the senior prize for anatomy and physiology. He afterwards entered at Guy's Hospital, and became in 1852 Member of the Royal College of Surgeons of England and Licentiate of the Apothecaries' Company. He was elected House-Surgeon to the Southern Hospital, which appointment he relinquished after a few months to enter into private practice in Mill-street, and afterwards at Dingle-hill. Dr. Barrett was a member of the Liverpool Medical Institution, Liverpool Phylomatic Society, and British Medical Association, Surgeon Accoucheur to the Toxteth-park Lying-in Charity, Assistant-Surgeon to the 8th Lancashire Artillery Volunteers, and he was a man of cultivated tastes, of cheerful, prepossessing manners, and thoroughly devoted to his profession. He had an extensive and increasing practice, and his kindness of heart not only endeared him to his patients but to all who had the pleasure of his acquaintance, and who feel they have lost a sincere friend. Among the poor he will long be deplored, as was manifested by the large and sympathising numbers present at his interment. Some years since Dr. Barrett had a severe attack of pleuro-pneumonia, and he had occasionally suffered from bronchitis, which at times confined him to the house for a few days; but his most intimate professional friends had not an idea he was a victim to the disease that proved so suddenly fatal. On Saturday morning, the 13th inst., he came downstairs apparently in his usual health, gave directions for his breakfast, and commenced writing a note in his consulting-room. He called to his assistant, Mr. Richards, who was in a room adjoining, and rose from his chair and said, "Mr. Richards, I feel very queer," and walked across the lobby to the dining-room; was assisted to the sofa, when he became unconscious, face livid, and stertorous breathing. Mr. Hodgson, surgeon, who resides within a few doors, was with him immediately, followed by Dr. Lyster, of Belvedere-road, but they were of no avail, as he died within twenty minutes from the time he was first seized. Dr. Barrett was 45 years of age, and leaves a wife to deplore his loss, but no family.

RICHARD JONES, M.D. ST. AND., F.R.C.S., ETC.,

DIED at his residence, The Bank, Newtown, on the 12th instant, aged 57. The deceased gentleman had been ill for some months. He had throughout his life taken an active part in the public affairs of the neighbourhood, and will be greatly missed. He was the medical officer of several parishes of the Newtown and Llanidloes Union, was a sub-inspector of factories, and very many years ago his name was placed upon the Commission of the Peace by the present Lord Lieutenant of Montgomeryshire. In his private and professional life he had gained the esteem of his fellow-townsmen and a large circle of friends for his care and attention and many good qualities. He leaves a widow, a son, and four daughters to mourn his loss.

ALBERT VON GRAEFE.—In consequence of a determination which had been come to at the Congress of Ophthalmologists at Heidelberg, a committee has been organised for the purpose of raising a statue in Berlin to the memory of this distinguished man. It comprises the names of some of the most distinguished surgeons in Europe, and local committees are about to be formed in all the chief cities.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 22nd inst., viz. :—

Blackshaw, Thomas Wilkinson, M.B. Edin., Stockport, Cheshire, student of the Edinburgh School.
Bosson, George, L.S.A., Barnstaple, of University College.
Davies, George Augustus, L.S.A., Newport, Mon., of University College.
Davies, John Hopkyn, L.S.A., Lampeter, South Wales, of the Middlesex Hospital.
Duncan, Andrew, L.S.A., Henrietta-street, Cavendish-square, of King's College.
Eastes, Thomas, L.S.A., Folkestone, of Guy's Hospital.
Grant, Garden Milne, Dover, of St. Mary's Hospital.
Hartridge, Gustavus, L.S.A., Shrewsbury, of King's College.
Imlach, Francis, Liverpool, of the Edinburgh School.
Lucas, Thomas D'Arcy, Stratford, Canada, M.D. McGill College, Montreal, of McGill College.
McConkey, Thomas Clarkson, Ontario, Canada, M.D. McGill College, Montreal, of McGill College.
Morgan, William Lewis, L.R.C.P. Lond., Merthyr Tydfil, of St. Mary's Hospital.
Paramore, Richard, L.S.A., Hunter-street, Brunswick-square, of Guy's Hospital.
Richards, John Edward, L.R.C.P. Lond. and L.S.A., Ruabon, North Wales, of University College.
Risdon, George Owen, Dotton, North Devon, of St. George's Hospital.
Sayer, Charles Wathen, L.S.A., Yatton, Somerset, of St. Bartholomew's Hospital.
Smith, George Cockburn, L.R.C.P. Edin., Winchester, of the Glasgow School.
Smith, George Francis Kirby, L.S.A., Northampton, of Guy's Hospital.
Toone-Smith, Thomas William, Austrey, Warwick, M.D. of the University of Pennsylvania.
Walker, William Newman, L.S.A., Tollington-park, Hornsey, of University College.
Warne, William Colston, Rochester, of the Edinburgh School.

The following gentlemen having passed in Surgery at previous meetings of the Court, and subsequently obtained medical qualifications, were also admitted Members of the College, viz. :—

Balkwill, William Edward, L.S.A., Kingsbridge, Devon, student of St. Bartholomew's Hospital.
Barber, Oliver, L.S.A., Sheffield, of University College.
Dunn, William Allison, L.S.A., South Lincolnshire, of St. Bartholomew's Hospital.
Greaves, Frank, L.S.A., Eastleigh, Hants, of the Middlesex Hospital.
Reid, Frank, L.R.C.P. Edin., L.S.A., Torrington-square, of St. Bartholomew's Hospital.
Rogers-Harrison, Napoleon Augustus, L.R.C.P. Lond., Lansdowne-road, South Lambeth, of Guy's Hospital.
Sculthorpe, Alfred Milward, L.R.C.P. Edin., L.S.A., Tamworth, of the Birmingham School.
Welchman, Edward, L.S.A., Winchester, of St. Thomas's Hospital.

The following candidates passed on the 23rd inst., viz. :—

Barfoot, George Harry, Leicester, student of University College.
Bell, George Pearson, Leicester, of the Hull Infirmary.
Brown, William, Carlisle, Cumberland, of the Edinburgh University.
Colgate, Henry, Eastbourne, of University College.
Cripps, William Harrison, Mitre-court-buildings, Temple, of St. Bartholomew's Hospital.
Edge, Abraham Matthewson, Manchester, of the Manchester School.
Elam, Shrofield, L.S.A., Woburn-square, of Guy's Hospital.
Eskell, Maurice Moses, Grovesnor-street, W., of University College.
Finzi, Judah Moses, Gower-street, of University College.
Glenny, George Wallis, Barking, Essex, of the London Hospital.
Griffiths, Alfred Yavasour, Stone, Staffordshire, of the Birmingham School.
Hall, James Thomas, Ashbourne, of the Manchester School.
Madden, Edward Monson, L.R.C.P. Edin., St. John's-wood, of King's College Hospital.
Massingham, John Payne, Warrington, of the Birmingham School.
Morgan, John Hammond, B.A. Oxon., Sussex-place, Hyde-park, of St. George's Hospital.
Northey, Gilbert William, Tavistock, Devon, of St. Thomas's Hospital.
Robinson, Mark, H.M.'s Dockyard, Portsmouth, of St. George's Hospital.
Scott, John Walter, L.S.A., Torpoint, Cornwall, of Guy's Hospital.
Stirling, Edward Charles, B.A. Cantab., Queen's-gardens, Hyde-park, of St. George's Hospital.
Turner, George, L.R.C.P. Lond., Portsea, Hampshire, of Guy's Hospital.
Wallace, William, Kingsland, of the Manchester School.
Ward, Joseph, Warwick, of the Birmingham School.
Withers, Robert, Stoke Devonport, of the London Hospital.

The following four gentlemen, who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were also admitted Members of the College, viz. :—

Beadnell, George David, L.R.C.P. Edin., Newton Abbot, Devon, student of St. Bartholomew's Hospital.
Bracey, Herbert Richard, L.S.A., Birmingham, of St. Thomas's Hospital.
Holder, William, L.S.A., Holderness-road, Hull, of the Hull Infirmary.
Verley, Reginald Louis, L.R.C.P. Edin., Gower-street, of University College.

The following candidates passed on the 24th inst., viz. :—

Appleyard, John, Burnley, Lancashire, student of University College.
Baker, Charles Eaton, Shrewsbury, of King's College.
Blackburn, Charles William Arthur, Mauritius, of University College.
Fagg, Thomas Henry, L.R.C.P. Lond., Bayswater, of Guy's Hospital.
Godlee, Rickman John, Walthamstow, of University College.
Griffiths, William Edwin, L.S.A., Kensington, of the Middlesex Hospital.
Hawkins, Henry Baillie, Topcliffe, Yorkshire, of St. George's Hospital.
Lawton, Herbert Alfred, L.R.C.P. Lond., L.S.A., York-road, Lambeth, of St. Thomas's Hospital.
Lungley, Frank, L.S.A., Lewes, Sussex, of Guy's Hospital.
Monro, Charles Edward, Hurstpierpoint, Sussex, of St. Thomas's Hospital.
Morley, John Lacy, Leamington, of Guy's Hospital.
Murrell, Clement Frederick Fenn, L.S.A., Great Yarmouth, of St. Bartholomew's Hospital.
Nankwell, Charles Atkinson, Torquay, of University College.
Ottley, Walter, Twickenham, of University College.
Peacey, William, Grange-road, Bermondsey, of St. Bartholomew's Hospital.
Phillpot, Joseph Henry, Croydon, of King's College.
Poignand, Malcolm, Jersey, of St. Bartholomew's Hospital.
Strother, William Henry Hugall, L.R.C.P. Edin., Darlington, of the Glasgow School.
Taylor, Seymour, Burton-on-Trent, of St. Thomas's Hospital.
Utting, James, L.S.A., Hockering, Norfolk, of Guy's Hospital.

Twelve candidates passed the examination in Surgery, and, when qualified in Medicine, will be admitted Members of the College. Five candidates, who had previously qualified in Surgery, having passed the examination in Medicine were admitted Members of the College, viz. :—

Bartlett, Edward, Connaught-square, student of St. Mary's Hospital.
Bellingham, Joseph, Dudley, of the Birmingham School.
Dodd, Thomas Anthony, Newcastle-upon-Tyne, of the Newcastle Infirmary.
Hey, Edward, Leeds, of the Leeds School of Medicine.
Holloway, Albert John Owen, of St. Bartholomew's Hospital.

Mr. Thomas Murray, H.M.'s Indian Army, of the Dublin School of Medicine, passed his examination under the old regulations, and was admitted a Member of the College. Seventeen candidates were referred to their hospital studies for a period of six months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 18, 1872:—

Balkwill, William Edward, Kingsbridge, Devon.
Dunn, William Allison, Louth, Lincolnshire.
Graham, Arthur, Castle-street, Leicester-square.
Lawton, Herbert Alfred, York-street, Borough.
Rogers-Harrison, Napoleon Augustus, Lambeth.
Tayler, Herbert Price, New Cross.

As Assistants in Compounding and Dispensing Medicines:—

Bowker, William, Bolton, Lancashire.
Platt, J. Wright, New Delph, Saddleworth.
Walton, M. Foulds, Sowerby-bridge, near Halifax.

The following gentleman also on the same day passed his Primary Professional Examination :—

Parker, George Williams, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ALDRICH, FREDERICK, M.R.C.S., L.S.A.—Medical Officer for the Great Barton District of Thingoe Union, Suffolk.

ATKINS, Mrs. LOUISA, M.D. Zurich—Resident Medical Officer and Secretary to the Birmingham and Midland Hospital for Women.

CATON, R., M.D. Edin.—Lecturer on Physiology at the Liverpool Royal Infirmary School of Medicine.

COUGHTREY, M., M.B., M.C. Edin.—Demonstrator of Anatomy at the Liverpool Royal Infirmary School of Medicine.

DUNBAR, HENRY, M.D.—Medical Officer for the Parish of Kirkmaiden, Wigtonshire.

HALL, JAMES, M.B., C.M., L.R.C.S. Edin.—Medical Officer for the Sharples District of Bolton Union.

MCRAE, A. E., M.D., C.M.—Medical Officer and Public Vaccinator for the Parish of Penicuick, Edinburgh, and Medical Officer of Health for the Burgh Commissioners.

PICKERING, THOMAS FENN, L.R.C.P. and L.R.C.S. Edin.—Medical Officer for Little Bolton, District No. 2.

ROSS, DANIEL M'CLURE, L.R.C.S.I., L.K. & Q.C.P.I.—Medical Officer of Monaghan Workhouse.

SIMPSON, PIERCE ADOLPHUS, M.D., F.F.P.S. Glasg., L.R.C.P. Edin. L.R.C.S., M.A. Cantab—Professor of Medical Jurisprudence at the University of Glasgow.

WOODS, WILLIAM, L.R.C.P. & S. Edin., L.K. & Q.C.P.I.—Medical Officer of Monaghan Dispensary District.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—Dr. Richard William Coppinger has been confirmed as an Assistant-Surgeon in her Majesty's Fleet, with seniority of November 12, 1870; William B. Fletcher, Assistant-Surgeon, to the *Orwell*.

Army Medical Department.—Deputy Inspector-General of Hospitals John H. Ker Innes, C.B., to be Inspector-General of Hospitals, *vice* Richard Dane, M.D., who retires upon half-pay; Staff Surgeon-Major Edward Baily Tuson, to be Deputy Inspector-General of Hospitals, *vice* J. H. K. Innes, C.B.; Staff Surgeon Edmund Humphrey Roberts, from half-pay, to Staff Surgeon, *vice* Staff Surgeon-Major E. B. Tuson; Assistant-Surgeon Thomas Turville Gardner, from Royal Artillery, to be Staff Assistant-Surgeon, *vice* William Christy Robinson, who exchanges; Assistant-Surgeon Frederick Robert Wilson, M.B., from 47th Foot, to be Staff Assistant-Surgeon, *vice* Mark Anthony, M.D., who exchanges; Staff Assistant-Surgeon Alexander Neill retires upon temporary half-pay.

BIRTHS.

Dawson.—On July 23, at Campden Villa, 203, Maida-vale, the wife of S. Houston Dawson, M.D., of a son.

Hill.—On July 17, at 55, Wimpole-street, the wife of Berkeley Hill, M.B., F.R.C.S., of a son.

Lamb.—On July 18, at 18, Price-street, Birkenhead, the wife of Joseph Lamb, M.R.C.S. Eng., of a son.

MARRIAGES.

Bate—Turner.—On July 17, at Llanfairfechan, William Alfred Bate, of Park House, Knutsford, only son of Thomas Bate, Esq., Ollerton Hall, Cheshire, to Jeannette Stewart, daughter of the late William Dutton Turner, M.D., of Spanish Town, Jamaica.

Colley—Turner.—On July 18, at St. Olave's Church, Southwark, J. N. C. Davies-Colley, M.A., M.B., F.R.C.S., Assistant-Surgeon to Guy's Hospital, to Sophia Margaret, only surviving daughter of Thomas Turner, Esq., Treasurer of Guy's Hospital.

Courtenaye—Gawley.—On July 10, at the parish church, Foxford, county Mayo, Philip A. Trant Courtenaye, Esq., H.M.C., to Alice Marian, third daughter of Eccles Gawley, M.D., of Foxford.

Crofton—Foster.—On July 18, at St. James's Church, Birch, near Manchester, Henry Crofton, Lieutenant Royal Artillery, only son of the late Charles Stanhope Crofton, Dublin, to Anna Maria, only daughter of the late Thomas Foster, M.R.C.S. Eng., of Manchester.

Doake—Rowe.—On July 11, at St. Columb's Cathedral, Londonderry, Samuel Doake, A.M., M.D., Army Medical Staff, eldest son of Samuel Doake, Esq., Glen Lagan, county Down, to Fanny Elizabeth, eldest daughter of the late John Henry Rowe, Esq., Londonderry.

Hart—Rowland.—On July 19, at St. Saviour's, Paddington, Ernest Hart, M.R.C.S.E., of 42, Harley-street, to Alice, third daughter of the late A. W. Rowland, Esq., of Champion Hall, Sydenham.

Maskew—Poore.—On July 15, at Emerydown Church, J. S. Maskew, M.D., of Elcombs, Lyndhurst, to Anna Maria Barbara Mackechnie, fourth daughter of the late Sir Edward Poore, Bart.

Morris—Cox.—On July 18, at the Abbey Church, Dorchester-on-Thame, Malcolm Alexander Morris, M.R.C.S., youngest son of the late John Carnac Morris, F.R.S., of the Madras Civil Service, to Fanny, elder daughter of Thomas Cox, Esq., of Dorchester.

Pilkington—Wright.—On June 10, at Wynberg, Cape of Good Hope, Commander Edward Pilkington, of H.M.S. *Rattlesnake*, son of the late Captain E. W. Pilkington, R.N., of Londoun House, Ryde, to Agnes Annie, eldest daughter of — Wright, M.D., of Wynberg.

Trezise—Thomas.—On July 17, at the parish church, St. Just-in-Penwith, Cornwall, W. R. Trezise, M.R.C.S. Eng., L.S.A., to Ellen, fourth daughter of the late Henry Grylls Thomas, Esq., of Lapoowde House.

Willis—White.—On July 18, at All Saints' Church, Sheffield, Julian Willis, L.R.C.P. Edin., M.R.C.S.E., of Sutton Scotley, near Micheldever Station, Hampshire, to Fanny Alicia, eldest daughter of Robert White, Esq., of Woodhill, Grimesthorpe, and Sheffield.

DEATHS.

Bowe, Eliza, widow of the late Henry Bowe, surgeon, and second daughter of the late Robert Allan, Surgeon R.N., Whitby, Yorkshire, at Cape Town, Cape of Good Hope, on June 6.

Burns, Marion Somerville, wife of Dr. Burns, Surgeon R.N., Medical Officer of the Chatham Convict Prison, at 4, Medway-villas, Gillingham, Kent, on July 18, aged 49.

Cumming, William Spink, M.R.C.S. Eng., L.S.A., at Limehouse, on July 16, aged 78.

Harrison, Catherine, wife of Charles Henry Rogers Harrison, F.R.C.S., and daughter of the late Thomas Weston, Esq., of Kemp-hill, Tenterden, Kent, at Kent House, Lansdown-road, S.W.

Hawkins, Margaret, widow of the late J. V. Hawkins, M.D., of King's Lynn, Norfolk, at Redhill, Surrey, on July 14, aged 60.

Longstaff, Cornelia Hamilton, widow of the late Edgar Henry Lougstaff, surgeon, of Ilkeston, Derbyshire, at her residence, 3, Ashchurch-grove, Shepherd's-bush, on July 16, in the 64th year of her age.

Norman, Ann Elizabeth, wife of George Allan Norman, M.B., eldest daughter of the late Charles Adnam Mason, of Torrington, near Ledbury, and Parkfield, Great Malvern, at Monmouth, on July 17, aged 31.

Payne, Anna Maud Robarts, only daughter of C. H. Payne, M.D., at Wimbledon, on July 18, aged 4 years and 2 months.

Smyth, Captain Mark Wood Carmichael, late 6th Madras Cavalry, seventh son of the late James Carmichael Smyth, M.D., at Bray, co. Wicklow, on July 12.

West, Mary, widow of the late Philip Hatchell West, Assistant-Surgeon Madras Army, at 3, Stanley-terrace, Upper Holloway, on July 11.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Board of Police, Glasgow.—Sanitary Medical Officer for the City. Applications, with testimonials, to John Lang, Clerk to the Board, Central Police-chambers, Glasgow, on or before August 2.

Bradford Infirmary.—Junior House-Surgeon. Applications, with testimonials, to C. Woodcock, 65, Market-street, Bradford.

Brighton and Hove Dispensary.—Resident House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Committee of Management, Queen's-road, Brighton, on or before August 5.

Dorset County Hospital.—Honorary Physician. Candidates must have taken their regular professional degree in some University of the United Kingdom, or be Fellows or Licentiates of the College of Physicians. Applications, with testimonials, to "The Chairman of the Committee," Dorset County Hospital, Dorchester, on or before July 31.

East London Hospital for Children and Dispensary for Women, Ratcliff-cross, E.—Resident Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before July 27.

Epping Union, Essex.—District Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to John Windus, Clerk to the Guardians, Epping Union, on or before August 1.

Hereford County and City Lunatic Asylum.—Assistant Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to the Medical Superintendent, on or before August 5.

Infirmary for Consumption and Diseases of the Chest, 26, Margaret-street, Cavendish-square.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

Kildalton, Islay.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen.

Leeds Public Dispensary.—Junior Resident Medical Officer. Candidates must possess at least one legal qualification (registered). Applications, with testimonials, to John Horsfall, 31, Albion-street, Leeds.

Liverpool Royal Infirmary School of Medicine.—Lecturer on Comparative Anatomy and Zoology; also, Demonstrator of Physiology. Applications, with testimonials, to R. Harrison, Registrar (from whom further particulars may be obtained), on or before August 10.

Manchester Royal Infirmary.—Indoor Physician's Assistant. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Weekly Board, on or before July 27.

Rotherham Hospital and Dispensary.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification. Applications, with testimonials, to J. Barras, Hon. Sec.

Royal Hospital for Diseases of the Chest, City-road.—Physician. Candidates must be registered as Fellows or Members of the Royal College of Physicians of England. Applications, with testimonials, to the Secretary, before August 6.

Royal Isle of Wight Infirmary, Ryde.—House-Surgeon. Applications, with testimonials, to the Secretary, on or before July 29.

Royal National Hospital for Consumption, Ventnor.—Resident Medical Officer. Applications, with testimonials, to Ernest Morgan, Secretary, 20, John-street, Adelphi.

St. Panoras and Northern Dispensary.—Honorary Physician. Particulars may be obtained from S. S. Wigg, Esq., Honorary Secretary, 33, Gordon-street, Gordon-square.
Guardians, Beverley, on or before July 25.

Stockport Infirmary.—Assistant House-Surgeon. Applications, with testimonials, to the Hon. Secretary, on or before July 29.

Sto urbridge Dispensary.—House-Surgeon and Secretary. Candidates must be M.R.C.S. Eng., L.R.C.P. Lond., or L.S.A. Lond. Applications, with testimonials, to the Secretary on or before July 30.

Trinity College, Dublin.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

Warneford Lunatic Asylum.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

Westminster Hospital.—House-Surgeon. Candidates must be qualified to practise under the Medical Registration Act of 1858, and must produce certificates of having served the office of surgeon's dresser to the in-patients for a period of not less than six months in some recognised hospital. Candidates will be subjected to a competitive examination, and must send in their names to the Secretary on or before August 10.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

APPOINTMENTS.

Aberystwyth Union.—Morris Jones, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., to the Workhouse.

Lewisham Union.—Augustus S. May, M.R.C.S.E., L.S.A., to the Forest-hill District. Frederick E. Hunt, L.R.C.P. Edin., M.R.C.S.E., to the Sydenham District.

Liverpool Parish.—Robert A. H. Wood, M.R.C.S. Eng., L.S.A., to the Sixth District. Frederick W. Lowndes, M.R.C.S. Eng., L.S.A., to the Twelfth District.

Ongar Union.—John R. Cloutiug, jun., M.R.C.S. Eng., L.S.A., to the First District.

Settle Union.—Frederick Griffiths, M.R.C.S. Eng., L.S.A., to the Ingleton Fells District.

Worksop Union.—Joseph Kenney, L.R.C.S. Ire., M.B. Univ. Dub., to the Whitwell District.

Dr. E. J. Tilt has been made a Corresponding Fellow of the New York Academy of Medicine.

THE death is reported of Dr. Edmunds, Superintendent-Surgeon of the Robben Island Lunatic Asylum.

THE students of St. Thomas's Hospital were last week entertained by the Archbishop of Canterbury, who showed them over Lambeth Palace.

THE new hospital at Tewkesbury will be opened on the 31st inst.

WE learn from Cape Town that a Bill to repeal the Contagious Diseases Act has passed both branches of the Legislature.

A convalescent home has been erected at Saltburn-by-the-Sea, through the liberality of the Pease family, of Darlington.

MR. CHARLES SPURGIN, after a service of thirty-five years as a Medical Officer of the Samford Union, has been awarded a superannuation allowance of £25 per annum.

MR. JAMES WILKIN has obtained a superannuation allowance to the amount of two-thirds of his salary on resigning as Medical Officer of the Ely Dispensary District of the Enniskillen Union.

THE Committee of the Birmingham and Midland Hospital for Women have elected Mrs. Louisa Atkins, M.D. Zurich, Resident Medical Officer and Secretary to that institution. There were two candidates besides of the other sex.

HOSPITAL FOR DISEASES OF THE THROAT.—His Royal Highness the Prince of Wales has graciously consented to become a Patron of this Hospital.

LORD CADOGAN, says the *South London Press*, is supporting the Ratepayers' Association in Chelsea against the scheme of the Local Government Board in the erection of an infirmary for that locality at a cost of £20,000.

DR. MCCORMACK has reported to the Lambeth Vestry on the vapours emitted from the potteries, that it was his opinion that hydrochloric acid gas (unless in a very concentrated form, which was not the case in the present instance) was not prejudicial to health.

PRESENTATION.—Mr. Thomas Land, M.R.C.S. Eng., has been presented with a massive marble clock, two elegant bronze vases of classical design, and an address, by the Governor and other officers of the Leeds Union Workhouse, on resigning as Medical Officer thereof. Mrs. Land was at the same time presented with a handsome ebony workbox beautifully inlaid with pearl.

AN EASY SANITARY REGULATION.—A good rule for ascertaining the amount of carbonic acid in the air of houses is given by Dr. Angus Smith thus—"Let us keep our rooms so that the air does not give a precipitate when a 10½-ounce bottle-full is shaken with half an ounce of clear lime-water."

FORTY-FIFTH MEETING OF THE GERMAN NATURALISTS AND PHYSICIANS.—Professor Thiersch and Zirkel, of Leipsic, have issued a circular requesting men of science, both in Germany and abroad, to make known to them their intentions of attending the forty-fifth meeting to be held at Leipsic from August 12 to 18. It was in this city that the celebrated Oken laid the foundation of the Association fifty years since.

CIVIL-LIST PENSIONS.—A pension of £60 a year from the Civil List has been granted to Mrs. Emma Meyer, widow of the late Dr. John Meyer, who was Superintendent of the Hospital at Smyrna during the Crimean war, and afterwards of the Criminal Lunatic Asylum at Broadmoor. Also to Miss Emily Southwood Smith, of £30 a year, in addition to the pension of £60 a year awarded in 1868, on account of the valuable services of her father, the late Dr. Southwood Smith.

WOMEN-DOCTORS IN SWITZERLAND AND MELBOURNE.—It is pretty clear that if women-doctors really come generally into vogue we must be prepared for a kind of epicene being "neither fish nor fowl." We learn from the *Swiss Times* that at Zurich the women medical students are adopting costumes which are neither male nor female. They wear short dresses, their hair not so long as many of the students of the opposite sex, small round hats, etc.—in a word, their whole appearance confirms the opinion that if a young girl wishes to study Medicine, she must cease to be a woman.——The question as to the desirability (says the *Melbourne Argus* of May 21) of extending the educational privileges of the Melbourne University to women has been discussed at a meeting of the Senate of that body. A motion was brought forward by Dr. Madden to the effect that there was no sufficient reason why women should be excluded from the educational advantages and corporate privileges of the University. The objection to ladies attending medical lectures was acknowledged, but Professor Wilson pointed out that, according to one of the regulations, any person who had entered his name upon the register and paid the fee could attend, whether matriculated or not; so that even at present there was no power to prevent ladies attending any of the lectures. The motion of Dr. Madden was carried, and ordered to be forwarded to the Council. Dr. Bromley withdrew a resolution of which he had given notice, which had a similar object in view. The admission of women to the medical lectures of the University, should it take place, will not, we think, improve its reputation as a school of Medicine.

STIMULANT LINIMENT.—The following was prescribed by Professor Chomel in certain forms of muscular rheumatism:—Tincture of cantharides 15, camphor 2, oil of almonds 120, and officinal soap 30 parts.—*Union Méd.*

CHOLERA IN RUSSIA.—Dr. Zuelzer, of Berlin, has forwarded some returns relating to the prevalence of cholera in Russia, which he has received from the medical department at St. Petersburg. In that city, the total deaths from cholera up to 11th inst. were 240, and in the week ending 14th, 126; estimating the present population of the city at 700,000, these 126 deaths were equal to an annual rate of 9 per 1000, or to 596 in a population equal to that of London. In Moscow the fatal cases in the week ending 6th were 32, but the prevalence of the disease has since declined. Cholera also prevails at Odessa, and 84 deaths were referred thereto in the week ending 3rd. In other parts of South Russia the fatality recently reported has decreased.—*Registrar-General's Weekly Return.*

THE annual meeting of the Clayton and Wakefield Hospital and Dispensary was held last week. The report stated that the patients remaining on the books of the Dispensary, July 1, 1871, were 260; admitted since, 2492—total under treatment, 2752. Discharged cured, 1938; discharged relieved, 343; discharged irregular, etc., 49; dead 104; admitted into the Hospital, 94; remaining on the books July 1, 1872, 224—total 2752. Patients visited at their own homes, 931; patients admitted since the opening, 80,576. Clayton Hospital in-patients: Patients in the house on June 30, 1871, 6; admitted since, 94; total number under treatment, 100; discharged cured, 66; total number discharged relieved, 9; dead, 9; remaining in Hospital, 16; total, 100.

ORGANIC MATTER IN METEORIC STONES.—A suggestive and significant fact is the presence, in some few meteorites of combinations of hydrogen and carbon, which if met with in a terrestrial mineral would with little hesitation be assigned to an organic origin. A few grains were exhibited to the audience, of such a body, crystallised from ether, which solvent had extracted it to the amount of about 0·25 per cent. from six ounces of the Cold Bokkveldt meteorite. Similar substances have been extracted by Wöhler, Roscoe, and other chemists from this and other meteorites. It was, however, observed, as pointing to the probability of the comparatively porous meteoric stone having in this case taken up the hydrocarbon as a substance extraneous to it (possibly when in the state of a vapour), that ether extracted it entirely from the solid lumps of the meteorite; pulverisation not in any way adding to the amount obtained, or facilitating in any appreciable degree the separation of the substance.—*N. S. Maskelyne, at the Royal Institution.*

AN EARLY MEDICAL CONTRACT SOCIETY.—M. Chereau, in his interesting contributions to the history of the French Medical Faculty, furnishes a curious specimen of an attempt made in 1772 to set up a Medical Contract Society, made by three young Paris doctors who, unprovided with patients, felt that it was a grievous loss to society to be deprived of their services. They therefore widely issued a circular to the public, in which they proposed to furnish medical attendance for 12 livres (or francs) annually, 18 livres for two in the same family, 24 for three, and 6 livres per head for every additional person. However, the days of medical discipline had not yet come to an end, and the Faculty of Medicine of Paris met immediately to stigmatise this "Economic Subscription for the Sick," and to call for the intervention of the police; declaring at the same time that its members were always ready to consider the circumstances of those who applied to them for advice. The three doctors did not think fit to pursue their scheme in face of this opposition, and signed a declaration that they abandoned all action respecting it.—*Union Méd., May 2.*

Health of Scotland.—During the month of June last the deaths of 2209 persons were recorded in the eight principal towns, of whom 1147 were males and 1062 females. Allowing for increase of population, this number is 243 under the June average of the previous ten years. A comparison of the deaths registered in the eight principal towns shows that during June the annual rate of mortality was 15 deaths per 1000 persons in Perth, 21 in Aberdeen, 22 in Dundee, 23 in Greenock, 24 in Edinburgh and in Leith, 25 in Paisley, and 27 in Glasgow. Of the 2209 deaths, 922, or 42 per cent., were of children under 5 years of age. In Perth 18 per cent. of the persons who died were under 5 years of age, in Aberdeen 33, in Edinburgh and in Leith 35, in Paisley 42, in Greenock 44, in Glasgow 45, and in Dundee 48 per cent. The zymotic (epidemic and contagious) class of diseases proved fatal to 471 persons, constituting 21·3 per cent. of the mortality of the eight towns. This rate was exceeded in Dundee from the prevalence of measles, in Edinburgh from small-pox and scarlatina, and in Leith from small-pox, scarlatina, and fever.

NOTES, QUERIES, AND REPLIES.

Ye that questioneth much shall learn much.—*Bacon.*

P.—Edinburgh or Aberdeen, or Trinity College, Dublin.

Hollingborne, Maidstone.—Thanks. Such material is always valuable.

Pater.—We can easily refer you to families in Paris with whom a respectable youth could live whilst attending to his studies.

Mirror.—1. Squire's red gum lozenges. 2. The Apollinaris water. 3. Consult some experienced practitioner, who will decide on view of the parts.

Ep.—We believe the ignatia amara to be a most dangerous medicine, tending to cause tetanic spasms much more than the nux vomica; it is purgative in its tendency.

Debilis.—The effects of the pressure of the truss on the skin may be mitigated by washing with yellow soap and water, dabbing with eau de Cologne, and powdering with starch.

Glanders.

To the Editor of the Medical Times and Gazette.

Sir,—I was walking down Park-lane about ten o'clock on Sunday evening, when my attention was drawn to a horse that was being led down the lane coughing and snorting at a remarkable rate. Whilst meditating on this fact, the fellow that led the horse was the first to break silence. "I say, measter, be this the right way to Vauxhall-bridge?" "Yes," I said; "be you a-going to the kuacker's?" "Knacker's!" said he, "what d'ye mean?" "That horse o' yourn has got the glanders," I said. "No he aint; he've only got a bad cold." I turned up a street, in order to be out of the way of so unsavoury a fellow-passenger; but I thought to myself that one sneeze of that poor beast might alight upon a "human," and give rise to symptoms very interesting, but highly pernicious to the sufferer.

I am, &c.,

Alpha.

Lincoln.—It is scarcely necessary, we think, to notice the circumstance alluded to. Dr. Lowe has now assured the Committee that he is fully prepared with proper apparatus and a good laboratory, and that he has been hard at work for some time past. His next Report on Adulteration of Food and Drink we shall expect to find ample and exhaustive.

Poor-law Medical Officer.—Dr. Norton, one of the Medical Officers of the Holborn Union, having been in attendance upon a nurse and other officers of the Union, sent in a charge of four guineas to the guardians for that attendance. The guardians denied his power to make any such demand, and ordered that the account "do lie on the table." If the guardians are not liable, the officers attended are.

Infirmary for Epilepsy and Paralysis.

To the Editor of the Medical Times and Gazette.

Sir,—I beg to correct an error which has found its way into the last number of the *Medical Times and Gazette* in reference to my appointment as Physician to that Institution. The proposal to join the staff came originally from myself, and not from the Committee of the Infirmary.

I am, &c.,

64, Harley-street, W., July 23. J. Lockhart Clarke.

Medical Education.—*Nature* has a paper in which it advocates abridgment of the ordinary school course for boys intended for the medical profession, and the substitution of a practical course of science:—

"The medical profession is not essentially a literary one. What is really required is a seeing eye and an understanding heart; the faculty of correct observation on the one hand, and on the other the ability to single out what is important amidst a multitude of unimportant particulars—in a word, judgment; and as this is capable of being immensely improved by exercise, it should surely be the point to which the education of the student should be directed. But, as a matter of fact, no line of education can be better adapted for the purpose in view than that of the medical student of the present day. From the beginning to the end it is or might be made a 'questioning of nature.' The grand defect of the system is that insufficient time is at the disposal of the student to master the details. He learns a little of many things—nothing well, unless it be his anatomy; but the advantage a knowledge of all would give him may be estimated in some remote degree by the value that teachers and students alike set upon this single acquisition. . . . We are bold to say that a boy of fifteen knows, or ought to know, enough of Latin, Greek, and arithmetic for any subsequent use he is likely to make of them. At this age he should be called upon to select what his future career shall be, and his education should be directed accordingly. . . . In every large school in England, a third or natural science department should be founded, in which practical chemistry, field botany, and natural philosophy, with the French and German languages, should form the subjects of study. We are confident that in the hands of competent teachers a lad might obtain between the ages of 15 and 18 or 19 a very large amount of useful knowledge on these subjects without any undue strain upon his intellectual powers. . . . . The instruction given need only be rudimentary, but it should be most precise and thoroughly acquired. Any chemist could select six elements, any botanist six natural orders, any zoologist six classes of animals, which, if thoroughly known, would constitute an invaluable training to the future physician. He would then enter the medical school with a well-cultivated mind accustomed to close observation, and prepared to profit to the utmost by the system of education now generally adopted."

Malchus's Ear.

To the Editor of the Medical Times and Gazette.

Sir,—I thought that everyone who had got a medical education was aware of the fact that certain parts of the human body, when completely severed therefrom, could be again made to unite. One of the first lessons I learned when a medical student was that fingers and toes were not to be needlessly sacrificed when clean cut off, but were to be replaced for the purpose of again uniting. Here are two cases in point:—

C. C., aged 6, had the point of his forefinger cut off by a wood chopper. I saw the patient about three hours after the accident, took the point of the forefinger from a basket, and strapped it on again. In about six weeks time union was effected. The finger-point was completely cut off close to the first phalanx of the forefinger.

A case where there was a connecting band of skin:—C. T., aged 30, severed his great toe clean across (through the bone), leaving the member hanging by a piece of skin at the posterior part of about three-eighths of an inch in width. Proper appliances were made use of, and the patient is doing well, the bone being now united.

The personal experience of great surgeons such as Fergusson and Erichsen does not, we imagine, condescend to teach what the most unlearned medical tyro must certainly be made aware of by clinical teachers. In fact, if personal experience was required for every little thing in either surgery or medicine, medical and surgical treatises would be of an astounding size. Even, under such circumstances, the plastic surgery of ears might be forgotten.

Again—"Further, many ears must have been clean cut off (?) in cavalry charges during the Indian wars of our own time. What say living military surgeons as to the fact of vital reunion in such cases?" I do not know what military surgeons would say, but it strikes me that in the *mêlée* of a charge extending over a considerable space of ground a soldier who had his ear clean cut off would not rein up, dismount, and look for the severed member, going to the rear with it to have it replaced. I expect the soldier would still go on, though *minus* an ear, rejoicing that the sword had not touched a more vital part. After the charge it would be quite a miracle for the ear to be found, even after the most diligent search over the field of action.

I am, &c., Sussex M.D.

Topographical.

To the Editor of the Medical Times and Gazette.

Sir,—Lolling on the beach, idly throwing pebbles at the receding waves, listening to the monotonous roar, sniffing the briny, and watching the outward-bound ships in full sail—one wonders if the passengers are very sea-sick—what remedies are found useful by the experienced surgeon, and how many invalids are leaving home, occupation, and everything held dear in the experimental endeavour to restore shattered health in foreign climes. All day long artillery practice vigorously is conducted, one gun on land, another wobbling about in a barge. Whiz! go the shells—a puff of smoke, a tremendous bang, followed by ducks and drakes in the far distant water. At low tide this morning six horses were racing along the sand, drawing at a respectful distance a target on wheels, no easy mark to hit. With barrels and pontoons, officers are building bridges or dismounting heavy ordnance. Sensibly dressed in jumpers—that is, white clothes—yet, instead of a straw hat and cabbage-leaf, each man, as if desirous of heat-apoplexy, wears the tiny gold-laced forage cap without a peak, this blazing sultry day! Scattered about, in addition to guns and carriages, are grim specimens forcibly illustrating the terrible destruction wrought by armed science. When the hardest wood, the strongest iron, and the rugged granite become thus splintered, perforated, torn, and shattered, how about poor flesh and blood—what avails the surgeon's art? Also, why should foreign nations be allowed to learn these secrets, to reap all the advantages of such costly experiments, only to be turned against us in warfare? "The nimble gunner now the devilish cannon touches, and down goes all before him," remarked Shakespeare long, long ago, when artillery was not quite so deadly as at present. Although the noise of firing is tremendous, the residents take no notice; indeed, a lady said "Was there practice to-day? baby slept through it all!" Those working long at the guns feel it, not so much in the way of deafness as concussion shaking them to pieces. Amongst the men, beer, cockles, winkles, and the sun cause diarrhœa. Sufferers from malaria find their weak points exposed. There is a certain amount of winter bronchitis, but altogether the place is healthy, and the sick-list small. The barracks, kept in good order, clean, and neat, afford sufficient cubical space apparently, and the cooking is conducted on Warren's principle. About 700 men, 200 women, 250 children, comprise the strength. Some of the officials have excellent houses covered with roses, vines, and honeysuckle, owing to the mild air and the clay soil, and in one of the pretty gardens Dr. Hooker would have been pleased with the care bestowed on a treasured plant, originally a sprig from a certain wedding bouquet. Hear that miners are so reckless, stealing nitro-glycerine to polish their boots on Sunday, and taking this explosive compound to bed to keep warm, and prevent freezing. Returning in a train crammed with daily-breaders, read of the terrible heat and the numerous deaths in India, also Dr. Copeman's remarks on puerperal fever treated by turpentine—one of the most valuable remedies of the Pharmacopœia, whether as a rubefacient, counter-irritant, hæmostatic, anthelmintic, diaphoretic, diuretic, or stimulant. Useful in tympanitis, colic, neuralgia, and the various neuroses of children, why should it be specific in iritis? Read also that the Winnebagoe "medicine men" give dances and musical "at homes," simply as solemn religious

ceremonies, to appease the angry spirits of patients who have succumbed to treatment. Unfortunately find a lady takeu ill during my absence, indignantly sent for Weasel, the opposition; and that the grave-diggers have struck for higher wages. Medical men can never strike: what with cheap colleges and uo preliminary Arts examinations, the Profession will always be overstocked. Some years ago there was a regiment in New Zealand: the majority of the privates (including a baronet and an "honourable") were broken-down doctors. Lately have been treating cases of dengue with quinine and iodide of potassium—slight desquamation, no sore throat, seldom fatal primarily, but leading on to diarrhœa and cholera. One woman states that this disease at Aden was blown over from the Persian Gulf, and that the most painful form attacked the nose. Have a child under treatment, 3 years and 6 months old, unable to walk or stand, brought up by the bottle. Mother went out wet-nursing; her other children she gave the breast to are strong and healthy. Some years ago an instance of pemphigus occurring in a family some time previously, exposed to the atmosphere of puerperal fever, made a lasting impression. Just now a fair-haired child, aged 3, prostrated by measles and diarrhœa, developes this curious disease; a painful red pimple appears on the arm or leg, rapidly turning into an enormous bulla containing limpid serum, then bursting and leaving a troublesome ulcer. This fluid applied to healthy skin will communicate fresh pemphigus, the severity depending on the individual constitution. Went the other night to a botanical fête. Can you conceive anything more melancholy than being cooped up (by the rain) in a conservatory, the storm outside drowned by bagpipes, and visions of cholera, paralysis, and dysentery constantly suggested by the presence of Burmese Ambassadors? Noticed several unhappy fathers brooding over the colchicum, blue pill, and podophyllin of the morrow. Pitied some very handsome girls whose lovely necks, set off with Streeter's lockets, were imprudently exposed to cutting draughts, and whose thin satin shoes sank into the sloppy gravel. Pretty butterflies! instead of garden parties, "Polo," excursions up the river, including flirtation, not a few will have a dreary turn of the sick-room—the nurse and the doctor. Under the circumstances I beg to enclose the card of an old family PRACTITIONER.
Finsbury-square.

COMMUNICATIONS have been received from—

Mr. BOWMAN; Mr. H. WILSON; Mr. W. P. SWAIN; Mr. JEBB; Dr. F. GOULD; Dr. PHILLIPS; Dr. HAYWARD; Mr. BAYLIS; Rev. T. W. BELCHER; SUSSEX M.D.; Dr. LOCKHART CLARKE; Mr. J. LAMB; Dr. TILT; Mr. F. A. BULLEY; Mr. J. M. HART; UNION MEDICAL OFFICER; Dr. J. H. WILSON; Dr. F. R. HOGG; Mr. C. SEDGWICK; Dr. E. COPEMAN; Mr. J. CHATTO; Dr. J. R. HARDIE; Mr. H. MORRIS; Dr. LIONEL S. BEALE; Mr. T. M. STONE.

BOOKS RECEIVED—

Health and Comfort in House-building, by J. Drysdale, M.D., and J. W. Hayward, M.D.—Recreation a Religious Duty, by Amelia Lewis—Temperature Charts, by Franklin Gould, M.D., M.R.C.P.—Hygiene of Air and Water, by William Proctor, M.D., F.C.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Canada Medical and Surgical Journal—Boston Medical and Surgical Journal—Lincoln Gazette—Lincolnshire Chronicle—American Journal of the Medical Sciences, July—Medical Press.

APPOINTMENTS FOR THE WEEK.

July 27. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

29. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

30. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

31. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

August 1. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

2. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 20, 1872.

BIRTHS.

Births of Boys, 1068; Girls, 1083; Total, 2151.
Average of 10 corresponding weeks, 1862-71, 1975·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	796	671	1467
Average of the ten years 1862-71	759·2	705·4	1464·6
Average corrected to increased population	...	...	1611
Deaths of people aged 80 and upwards.	...	...	36

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	3	...	...	2	11	1	1	2	45
North ...	751668	11	5	1	...	8	1	1	3	49
Central ...	333887	1	2	...	...	5	...	2	...	36
East	638928	6	4	1	...	14	1	...	2	78
South... ...	966132	8	1	1	3	22	1	5	3	50
Total	3251804	29	12	3	5	60	4	9	10	258

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·799 in.
Mean temperature	61·4°
Highest point of thermometer	83·9°
Lowest point of thermometer	47·0°
Mean dew-point temperature	55·9°
General direction of wind	Variable
Whole amount of rain in the week	0·16 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 20, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending July 20.	Deaths Registered during the week ending July 20.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2151	1467	83·9	47·0	61·4	16·33	0·16	0·41
Portsmouth ...	115455	12·1	84	55	78·6	49·2	61·4	16·33	0·40	1·02
Norwich	81105	10·9	52	31	80·0	41·8	58·3	14·61	0·41	1·04
Bristol	186428	39·5	121	60	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	48	24	77·3	49·8	60·5	15·83	0·01	0·03
Birmingham ...	350164	44·7	275	138	77·3	50·4	59·8	15·44	0·42	1·07
Leicester	99143	31·0	77	40	...	...	...	...	...	...
Nottingham ...	88225	44·2	70	48	78·9	46·2	59·0	15·00	0·36	0·91
Liverpool	499897	97·9	425	217	73·9	51·5	59·8	15·44	0·00	0·00
Manchester ...	352759	78·6	265	155	77·0	52·3	60·9	16·06	0·10	0·25
Salford	127923	24·7	116	39	77·7	45·0	59·1	15·05	0·04	0·10
Oldham	84004	20·2	88	42	...	...	...	...	...	...
Bradford	151720	23·0	71	73	73·2	49·0	59·4	15·22	1·00	2·54
Leeds	266564	12·4	232	120	72·0	47·0	57·6	14·22	1·23	3·12
Sheffield	247847	10·9	191	116	76·0	48·0	59·1	15·05	0·07	0·18
Hull	124976	35·1	100	76	...	...	...	...	...	...
Sunderland ...	100665	30·4	74	51	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	108	72	70·0	48·0	55·3	12·94	0·19	0·48
Edinburgh	205146	46·3	122	85	72·0	43·7	58·4	14·66	0·03	0·08
Glasgow	489136	94·8	447	239	73·5	44·2	59·2	15·11	0·02	0·05
Dublin	310565	31·9	135	130	79·9	41·0	62·6	17·00	0·00	0·00
Total of 21 Towns in United Kingd'm	7393052	34·0	5252	3278	83·9	41·0	59·5	15·28	0·28	0·71

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·80 in. The highest was 29·93 in. on Saturday morning, and the lowest 29·66 in. at the beginning of the week.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

FLOUR.

HORSNAILL & CATCHPOOL,

BULLFORD STEAM MILLS, ESSEX,

Continue to supply families in and around London with Flour, &c., of their own manufacture (warranted pure), carriage free. Whites for Pastry. Fine Households, specially recommended for Bread-making. Seconds. Wheaten Meal for Brown Bread. Rye Meal. American Hominy Meal. Pure Flour of Lentils. Scotch Oatmeal (fine) for Gruel; ditto (round) for Porridge. Scotch Brose Meal, &c., &c.

Address, Horsnaill & Catchpool, Liverpool-road, London, N., for all information.

PEPSINA PORCI.

Messrs. BULLOCK & REYNOLDS

Beg to direct the attention of the Profession to the experiments upon Medicinal Pepsin by Professor Tuson, recorded in the "Lancet," Aug. 13th, 1870, which incontestably prove the very great superiority of their preparation in point of digestive power over every other Pepsin, British or Foreign. Dose—Two to four grains.

Messrs. BULLOCK and REYNOLDS will be happy to forward a Reprint of Professor Tuson's Paper on application.

3, HANOVER-STREET, HANOVER-SQUARE, W.

HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

Messrs. Baiss Brothers & Co.	Messrs. Geo. Curling & Co.	Messrs. Hearon, Squire, & Francis.	Messrs. Southall, Son, & Dymond.
,, Barron, Harveys, & Co.	,, Drew, Barron, & Co.	,, Herrings & Co.	Mr. James Woolley.
,, Battley & Watts.	,, Evans, Lescher, & Evans.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Langtons, Scott, & Edden.	,, Wyleys & Co.
,, Cox, Gould, & Co.	,, Samuel Foulger & Son.	,, Preston & Sons.	Glasgow Apothecaries' Co.

PURE AIR AND HEALTH.

EFFICIENCY AND SAFETY.

FREE FROM POISON.

McDOUGALL'S
PATENT CARBOLIC DISINFECTANTS,

In Powder, Fluid, and Soap,

PREVENT INFECTION & FOUL SMELLS.

Selected by the Royal Commissioners as

THE BEST DISINFECTANT.

Should be used in every house as **Safeguards from Infectious Diseases,** also for the purification of **Water-closets, Dust-bins, Drains, Sick-rooms, Outhouses, &c.**

Note.—Non-volatile and "odourless" preparations only act upon the matter to which they are applied; they do not purify the atmosphere or destroy infectious germs floating in it, and for that reason are but of slight utility for general use. The above Carbolic Preparations of Messrs. McDougall purify the surrounding atmosphere as efficiently as they disinfect the matter with which they are brought into contact.

Sold by Chemists, Chandlers, &c.

McDOUGALL BROTHERS—London, 158, Leadenhall-street; Manchester, 68, Port-street.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture VIII.

The Rodentia, or gnawing animals, are very numerous, widely distributed over the earth's surface, and mostly of small size. They are easily distinguished from all other mammals by the well-known characters of their teeth. On the whole, they are more decidedly vegetable feeders than any group hitherto spoken of, though some are more or less omnivorous. Among the latter is the common rat, the digestive organs of which will supply an illustration of the general arrangement of these parts in a considerable number of members of the order.

It will be recollected that the teeth of the rat, as of other rodents, consist of large cutting incisors at the front part of the mouth, and of a set of grinding molars at the back part, with a long interval between. In accordance with this arrangement of teeth, the mouth appears to be divided into two compartments, anterior and posterior, with a constriction between, caused by the hairy skin of the upper lips nearly meeting behind the incisor teeth, or in some rodents actually uniting across the middle line, and allowing of but a very small aperture into the posterior or molar compartment. This position of the incisor teeth, almost outside the mouth proper, may be related to the numerous functions required of them, independently of their direct action upon alimentary substances, as in gnawing through hard substances not intended to be eaten, such as the shells of nuts, wood used for constructing their habitations, roots, or other obstructions to their burrows, etc.(a)

The upper lip in the rat and most other rodents is deeply fissured in the middle line in front, and very mobile; the lower lip is entire and pretty firmly attached around the base of the lower incisors. The gape is small, and from the angle of the mouth a patch of skin covered with long hairs is reflected backwards and upwards on to the inner surface of the cheek. There are no cheek-pouches in the common rat, but several allied forms, as the hamster (*Cricetus*), and *Geomys*, *Saccomys*, *Saccostomus*, *Spermophilus*, etc., have large oval sacs, formed by the extension of the mucous membrane lining the cheek, with a muscular covering, passing beneath the skin, along the side of the neck, used, as in cercopithecine monkeys, as temporary reservoirs for food.

The palate of the rat is long and narrow. It has three very strong transverse ridges in front of the molars, and five smaller wavy or zigzag denticulated ridges between those teeth. Behind the molars the soft palate is continued for more than half an inch, gradually narrowing, flat, and covered with small tubercles, and the openings of numerous glandular crypts. The velum is a straight transverse ridge of little prominence, immediately behind which the posterior nares open into the pharynx by a small and nearly circular aperture with a raised tumid margin, into which the upper edge of the larynx exactly fits, the epiglottis passing behind and above the velum. The tonsils are only represented by scattered follicular openings on the soft and longitudinally folded side-walls of the narrow faucial canal.

The tongue is long and rather narrow, deep, and fleshy, contracted in the middle, broader and obtuse in front, where the dorsal surface has a strong median groove. The hinder part between the molar teeth is elevated and compressed (the "intermolar eminence"), but less distinctly so than in most rodents. There is no distinct median frænum, but a pair of lateral frænа pass backwards from near the tip to join the band which ties the lower lip to the gum, just in front of the molar teeth. There is no sublingua, but a pair of small salivary papillæ are present, close to the median line in the floor of the mouth, behind the lower incisors. There is a single median circumvallate papilla close to the base of the tongue. The surface of the dorsum in front of this is covered very evenly with small, sharp-pointed conical papillæ, directed backwards, which become larger and more filamentous and vertical or even turned forwards on the raised intermolar tract. Among them, over the anterior part of the surface, conspicuous round fungiform papillæ are sparingly scattered.

The salivary glands are largely developed. The parotid consists of numerous rather scattered lobules, extending from the under surface of the ear conch backwards along the side of the neck. Its duct, formed by the union of three principal branches, runs directly forwards across the masseter muscle, and opens a short distance (·15 inch) in front of the anterior molar tooth. The submaxillary gland is larger and more compact than the parotid, of an elongated oval form, lying on the front of the neck, reaching to the median line; its duct has the usual course, and opens on the papilla previously mentioned beneath the tongue. The sublingual gland is a small flattened lobule (one-fifth of an inch in length), closely adherent to the mucous membrane of the floor of the mouth, by the side of the middle of the tongue. The large lachrymal gland, placed superficially between the ear and the eye, and very like the parotid in external characters, might at first sight be mistaken for part of the salivary apparatus. There appears to be no zygomatic gland, though it is found well developed in many other rodents.

The œsophagus is narrow and continued for a considerable distance below the diaphragm before it enters the stomach. The last named cavity is of oval form (see Fig. 28), much curved, the elongated right cul-de-sac projecting upwards by the side of the œsophagus, the pyloric portion short and slightly saccular. Although not distinctly divided into compartments, the whole organ is sharply marked off into two distinct parts of nearly equal extent by the structure of the

Fig. 28.

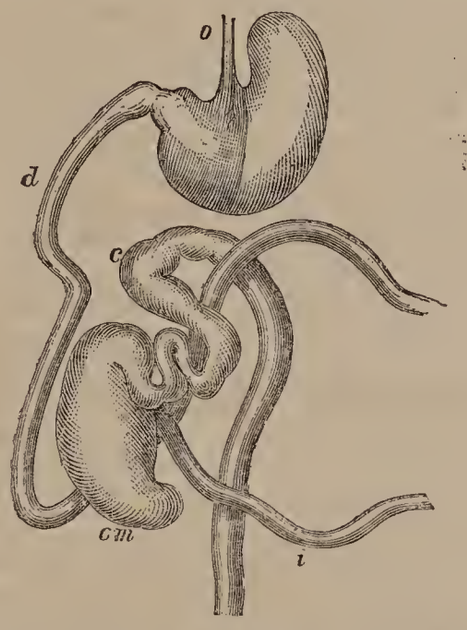


Fig. 28.—Alimentary canal of Common Rat (*Mus decumanus*), the greater part of the small intestine being omitted: *o* œsophagus, *d* duodenum, *i* ileum, *cm* cæcum, *c* colon.

walls, clearly visible on the exterior, but much more distinctly when it is laid open. The part to the left of the œsophagus has translucent walls, and a pale, whitish, mucous surface, covered with epithelium, and containing only mucous glands. The right or pyloric portion is more opaque and muscular, with a reddish-grey, vascular, velvety mucous membrane, arranged in longitudinal folds, and containing peptic glands in great number.

The characters of the stomach of the rat are thus very interesting, as affording one of the simplest examples, though well marked, of that division of the stomach into compartments of different structure and function (indicated, it is true, though feebly, in man and the carnivora) which attains so great a development in the ruminants and some other typically herbivorous mammals.

The general arrangement of the intestinal canal is shown in the annexed diagram (Fig. 28). The small intestine is about six times and the large intestine once the length of the body of the animal. The cæcum is placed on the right

(a) "Most have a great variety of powers with their fore-teeth: they are a kind of carpenter's tools, becoming a compound instrument."—Hunter, "Essays and Observations," vol. ii., p. 198.

side of the abdomen, with its apex towards the pelvis. It is of a wide pyriform shape, curved on itself, and about the same size and also of much the same form as the stomach. It suddenly contracts as it enters the colon, which at its commencement is slightly sacculated and folded a little; but it soon diminishes in calibre, and has a simple course.

The liver (Fig. 29) is divided in exactly the same manner as in the insectivora and smaller carnivora, but the Spigelian lobe is large and composed of two flattened leaf-like processes.

Fig. 29.

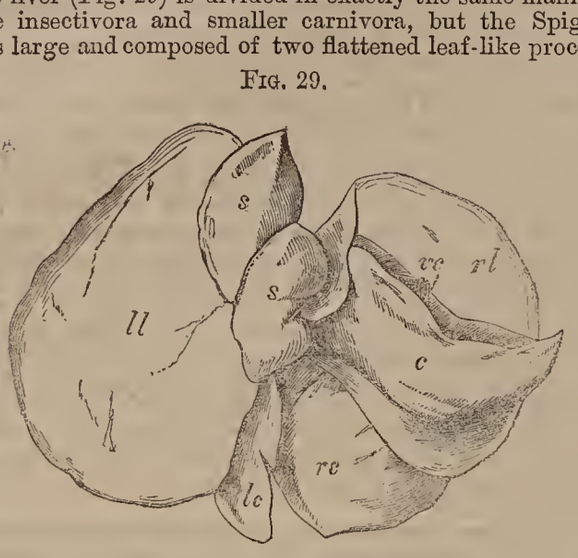


Fig. 29.—Under surface of the liver of common rat: *ll* left lateral lobe, *lc* left central lobe, *rc* right central lobe, *rl* right lateral lobe, *s s* divisions of the Spigelian lobe, *c* caudate lobe, *vc* vena cava.

Unlike the liver of all the animals hitherto spoken of, it has no gall-bladder, the hepatic ducts uniting to form the common bile-duct, which enters the duodenum nearly an inch from the pylorus. The pancreas is composed of numerous foliated lobules, as in the insectivora.

I will now pass to another type of rodent, one of the most purely herbivorous forms—the rabbit.(b) The incisor teeth being more exclusively used for biting off the leaves and blades of grass on which the animal feeds, they are less powerful in comparison, and not divided off from the rest of the mouth by a constriction of the upper lips, as in the rat and many other rodents. The molar teeth are more numerous, and their continuous growth and wavy transverse ridges of enamel are especially related to the tough fibrous nature of the food they have to act upon. The additional rudimentary upper incisors placed behind the large functional ones do not appear to have any teleological importance. The thick, tumid, and hairy upper lip is fissured in the middle line, whence the common expression "hare-lip" applied to an occasional defect in human organisation. The gape is not wide. The hairy skin of the cheeks extends inwards from the angle of the mouth, nearly as far back as the molar teeth. The palate is long and narrow, and covered with numerous transverse elevations of the mucous membrane, which are more developed than in the carnivora and other animals we have hitherto considered, being flat, imbricated plates, a row on each side of the middle line, extending as far back as the penultimate molar. Beyond this the surface is quite smooth, and deeply grooved in the middle line, and contains a large number of acinose glands. Immediately behind the small posterior incisor teeth are the narrow longitudinal openings of the nasopalatine canals. The hinder border of the soft palate is thin, nearly straight, and without uvula. The tonsil is a distinct and rather deep fossa, with glandular walls, the orifice of which is placed longitudinally, with a tumid inferior margin.

The tongue is long and narrow. It has a distinct compressed intermolar elevation, of about half the length of the organ. In front of this the tongue expands laterally, the anterior half having an oval flat upper surface. The papillæ are small and soft. The two circumvallate papillæ are far apart. The conical papillæ are very uniform in character, small, and scale-like, except on the intermolar elevation, where they become filamentous. The flat-topped, circular, fungiform papillæ are neither large nor numerous, and confined to the anterior end of the organ. The under surface is smooth, and there is a median frænum, but no sublingua nor any salivary papillæ.

The parotid gland is of considerable size, being extended from above downwards, but narrow from before backwards. It consists of an irregular-shaped upper portion, which rises in front of the base of the external ear, of a narrow median or connecting part, and of a triangular inferior part, lying behind the ascending ramus of the mandible. The duct leaves the anterior edge of the lower part of the upper portion, runs directly forwards across the masseter, and enters the cheek by a small round aperture, opposite the interval between the first and second premolar teeth. The submaxillary gland is of an irregular oval form, is not more than half the size of the parotid, and lies on the inner side of the angle of the jaw. The duct enters the floor of the mouth a little way in front of the attachment of the frænum linguæ, very near the median line, without any distinct papilla.

The sublingual is a narrow strip of gland-substance three-quarters of an inch in length, lying on the outer side of the submaxillary duct, communicating by eight or nine short ducts with the floor of the mouth, in the groove by the side of the middle third of the tongue. The buccal glands are arranged in two longitudinal rows—upper and lower—the last being more developed and parallel to the upper border of the mandible. As in the dog, the posterior upper buccal glands form a distinct lobulated mass, which has been described as the zygomatic or infraorbital gland. It lies beneath the anterior root of the zygoma. The labial glands form a compact oval mass half an inch long by the side of the lower lip.

The stomach of the rabbit is simple, elongated transversely, with a largely developed cardiac or left pouch, and a tolerably distinct pyloric antrum, over which the muscular coat is very much more developed than elsewhere. There is not that sharp division of the character of the lining membrane seen in the rat's stomach, and the epithelial lining of the œsophagus ends by an abrupt festooned border at the cardiac orifice. The pylorus is a moderate-sized circular aperture. The intestinal canal from the pylorus to anus is about ten or eleven times the length of the body, of which the small intestine occupies about seven, the cæcum one, and the colon and rectum two parts. The duodenum is very long, loosely attached, passing down the right side of the abdomen before it turns up to cross the spine. The mucous membrane of the small intestine has some longitudinal folds and from four to six Peyer's patches. It is thickly covered, especially at the upper end, with flattened leaf-like villi. The cæcum is of very great size, holding at least ten times the contents of the stomach, and of very peculiar form. Immediately above the circular ileo-colic valve the ileum has a roundish dilatation, with thick walls beset with lymph follicles of the same nature as the Peyer's glands. A nearly circular patch of similar follicles is placed just on the colic side of the valve. The first and greatest portion of the cæcum is the widest; its walls are greatly increased in extent by a projecting fold of mucous membrane about a quarter of an inch in breadth, which runs round it in a spiral manner, and is shown externally by a constriction of the canal, and making about twenty-five turns round the intestine. The terminal portion has no spiral fold, is contracted, cylindrical or slightly tapering, and resembles the vermiform appendage of man, except that it retains its primitive terminal position. Its walls are thick, being filled with closely packed lymph follicles.

The cæcum occupies the greater part of the abdominal cavity; it commences near the pubis, and, placed quite superficially, passes rather obliquely to the right hypochondriac region, then turning round, passes again to the pubis, concealed by the first part, then crosses to the left inguinal region, and again becoming superficial, runs along the left side of the abdomen, crossing obliquely to the right hypochondriac region, and turning again, and passing backwards, its vermiform terminal portion lies deeply on the right side of the abdomen, with its apex towards the pelvis.(c)

The colon commences in a roundish, thin-walled sac, continuous with the cæcum, but it soon contracts rather suddenly, and has three strong longitudinal muscular bands, by which the intermediate tracts are thrown into numerous small pouches. Two of these tracts disappear by degrees, and sacculi are seen on one side of the canal only; but ultimately it becomes quite smooth and thin-walled, and no wider than the small intestine. Owing to its great length, it follows a tortuous and complex course before ending in the rectum.

The liver lies more to the left than the right side of the abdomen. It is divided into the usual number of lobes, the central lobes being proportionately large and nearly equal; the right lateral extremely small, being greatly exceeded in bulk by the caudate. The Spigelian is large and bilobed.

(b) The anatomy of this animal has been fully described by Professor Krause, of Göttingen, in a monograph entitled "Die Anatomie der Kaninchens in topographische und operativer rücksicht." Leipzig, 1868.

(c) For experiments illustrating the function of the cæcum of the rabbit, and its physiological analogy with the non-peptic compartments of the stomach of ruminants, see Schiff, "Leçons sur la Physiologie de la Digestion," vol. ii., leçon xxx.

A gall-bladder is present, rather small and pyriform, and deeply embedded in a fossa on the under surface of the right central lobe. The common bile-duct enters the duodenum on a papilla about half an inch from the pylorus. The pancreas is loose and foliated, lying between the layers of the wide mesoduodenum. Its duct enters the duodenum in a very unusual situation—viz., sixteen to eighteen inches below the pylorus, and far removed from the bile-duct. An accessory duct opening into the latter has been described by Bernard; but its presence as a regular or normal condition is denied by Krause and others.

With regard to the remaining Rodentia, I must be content to point out only the most striking deviations in the alimentary canal from the two forms just described. Among the organs connected with the mouth, the flattened, horny, toothed spines covering the anterior part of the dorsal surface of the tongue of the porcupines, and the enormous development of the parotid glands of the beaver, and the narrow funnel-like constriction of the back of the mouth in the capybara and its allies,(d) must be noticed. In the structure of the stomach, considerable differences occur from the perfectly simple and oval form with a more or less distinct pyloric antrum, as seen in the guinea-pig and squirrel, to one that is much more complicated, and a gradually increasing degree of complexity may be traced, through the common rats (*Mus*), the voles (*Arvicola*), to the lemming (*Lemmus*), in which the left or pyloric compartment, lined with vascular and very glandular mucous membrane, is partially divided into three, and where a pair of ridges on the side of the smaller curvature border a groove leading from the cardiac orifice towards the pylorus, much as in the ruminants. The stomach of the beaver is remarkable for the large glandular mass situated on its lesser curvature to the right of the cardiac orifice, composed of branched follicles, which open in three longitudinal rows on a flat tract of the inner surface. In the rare African genus *Lophiomys*, M. A. Milne-Edwards has lately described a pyriform glandular cæcal appendage, with a narrow opening, guarded by a sphincter, attached to the greater curvature of the stomach, near the pyloric end.(e) In the common English dormouse (*Muscardinus avellanarius*) the lower end of the œsophagus has a globular dilatation with glandular walls, very similar in appearance to the proventriculus of birds; but in the allied large European dormouse (*Myoxus glis*) this is entirely wanting, and the stomach is simple.

In the one family of dormice, including both the animals just named, the colon is short, simple, and scarcely distinguishable externally from the rest of the intestine, and there is no trace of cæcum, the general arrangement of the alimentary canal resembling that of the hedgehog. This is a most singular exception to the general rule, as all the other members of the order have a cæcum of considerable size; often, indeed, very voluminous and sacculated.

The liver is always divided into the two central, two lateral, Spigelian, and caudate lobes. In *Capromys* these lobes are subdivided by intersecting fissures into numerous small angular lobules in a manner not found in other mammals. The absence of gall-bladder in some genera and its presence in others does not coincide with their general structural affinities, nor can it be satisfactorily explained on physiological or teleological principles. It is absent in the true rats (*Mus*) and *Cricetus* and *Lemmus*, but present in the voles (*Arvicola*); absent in the tree-porcupines (*Cercolabes*) and in *Erethizon*, but present in the true porcupines (*Hystrix*). It is absent also in *Lophiomys* and *Helamys*, and some species of *Sciurus*,(f) though present in the large majority of the order.

Effects of the Thunderstorm near Birmingham.—Dr. Lakin, of Sutton Coldfield, a gentleman very much respected in the Profession, was found last week lying on the roadside in a state of insensibility. It is supposed that the lightning and thunder so alarmed the horse on which he had been riding, that it became restive, and threw him. Dr. Lakin remained unconscious and in a dangerous state some days, but is now happily out of danger. What makes the accident the more lamentable is that Dr. Lakin was to have been married in a few days.

(d) See Morgan "On the Anatomy of some of the Organs of Deglutition in the Capybara (*Hydrochoerus capybara*)." *Trans. Linn. Soc.*, vol. xvi. (1833), p. 465.

(e) "Nouvelles Archives du Muséum," tome iii., p. 81.

(f) Hunter ("Essays and Observations," vol. ii.) has left accounts of the dissection of eighteen species of rodents.

INTRODUCTORY LECTURE
TO THE COURSE
ON PSYCHOLOGICAL MEDICINE
DELIVERED AT KING'S COLLEGE, LONDON.

By EDGAR SHEPPARD, M.D.,
Professor to the College, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

(*Continued from page* 538, vol. i., 1872.)

We turn from the moral to *the physical causes of insanity.*

Without doubt the most frequent of these is *intemperance.* Considering the unreliability of statistics to which I have before alluded, it is not easy to measure with perfect accuracy the extent of this evil as a causal phenomenon. Every additional year of experience confirms me in my belief that it is filling our madhouses with its subjects. I cannot tell you by it how many homes are broken up—how many hearts are broken down. It is a gigantic evil parturient of gigantic misery, committing its terrible havoc not only upon the first, but upon the "third and fourth generation of them that hate me."

Yet it is to be noticed that even here an element of great uncertainty is introduced. A renowned French psychologist, M. Moreau, says—"Drunkenness is regarded as one of the most frequent causes of insanity. But it is equally certain that drunkenness, or rather *the taste for drink*, is as often, and even more frequently, a first symptom (the effect, therefore, and not the cause) of disease." And this taste, he affirms, has been hereditarily transmitted from the parents to the offspring, just as the same features, and gait, and colour of hair and complexion. "I receive patients daily, at the Bicêtre (the same author wrote), in whom I can trace back the origin of their malady to nothing else but the habitual intoxication of their parents." These words actually express my own experience at Colney-hatch Asylum. Esquirol long since gave utterance also to something like the same truth when he wrote—"If the abuse of alcoholic liquors is an effect of mental depravity, of educational vices, and the force of bad example, men sometimes give way to it by reason of a morbid impulse which they have not the power of resisting."

Another French psychologist (Morel) also observes—"It is not necessary to create a monomania of which the chief characteristic is an irresistible tendency to fermented liquors. That tendency is most frequently only the *symptom* of a principal disease, especially when it is suddenly developed in persons who previously had given no evidence of such a propensity."

Dr. Anstie, who has made alcoholism a special study, is clearly of opinion that of all depressing agencies it has "the most decided power to impress the nervous centres of a progenitor with a neurotic type, which will necessarily be transmitted under varied forms and with increasing fatality to his descendants."

A large-hearted essayist and divine of our own day (Canon Kingsley) has also written—"I am one of those who cannot on scientific grounds consider drunkenness as a cause of evil, but as an effect. Of course it is a cause—a cause of endless crime and misery; but I am convinced that to cure you must inquire, not what it causes, but what causes it."

You see, then, that this subject, in its etiological bearing, is invested with very much uncertainty. The immediate effects of drink are sufficiently obvious, but its ulterior effects are intricate and far-reaching; while the ancestral antecedents of the intemperate may create for them many excuses and entitle them to much sympathy. This subject presents a wide and open field for research and investigation, and I commend it specially to your attention.

Another frightful cause of insanity is *masturbation*, or self-abuse. All alienist physicians bear evidence to the prevalence and power of this pernicious habit. No vice can be more easily initiated; none can be eradicated with greater difficulty. "Impurity (it has been well said) can outlive and kill a thousand virtues: it can corrupt the most generous heart, it can madden the soberest intellect, it can debase the loftiest imagination."

It is very remarkable, but it is very true, and therefore I invite your special notice of the fact, that the indulgence of the sexual passion through unsexual means is very frequently associated, in both sexes, with certain neurotic temperaments given to the display of precocious piety and the manifestation of religious ecstacy or gloom.

"I could not say," observes Morel, "how frequently I have seen this pernicious habit existing in youths educated with the most pious sentiments, generally, however, endowed with a

timid and retiring disposition." Speaking of this *neuropathia psychica sexualis* in women, M. Guislain says that it finds its constant cure in "marriage and assafœtida."

This subject is too delicate for me to enlarge upon to the mixed audience at an introductory lecture, but you will not lose sight of it, and turn to a profitable account this allusion to the same.

Amongst the other physical causes of insanity may be mentioned injuries to head, sunstroke, epilepsy, childbearing and its sequences (such as prolonged lactation), fevers, imperfect nutrition, and even excessive nutrition—in other words, starving and stuffing. I have long thought that half the world is overfed and the other half underfed. If the distribution of forces could be a little more equalised, there would be less disease and suffering both for rich and poor. The food which I see some persons put away daily is of incredible amount. Heavy breakfasts, hot luncheons with beer and sherry, stupendous dinners, muffins with tea, and just "a snack of something" with a "nightcap" before going to bed! And then—the other side of the picture—how terrible are the sufferings of some from want of the commonest food!

You will now be interested in knowing what are the *chances of recovery and relapse from a first attack* in those who become insane. There is no doubt that the modern treatment of insanity is much more successful than the old system of depletion and purgation. Yet even now the true state of things is sufficiently discouraging.

Dr. Thurnam, who is great in the statistics of mental disease, says that "of ten persons attacked by insanity, five recover, and five die sooner or later during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die." This, of a truth, is a sad state of things, and indicates the immense importance of keeping your upper-storey well swept and garnished—swept from the cobwebs of indolent and degrading obfuscations, garnished by the well-appointed aids of discretion, and temperance, and virtue.

You need not be told that, other things being equal, the recoveries are in the ratio of youth and recency of attack. "The mortality," Dr. Hood says in his statistics of Bethlem Hospital, "as a rule increases with age, but under 20 it is frequently found higher than in the decenniad following, and between 35 and 45 it is much higher than in the years immediately preceding and following."

6. Importance of Early Treatment.

It is of immense importance in the treatment of insanity, as in that of all other diseases, that you should meet the enemy at the very onset; and, other things being equal, the ratio of cures will be in the ratio of the vigour and promptness of your attack. There is a difficulty, however, about the early treatment of mental maladies which requires explanation, and with which you should be made fully acquainted. There is an insidiousness about the approach of many forms of alienation which, even detecting ourselves, we are unable, for various reasons, to demonstrate successfully to others. You can pounce upon a pleurisy or pneumonia, and say, "An open enemy (open by auscultation and percussion) hath done this." My friend and colleague, Professor Johnson (of whose merits and excellence I need not speak in this College), has taught you how to recognise these foes, and how to grapple with them. But, turning to the less certain field of cerebral pathology, you will find that it is only in the sudden and acute forms of maniacal delirium that you have a like opportunity of confronting the foe, and disarming him of his destructive weapons.

Besides, you may, without offence, tell a man that his wife or child has a pleurisy. He recognises your discernment, and pays a well-merited tribute to your diagnostic skill. But you must be cautious how you tell a man that any of his family are mad. You could not frighten him more, or make him more indignant, if you said they were dishonest. It is almost to filch from him his good name, and stain him with a dye which is indelible. Insanity is a very serious issue. It involves in most cases the loss of personal liberty; it sets in motion the wheel of a costly and elaborate machinery. Doctors, and Magistrates, and Commissioners, and Lords Justices of Appeal, and even the Lord Chancellor himself, come treading upon the scene. It will behove you to be very cautious how you move in the presence of these dignitaries. In stating that a man is mad, you must prove it. You must put it upon paper. You must give all your reasons. A slip of the pen—an inaccuracy as to your own qualifications, or as to the residence of your patient—after you have gone through various processes, will render your certificate invalid; and all your work will have to be done over again. To take away a man's liberty upon the plea of insanity, without complying with all the legal requirements for such a serious step, may be the cause of your being dragged through all the courts in the kingdom. It may involve you in penalties and loss of character and practice. Even though you are not what are called "mad doctors" (and they are the bugbears of society—especially of the legal profession), yet you will have to do mad work sometimes. I want to tell you of its formalities, and teach you how to do it well.

To return, then, to the question of early treatment, from which this has been no useless digression, and for which, therefore, no apology is needed, let me say that it *is* a great fact, the importance of which cannot be overestimated. But I will give you an illustration not only of the difficulty of being able to initiate early treatment, but of being able to initiate any treatment at all until it is too late. And you will bear in mind that the illustration is a typical one—typical of hundreds and thousands of cases occurring amongst us yearly. The same case will be of twofold value to you, as showing at the same time the inaccuracy of the medical certificates upon which patients are admitted into asylums, and upon which our statistical tables are subsequently based.

W. L., aged 29, married, a costermonger, was admitted into the Asylum on December 23. Duration of existing attack *stated to be two weeks.* Supposed cause—cold, and *through a fit.* The facts observed by the medical man, and made the subject of his certificate, are thus put:—"Cannot answer questions rationally; believes dogs are under his bed; talks nonsense." It is added that the case is quite recent, and *not complicated with any form of paralysis.* Observe that the patient had been in the workhouse *two weeks*, and, being unmanageable, he was, at the end of that period, sent to the Asylum, the duration of his disease being dated from the first day of his workhouse experience. Immediately after W. L.'s admission I diagnosed the case as one of general paralysis of not less than six months' duration, and expressed a belief that he had probably had one of the epileptiform seizures so frequent in this disease; that the insanity was not caused "*through* a fit," but that a fit was one of its results, showing the fatal stage to which the malady had advanced. I had little doubt, also, that the man was of intemperate habits. My diagnosis was based upon the existence of the following symptoms:—The patient appeared dazed and confused, with difficulty only apprehending the nature of anything said to him; his gait was somewhat unsteady, from a want of co-ordinating motor power; he had a blank, expressionless face; his articulation was "thick" and indistinct; there was unequal dilatation of his pupils; there *had been* a fit.

Now, remember, the case was admitted into the Asylum on December 23. Five days later his wife visited him. From her I extract with difficulty the following facts:—"W. L. is a good husband; never keeps me short of money, and is not a drunkard. He is a fruit-hawker, and has always enjoyed good health until *three weeks ago*, when he had a fit." On pressure, however, she admitted that, though not a drunkard, he was in the habit of coming home most nights muddled and confused; that for *the last six months* he had not been himself; he had spoken of the sums of money he had made each day by the sale of his fruit—sometimes as much as £5—when she knew he could not possibly have made more than 5s. His memory had become defective; he had seemed indifferent to what was going on at home, and had talked largely about his prospects. Gradually this state of things became more marked, until the occurrence of the convulsion. Now observe the inaccuracies which have been imported and tabulated here. The *cause* of the disease is registered as a *fit;* the fit was a symptom, a complication and not the cause, which was clearly intemperance, of that quiet but continuous and systematic kind which amounts to perpetual befoozlement. Again, the disease was manifestly of six months', and not of two weeks' duration.

So far for the illustration of inaccuracy. And now with regard to the difficulty of early treatment.

Supposing I had seen this man four or five months earlier; it is probable that I should have detected the first symptom of general paralysis, and recommended *an altered mode of life*, which in itself would have been treatment. But how is such a man to alter his life? And where is he to find that quiet and repose which, then initiated, might have arrested the incipient disease? To have spoken openly of insanity would have been to arouse the indignation of his friends; to have advised his giving up his occupation would have been to counsel that which could not have been carried out; to have advised

his giving up drink would have been to assume the existence of a vice which he would have denied;—in fact, meet the man and his malady how you may, it is clear that you must here find yourself in a minority of one.

The same difficulty confronts you with equal force in the middle and upper circles of society. We, with our experienced professional eyes, can see the danger coming, when it is even but a little cloud, no bigger than a man's hand, and give the note of warning. But friends can't and won't see it. How should they? It is not to be wondered at, knowing what we do of human nature. And so you get no credit—the rather discredit—for your advice; for, though it involves the immediate surrender of the exciting cause of disease, it is at the same time a surrender of the means of livelihood and pleasure. "You take my life when you do take the means whereby I live." Thus, you see, early treatment in cases of this kind is absolutely impossible, because you cannot make manifest to the patient himself and to his friends that there is any occasion for treatment at all, much less for treatment of the kind proposed—demanding self-sacrifice, and freedom from the busy turmoil which has become second nature. When the disease, however, which you have correctly but uselessly diagnosed, culminates in a fit, or in some overt act, or in utterly uncontrollable excitement and extravagance, the friends are alarmed; they retrace their steps, and recall the things which you have previously spoken of as evidences of insanity; at last they put two and two together, and find that it makes four! But the time for all active treatment is now gone by; you may palliate and assuage, but you cannot cure. The disease stands before you, as it were, triumphantly and defiantly, and seems to say, "I came, I saw, I conquered!"

I do not know that I can better conclude this introductory lecture than by assuring you that the insane members of the community are, as a class, the best cared for and best protected in the country. In spite of what you may sometimes hear to the contrary; in spite of the occasional cases of ill-treatment (generally greatly exaggerated for sensational—in other words profitable—purposes by the press) you may accept this as a verity. For half a century and more we have been moving in one direction to humanise everything that has relation to those who from disease are no longer responsible agents. It is wise and right that it should be so. The gathering together of the loose and scattered madness of the country has been a great achievement. Unfortunately there is now a growing belief that this has been overdone, and that it is better to treat persons at their own homes—where, amongst friends, there can be no exercise of proper discipline, but, on the contrary, a most injurious amount of feeble and indiscreet kindness! But something is due—a great deal is due—to the sane members of the community, and we have no more right to allow them to be afflicted with the obtrusive presence of insanity when once recognised, than we have to expose them to the influence of a contagious disease.

In my next lecture I shall make some remarks on the physiology of the nervous system; on the pathological changes observed after death in those who die insane; propound to you a simple classification; and proceed with the consideration of some of the special forms of insanity.

ORIGINAL COMMUNICATIONS.

OPHTHALMIC PRACTICE AT WIESBADEN.

By WILLIAM PAUL SWAIN, F.R.C.S.,
Surgeon to the Royal Albert Hospital and Eye Infirmary, Devonport.

A STAY of a month at Wiesbaden has enabled me to attend the practice of Dr. Pagenstecher at the Eye Infirmary, and an account of it may be acceptable to your readers.

The Eye Infirmary is pleasantly situated on the side of a hill above the town of Wiesbaden, and is surrounded by a large garden. It contains nineteen separate wards, some of them entirely appropriated to children. The number of in-patients varies from forty to seventy-five, the largest number being received during the summer months. The patients pay eleven silver groschen (rather less then a shilling) per diem towards their maintenance. In addition to the in-patients a large number of out-patients are also treated. From the last annual report I see that in all 2647 patients were under treatment during the year, 508 being in-patients. Thus a large field of ophthalmic practice is afforded, and—conducted as it is by Dr. Pagenstecher, one of the leading ophthalmologists of Germany—a visit to this institution is both interesting and instructive. I propose to notice some of the leading characteristics of Dr. Pagenstecher's practice, many of which are novel to English ophthalmic surgeons.

Nearly all the operations are performed whilst the patient is in bed, and chloroform is seldom or never administered. Linear extraction is performed by Von Graefe's method, the pupil being previously dilated with atropine. It appeared to me that the sclerotic was more encroached upon than is usual with us, and the conjunctival flap seemed longer. I had the opportunity of seeing Dr. Pagenstecher on several occasions perform his operation for the removal of the lens with the capsule entire. After the section of the iris is completed, the next step—viz., the laceration of the capsule—is omitted, and a spoon made for the purpose is pushed behind the posterior capsule, and the lens, with the entire capsule, removed. By this method a perfectly black pupil is at once obtained, and all the after trouble entailed by the remains of capsule and cortex avoided. I saw in several instances patients upon whom the ordinary operation had been performed on one eye, the capsule being left, whilst from the other eye the capsule and lens were removed; and there can be no doubt that in the latter case the irritation is much less, and the pupil remains widely dilated without the use of atropine. Vitreous is sometimes lost during the performance of this operation, but I am told that it does not interfere with good recovery. It is needful carefully to select cases for this proceeding. Those most favourable for it are cataracts which have taken some time to mature—where the cortex has shrunk and the capsule become hardened. Cataracts of rapid formation, with bulky cortical matter, should not be treated in this manner. About 200 cases have been thus operated on by Dr. Pagenstecher with very considerable success. In performing extraction on the left eye the operator sits on the left side of the bed in front of the patient, using the knife with the right hand. When both eyes are affected the operation is performed on both at the same time. After the operation atropine is freely dropped into the eyes, which are then covered with cotton-wool, and firmly bandaged with a fine flannel roller. This is removed the next day and fresh atropine instilled, and so on every day. In cases where the capsule has been removed no atropine is required, as the pupil keeps well dilated without its use.

Granular lids, here as elsewhere, are the *bête noir* of the ophthalmic surgeon. In certain cases, however, a means of considerable relief is afforded. When the aperture of the lids has become much contracted, the upper lid is pressed down upon the cornea, thus much aggravating the distress and damage to the eye. To remedy this the following operation is performed:—One blade of a pair of blunt-pointed straight scissors is thrust as far as possible under the lid at the outer canthus, and the aperture is enlarged in an outward direction as far as the scissors will cut. It will then be found that the skin and mucous membrane present cut edges both in the upper and lower lid. These cut edges are sewn together with fine silk, two sutures being placed in the upper and two in the lower lid. In twenty-four hours the cut surfaces are healed, and the sutures removed, leaving the palpebral aperture much enlarged, and thus considerably diminishing the pressure of the upper lid on the cornea.

In slitting up the canaliculus a very handy little probe-pointed knife is used instead of the director. The operation is thus performed more rapidly, and with less distress to the patient. In extreme cases of lachrymal obstruction the lachrymal sac is obliterated in the following manner:—Both canaliculi are slit up, the tendo oculi being divided, thus laying open the lachrymal sac. A portion of chloride of zinc paste (one part chloride of zinc, two parts flower) about the size of a small pea, slightly coated with cotton-wool, is then placed in the sac, and allowed to remain there for two or more hours, according to the pain produced. Considerable swelling and inflammation ensue, and in the course of a day or so the entire sac is thrown off, and the site of it obliterated by subsequent granulation. The *rationale* of this proceeding is as follows:—Under ordinary circumstances the lachrymal gland secretes an infinitesimally small quantity of tears. Only upon the application of an irritant—as, for instance, wind or the presence of a foreign body—does the secretion become excessive. A diseased lachrymal sac is a source of continual irritation to the gland, thus exciting it to a continual hyper-secretion of tears. Remove the source of irritation, and the secretion of tears ceases—if not entirely, yet sufficiently to give the patient complete comfort.

An other troublesome condition—symblepharon, or adhesion of the lower lid to the eyeball—is effectually treated by operation. An explanation without a diagram is somewhat difficult. The condition met with is generally this:—A triangular bit of conjunctiva stretches from the lower lid to the eyeball, having its apex at the edge of the cornea. This triangular fold is dissected back from the apex to the base with scissors, and turned down on the lower lid. There is then left a raw surface, which has to be covered. To effect this the conjunctiva on either side is dissected off the globe, and is then stitched together in the mesial line. The original flap is left to shrivel up, as it lies loose on the lower lid.

The operation for strabismus is performed very differently from the manner in which it is usually done in England. The conjunctiva is opened very freely at the corneal edge, and the muscle hooked forward and divided. Supposing the case to be one of convergent strabismus, should the convergence still exist after the division of the muscle, the conjunctiva is further divided at the corneal edge. If divergence takes place the conjunctiva is stitched to the corneal edge. Both eyes are not operated on at once, the second only being interfered with at a subsequent period in the event of the eyes not being parallel. In these few and imperfect notes I believe I have reviewed the chief novelties to English surgeons in German ophthalmic practice. I would in conclusion advise any surgeon who takes an interest in ophthalmology to pay Dr. Pagenstecher's clinique a visit; he will receive a hearty welcome, and cannot fail to obtain most valuable practical information. I am indebted very much to Dr. Pagenstecher, jun., a gentleman well known in London ophthalmic circles, for much of the information contained in this paper.

Devonport.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE TREATMENT OF STRANGULATED HERNIA BY PUNCTURE OF THE INTESTINE.

The very great importance to surgical practice which the introduction of any plan for the treatment of strangulated hernia implies, induces us to refer to a method suggested by Mr. Bryant in a clinical lecture delivered at Guy's Hospital in the month of February of this year.

It will be in the recollection of some of our readers that, in the third lecture of his series (which appeared in our columns on April 20), Mr. Bryant gave the details of a case which occurred to him in 1871. It was that of an old man, aged 71, the subject of strangulated scrotal hernia, upon whom he had performed herniotomy, it being necessary to expose the bowel in order to return it. Owing to the restlessness of the patient, however, the gut again descended in a few hours, and all attempts to reduce it failed, until the large intestine was punctured in four or five places with a grooved needle, and a quantity of flatus (but no fæcal matter) let out. The patient recovered without a single bad symptom. In his subsequent remarks upon this case, Mr. Bryant observed that it proves clearly that puncturing the intestine freely may be resorted to with every prospect of success in some cases of hernia. He raised the question whether it is not possible to reduce some herniæ without any operation at all, and he stated that he had made up his mind to try the practice in large scrotal and umbilical herniæ, and thought favourably of its employment in all cases of acute internal strangulation due possibly to bands or twists.

Since the publication of this lecture the treatment of puncturing the bowel to remove strangulation has been followed in three cases (which are now well known), two of which have been published. The third occurred in the practice of Mr. Hulke, in the Middlesex Hospital, in the early part of May. The case was one of internal strangulation from a band, in which abdominal section was performed, and the distended small intestine punctured (ultimately laid open) before reduction of the bulging portions could be effected and the wound closed. This case, with Mr. Hulke's remarks, will shortly appear in our pages.

Of the two published cases, one was reported by Dr. Léon Labbé, of the Hôpital La Pitié. It was a strangulated inguinal hernia, of about eighteen hours' duration, in an old man, aged 70. Here, as the taxis failed, puncture with the aspirator was proposed, and a No. 2 needle introduced. In eight days the patient was well. The other case was one brought before the Académie de Médecine, on May 21, by M. Demarquay, a brief notice of which was given in the *Medical Times and Gazette* of June 1. In this instance, after taxis had failed, a fine trocar was passed into the centre of the tumour, which was a strangulated congenital inguinal hernia, and by means of Potain's aspirator about 120 grammes of intestinal liquid were drawn off into the recipient. No ill-consequence followed, and the patient rapidly got well.

Thus, then, this new mode of treating certain kinds of hernia, which has been tried and suggested by Mr. Bryant, has since found favour in English and foreign practice; and we hope, as time goes by, to be able to report favourably of it as a means of relief in those cases in which hitherto little or no success has crowned surgical efforts.

GUY'S HOSPITAL.(a)

CASES UNDER THE CARE OF MR. POLAND.

[For notes we are indebted to Mr. W. H. Galland, House-Surgeon.]

Case 1.—*Fractured Spine* (*Fifth and Sixth Dorsal*).

T. T., aged 20, admitted July 22, 1872, 4.30 p.m. Fell through a trap-door down a shaft twenty to thirty feet. He alighted on his feet, but was found doubled up and insensible. He was brought here on a stretcher. On admission was removed from the stretcher to a spring-bed, extension at feet and shoulders being carefully maintained. Pale, skin cool, but that where anæsthesia exists is absolutely cold, perspiring. Heavy look about eyes; no pain in head; quite sensible. Complains simply of pain in spine—about sixth dorsal vertebra—and total loss of sensation and motion of the whole body below, cannot be disabused of the idea that he has broken his legs, as he cannot move them. There is pain on pressure at the part of the spine indicated; no bruise; priapism well marked; had not been sick. 7.30 p.m.: Warmth returning; temperature in axilla 99·2°; pulse 84, full; is suffering from bronchitis; a little blood in expectoration; abdomen distended with flatus. 11.30 p.m.: Pulse 92; temperature 101·2°. Breathing more difficult. ℞. Mist. senegæ ℥j. every two hours. Cannot micturate; catheter passed in spite of the priapism.

23rd.—7.30 a.m.: Pulse 100; temperature 99·8°. Did not sleep much. 12 p.m.: Temperature 103·2°; pulse 112, full. Vomits all he takes. About an hour ago felt sensation slightly returning, especially as far as the knees. Cannot move lower part of body; no reflex action, nor has there been any. Does not feel the catheter being passed, which has to be done thrice daily. Very thirsty; breathing somewhat relieved. Has had an injection containing ℥ss. of tinct. assafœt., which relieved him of a little fæcal matter and flatus; the accumulation of the latter had been very distressing to him.

24th.—7.30 a.m.: Temperature 100·5°; pulse 100; still vomits continuously; no improvement in sensation. 8 p.m.: Pulse 116; respiration 30; temperature 103·2°.

25th.—8 a.m.: Respiration 30; pulse 118; temperature 101·2°; vomits less; has retained a little beef-tea; expectoration excessive. 12 p.m.: Pulse 114; temperature 102°; bowels open during the day; loud mucous râles all over chest.

26th.—7 a.m.: Pulse 100; temperature 100·8°; appetite better; does not vomit. 11 p.m.: Was able to be moved upon his side, when examination of his back was made. At the fifth and sixth dorsal vertebræ is a slight angular projection, some thickening on either side; the dorsal muscles at that spot are

(a) The details of the following four cases (two at Guy's and two at University College Hospital), which we have obtained from the practice of Mr. Poland and Mr. Erichsen, illustrate forcibly the very different nature of the lesions which may arise from essentially the same kind of accident. Notes of the pulse and temperature were carefully taken.

spasmodically contracted; no pain on slight pressure. To discontinue the mist. senegæ. ℞. Mist. quiniæ ʒj. 4tis horis. Pulse 108; temperature 102·3°.

27th.—10 a.m.: Pulse 108; temperature 100·8°. Patient is much lower; breathing very difficult; complains much of tightness across chest; herpes on upper lip; no sordes on or about mouth; tongue only slightly furred and moist; some urine has passed from him. 7 p.m.: Pulse 108; temperature 102·7°; passes urine involuntarily.

28th.—Temperature 101·7° in the morning, 102° in the evening; breathing very labouring.

29th.—Temperature 100°; some dulness at the base of both lungs; the mucus very troublesome in bronchi.

The termination of this case will be recorded.

Case 2.—Compound Fracture of the Skull in the Left Temporal Region—Laceration of Brain.

J. N., aged 20, was admitted on July 16, 1872, at four in the afternoon. He was not quite insensible, but could not be made to answer questions; very irritable and restless; pupils equal, and acting under the influence of light; no blood under conjunctivæ, but left lid ecchymosed. There was an incised wound in the left temporal region, on the edges of which some small portions of brain-matter were seen. The wound was about three inches long, through which could be felt a clean cut through the skull and dura mater. Upon clearing the blood away the brain could be seen pulsating at the bottom of the wound.

The patient's father states that he fell from a hayloft, twelve feet from the ground, striking his head upon an iron fender. The accident occurred about an hour previous to admission. His father says he had two fits on the way to the Hospital; he also had one after admission, very similar in character to epilepsy. At 4.30, chloroform having been administered, Mr. Birkett enlarged the wound slightly, and removed some small pieces of loose bone. Some blood welled up from the wound, which was arrested by the application of cold. The wound was covered with lint, and a bag of ice applied over it. Milk diet ordered. Pulse 108.

July 17.—Has passed a quiet night, and is now quite conscious. Passes his water naturally. 10 p.m.: Pulse 78; temperature 100·5°.

18th.—Slept well; no pain; bowels open. 10 p.m.: Pulse 75; temperature 101·2°.

23rd.—Still continues to progress favourably; wound discharges freely; a little blood under the left conjunctiva. 10 p.m.: Pulse 58; temperature 100·2°.

26th.—Has been sitting up in bed, and taking fish for his dinner to-day.

28th.—Wound gradually filling up. The patient has had no head symptoms since the operation, and is now fast recovering. Bowels open; tongue clean; temperature 97·8°.

UNIVERSITY COLLEGE HOSPITAL.

CASES UNDER THE CARE OF MR. ERICHSEN.

Case 3.—Concussion of Brain—Cerebral Irritation—Cure.

Ellen R., aged 4, was brought to the Hospital at twelve o'clock on the evening of February 23. She had fallen from a window (about twelve feet) to the ground, about two hours before, striking her head against ledges in the wall of the building before she arrived at the bottom. An hour after the fall and before her admission she vomited.

The next morning the eyelids were tightly closed; both pupils dilated, but equal. Pulse firm and regular. There was a puffy swelling over both parietal eminences, and when either of these was pressed the child appeared irritated, and made a peculiar noise.

On the morning of the 26th the little patient was curled up, and when roused, or her position shifted, she resumed it again. Bruises were very evident upon the eyelids, but there was no discoloration of the conjunctivæ.

The child remained in a drowsy, listless state for a few days longer, but on the eleventh day from the date of accident she was discharged well.

Case 4.—Injury to Head—Laceration of the Brain—Recovery.

Henry W., a livery stable keeper, was brought to University College Hospital about 9 p.m. on January 23, 1872. He had drank six glasses of whisky, and, while riding in a cart, which came into collision with a cab, the patient was pitched out, and appears to have grazed the right side of his forehead. On admission he was unconscious; pupils slightly contracted; pulse full. There were three grazes upon his face, and from the one above the right orbital ridge there was some hæmorrhage, which was stayed by pressure. An ice-bag was applied to the head.

January 24.—Patient lying on his left side; has been moaning all night, and has sat up on the side of the bed two or three times; every now and then he dozes off; can give no coherent reply to questions. Pulse 84, full and soft; respirations 20; temperature 100·4°. There is no subconjunctival ecchymosis, but a very slight amount of œdema of lower right eyelid. During the day he passed his urine voluntarily.

25th.—He was perfectly incoherent in his remarks; had evidently pain in the head. The forehead was hot, and his face flushed. His pulse, as far as could be judged from the temporal artery, was firm and hard, and 128. (His hands were confined in the strait-jacket.) Temperature in the groin 100·2°. It was supposed acute meningitis was setting in, and it was determined to bleed him if the pulse remained hard and the symptoms did not abate. An enema was administered at 11 a.m., as neither the calomel nor the croton oil taken previously had any effect.

26th.—Condition much the same. The enema acted very efficiently.

27th.—Would persist in getting up during the night. After the House-Surgeon and nurse had got him into bed he became quite aphasic—said a word or two, and then could only mutter.

29th.—More rational; is able to tell his name; is under the impression he is in an hotel, and still says much that is incoherent. Both pupils normal. Pulse 80, full and compressible. Temperature in axilla 99·8°. Tongue almost clean.

February 2.—Pulse weak, 108. Is still greatly excited; keeps referring to his business. He spends much of the day on a chair, looking out of window for a cab. Mr. Erichsen ordered a hypodermic injection of morphia.

5th.—Much quieter; still desires to go home. Pulse steady and firm, 68. Skin quite cool.

11th.—Thought well enough to be dismissed.

ROYAL INFIRMARY, EDINBURGH.

CASE OF MALIGNANT DISEASE OF CERVIX UTERI SIMULATING CAULIFLOWER EXCRESCENCE.

(Under the care of Dr. MATTHEWS DUNCAN.)

[Reported by Dr. J. R. Hardie.]

J. B., aged 39, has been twice married. During her first husband's life she had five children, one stillborn, and by her second husband she has two children, the last two months ago. On admission into the Infirmary on May 2, 1872, she complained of a profuse discharge from the vagina of a purulent-looking fluid. Her pregnancies and labours have been natural, with the exception of the last. Eight months ago (about three months after the commencement of her last pregnancy) the discharge she complains of first appeared. It was then small in quantity, and of a white colour and odourless; but now it is profuse, sometimes coming away in gushes, in appearance cream-like, and with a heavy smell. Her children are healthy. She had a sister who, she says, died of cancer of the womb; all the rest of her near relations have, as far as she knows, been healthy. Before the discharge began she enjoyed good health, and the monthly periods were regular.

On abdominal palpation nothing abnormal is to be detected. On examination per vaginam the cervix is found to have seated on it an excrescence presenting the physical characters of cauliflower excrescence—that is, the tumour is attached by a small neck to a part of the cervix. The tumour, on being exposed by Sims's speculum, is found covered by a greyish dirty coating, and the vagina is filled with a muco-purulent discharge.

May 4.—Dr. Duncan removed the tumour to-day. It was pulled down by a volsella to the orifice of the vagina, and cut out by means of scissors. A considerable hæmorrhage followed, which was found difficult to arrest. Several vessels were ligatured, perchloride of iron and the actual cautery were applied, but the bleeding was not completely arrested until the vagina was firmly plugged with pieces of lint, the first pieces dipped in liq. ferri perchlor., and manual pressure kept up on the plug for about half an hour. Pulse 76, very weak, but regular.

5th.—Passed a pretty good night. Plug removed from vagina. Pulse 130; temperature 98·9°.

6th.—Pulse 116; temperature 98·1°.

10th.—Examined with Sims's speculum. The wound looks healthy; it is covered with a layer of pus.

12th.—Wound presents a yellow surface, and is healthy.

17th.—No discharge. Wound perfectly healed. Patient looks and feels quite well. Dismissed.

Remarks.—In the case related we have to do with an uncommon form of a disease. Malignant disease of the cervix uteri is far from uncommon, cauliflower excrescence of the neck of the womb is frequently met with in practice, but cancer of the uterus assuming the physical characters of cauliflower excrescence is rare. In this case no papillary structure was to be observed, but on microscopic examination it presented the characters of a malignant growth of another kind. Although on a physical examination per vaginam being made the disease was not readily distinguishable from cauliflower excrescence, still there are points in the history and symptoms sufficient to excite at least suspicion as to its real character. Here no copious watery discharge tinged with blood ("fleischwasser") presented itself, the tumour did not bleed when handled for the purposes of examination, nor did its superficial layer break down easily under the examining finger; the discharge was white, muco-purulent, in large quantity, and fetid. Another unusual feature was the absence of fixation of the uterus. It is uncommon for malignant disease to have advanced so far without the uterus becoming fixed by perimetric inflammation—in fact, this is frequently the first sign which, superadded to others, permits us to give an opinion of anything like a decided character as to the true nature of a case like this. The tissues around the uterus were also unaffected.

The question of treatment resolved itself into that of amputation or no amputation. The circumstances here were more than ordinarily favourable for removal. The disease was practically limited; the tissues in the neighbourhood were unaffected the uterus itself being movable. In cauliflower excrescence Dr. Duncan advocates removal of the disease, or as much of it as possible, although the chance of complete recovery may be very remote. The following considerations are advanced by him in favour of this practice:—The objection to the operation in cases where a cure is not to be looked for is, that the bleeding during and after it is so great as to be a compensating disadvantage to such a degree as to preclude one from having recourse to the removal. Dr. Duncan's experience is opposed to this. The flesh-water discharge, which in advanced cases is present in quantity, is, as weakening as loss of blood. This discharge is very much diminished in quantity, if not absolutely arrested by the operation, and in a few weeks after the removal the patient is restored to a state of health of body and mind which she has not enjoyed for a time. The absence of the discharge allays her fears, and permits her to regain strength. Besides these advantages the operation prolongs life many months beyond the period which would have been enjoyed had the disease been allowed to remain in its integrity. In most cases little bleeding has accompanied or followed this operation in Dr. Duncan's hands. The scissors was the instrument used to remove the disease. It was selected because it was desired to remove the diseased part of the cervix as completely as possible; and as only one lip was affected, this could not be so well done by means of the écraseur, which is the instrument to be preferred when suitable. During and after the operation there was considerable hæmorrhage from the stump, several severed arteries bleeding freely. Some of these were secured by the ligature, others which it was found impossible to secure in this way were touched with perchloride of iron and the actual cautery, but the bleeding was only perfectly arrested by means of complete vaginal plugging and keeping up pressure upon the plug. The blood loss, which might be reckoned at about one pound, although little to a healthy woman, is considerable in the case of one weakened by discharge, old, and anæmic like our patient, but she recovered from it in a few days, and on her dismissal was hardly to be recognised, having gained flesh and good looks to such an extent. The chances here in favour of a complete cure are considerable; great relief is certain.

Dublin Sanitary Association.—Pending the holding of a general meeting and the formal organisation of the Association, an executive committee has, we believe, been appointed to take such action as may seem to be called for. The list of supporters is rapidly augmenting, some ninety gentlemen, including the two members of Parliament for the city of Dublin, having already enrolled their names as members of the Association. *Macte virtute!*

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, AUGUST 3, 1872.

THE LORD ORDINARY AND THE EDINBURGH LADY-STUDENTS.

In another column we print the "interlocutor" or decision of Mr. Adam Gifford, the Lord Ordinary of the Scotch Court of Session, in the case of Jex Blake and others *v.* the Senatus of the University of Edinburgh. The Lord Ordinary appends a long explanatory note, of which we can notice only the salient points. If his decision be accepted, we agree with the *Edinburgh Courant*, which has a well-written article on the subject, that by a dash of the pen his Lordship has once for all settled the whole question of woman's rights. Every profession, including that of practical politics, the rules of admission to which run, as regards nouns and pronouns, in the masculine gender, is open equally to both sexes. The two Houses of Parliament, the bar, the pulpit, the army, and the navy, can no longer present insuperable barriers to female ambition. Even Oxford and Cambridge must submit to further reforms.

We believe Mr. Gifford has the character of an able lawyer and of having a fair share of common sense. It is a matter for curious inquiry, therefore, how he came to entertain the notion he promulgates in his note, and to believe that he had power to order the professors according to the interlocutor. It is well known that before the case came before him he had already committed himself to what is commonly known as the "female" side of the question. We wonder whether the agents of the pursuers, knowing this, ingeniously contrived that he should be the judge in the case. And, if he were already a member of the Association for Promoting the Medical Education of Women, which conducts this litigation—and this, if we are rightly informed, is the case—the pursuers might reasonably expect at least a favourable consideration of their claims. In truth, Mr. Gifford warrants this conclusion by intimating in the first sentence of his note that he had already "his convictions of what the law ought to be"; but he declares, however strong these may be, he has endeavoured to keep in view "that his duty is simply to declare the law as it now stands," and "to approach the consideration of the subject dispassionately and free from all prejudices and

prepossession." Such a declaration was what might be expected under the circumstances.

It is acknowledged by the judge as a fact, whatever may be its effect in law, that no university in Great Britain has ever granted a medical degree to a "lady." So the question is now practically raised for the first time in a court of law, "Can a lady obtain a medical degree?" In using the term "lady," the Lord Ordinary really means "woman"; but surely in *law* a lady, although a woman, is something more than any woman. A series of special pleadings that would have come well from the judge if counsel for "the ladies" then follow in support of the affirmative, with a looseness of statements as to facts which would have been better avoided.

1. There is no "inherent illegality," he affirms, in women prosecuting the study of Medicine or engaging in its practice. This is too plain to need argument. Neither is there any natural impropriety. In obstetric practice, on the other hand, he says a "male" practitioner is singularly out of place, and "nothing but the deadening effect of habit would ever reconcile the community to that anomaly both in name and reality—'a man midwife.'" We may observe that this question never was debated before the Lord Ordinary.

2. "The practice of all civilised nations testifies most loudly at once to the fitness and the suitableness," etc. Here is a little exaggeration, if the Lord Ordinary means that its testimony is by graduating women in Medicine. No German university does this; nor is it the fact that "from the *earliest* times in Italy medical degrees were conferred upon, and medical honours held by, women." The effect of strong convictions and prior discussions may be traced here in this enthusiastic inaccuracy of statement.

3. There is nothing in the University Charters to exclude "females, even when the masculine form of noun or pronoun is made use of in speaking of students. *The Lord Ordinary cannot doubt* that this is done, not to exclude females, but *merely in conformity with ordinary brevity of expression.*" In other words, under the word young *men*, for the sake of shortness, it was meant to include young *women*. Surely this stretch of imagination is clearly due to the influence of the "strong convictions of what the law *ought* to be."

4. But then, it is argued, there is no recorded instance of a woman having ever taken a degree therein; and this fact the Lord Ordinary candidly allows "has more weight—perhaps considerable weight." But, on the other hand, there is no instance of a woman having ever been excluded or refused admission or instruction. If women had originally the right to become students or graduates, their right will not be lost by mere usage—that is, by their merely neglecting to use their right. The right in them was *more facultatis*—like a man's right to build upon his own ground. Unfortunately for this mystical argument, women *have* been excluded from the University of Edinburgh, and Miss Garrett was first "excluded" from St. Andrews, and "refused" either admission or instruction at Edinburgh. The Lord Ordinary's strong convictions as to what ought to be the law have led him to overlook these facts. In this way he arrives at the conclusion that the law is as he feels strongly it ought to be; and he infers that "a medical school founded in the University cannot have as one of its conditions the exclusion of the female sex." And so, therefore, with all professions!

It is not surprising, after reading all this, and much more of the same kind, that the Lord Ordinary unjustly attributes the opposition of the Senatus to the claims of "the ladies" to unworthy motives. Forgetting his duty, as laid down by himself, which was to stick simply to the law, and also the duty of the Senatus, as trustees for the Scottish people and of the students and graduates of their University, he remarks that "their [the ladies'] demand for degrees, and the announcement of their intention to practise as physicians, has aroused a jealousy which the Lord Ordinary is very unwillingly obliged to characterise as unworthy, and hence this strife." And, by way of clenching this reproof of the Senatus for having simply defended an action in pursuance of their obviously binding duty as trustees, he intimates a reservation as to the expense of the action in favour of the six Professors who abandoned that duty, as the minority who proposed to allow judgment to go by default.

Every right-thinking person must regret this legal meddle and muddle, and in a while none will regret it more, we think, than the Lord Ordinary himself. In the meanwhile the duty of the Senatus is too plain to need exposition.

DR. TRIPE'S REPORT ON THE HEALTH OF HACKNEY.

THERE are, we believe, in London, Medical Officers of Health to each of the forty-four districts into which the metropolis is divided; and as the Metropolis Management Act is now sixteen years old, there must be in existence $44 \times 16 = 704$ annual reports on the health of the several districts. We believe that it is obligatory on the local authority of each district to send every year to the central office of the Metropolitan Board of Works a copy of every report made by the Medical Officer of Health, and we suppose that these copies are carefully preserved for future reference. We believe also that copies are preserved by the Librarian of the Royal College of Surgeons, the Royal Medico-Chirurgical Society, and perhaps some other professional institutions. Still it is very difficult for the student of sanitary science to study forty-four separate reports *per annum*, even though they relate to the largest city in the world; and we wish that some Farr, or Simon, or Letheby, or Ballard could be induced each year to present us in one volume with a summary of the whole. We say this most emphatically, in view of the waste of intellectual material which the present system involves. We have before us a single report by Dr. Tripe—far, indeed, from being a mere dry catalogue of nuisances or mortality—so agreeably written, so full of practical suggestions, and evidently so drawn from life and practice, so little common-place or trivial, that it seems a pity that the writer had not a larger scope for his labours, and a larger number of readers than is afforded by Hackney and the authorities thereof.

With respect to that large class of diseases known as the zymotic, Dr. Tripe enunciates some propositions well worthy of consideration. Like Dr. Letheby, he points out that "there is a very decided tendency for eruptive fevers to assume an epidemic form in the metropolis, about once in four years, and then gradually to cause only their ordinary death-rate. As this period is nearly the same in the metropolis as regards hooping-cough, small-pox, measles, and scarlet fever, it rarely happens that we have more than one or two of these diseases epidemic at the same time." He shows incidentally how much more fatal our habitual plagues are than an occasional pestilence:—"There were nearly three times as many deaths in this district from small-pox last year, as from cholera and choleraic diarrhœa in 1866." If the several years since 1840 be grouped in periods of four years—say 40-41-2-3, and so on with the rest (except that the year 1855 does not quite tally with the series)—it will be found that out of 100 deaths from small-pox quite "43·9 occurred in the first year of each quarternary period; in the second 20·3; in the third only 11·9; in the fourth 23·9 per cent. The most cursory examination of this table shows, I think conclusively, that the disease has been epidemic in certain years in obedience to certain causes which permanently influence its course. This tendency to periodical recurrence is no reason for relaxing our efforts to diminish its spreading and intensity by proper sanitary precautions, but on the contrary should spur us on to greater efforts in the hope of ascertaining the causes which enable it to assume this form. There is also another reason why we should remember this tendency to

become epidemic every fourth year—viz, that vaccination should be most strenuously enforced in the year before an epidemic is expected, so as to diminish the number of those who would otherwise be susceptible to an attack."

Dr. Tripe adds his own to the now overwelming mass of testimony that vaccination, if not an absolute or positive protection against small-pox, is "at least as good a protection as an attack of small-pox would be. I had under my care, nearly twenty years ago, a lad 13 years of age who was deeply pitted from a former attack of the disease, and who yet died from the second, which assumed a confluent form. I have seen numerous cases of second attacks of small-pox, and one of a third, and in nearly all the progress of the malady was similar to that which it takes after efficient vaccination."

The author touches lightly on a matter which must be heard more of ere long, if preventive medicine is to be a reality. The community clearly has a right to know of the existence of a contagious disease, in order that it may be able to protect itself. Hence somewhen we shall have a law requiring the existence of cholera or small-pox to be made known to the Local Authority, in order that this authority, without interfering with the treatment of the disease, may make sure that everything is done to prevent its spread. Dr. Tripe believes that above 1200 cases occurred of small-pox which were not made known.

On another matter he has the courage to speak out, though his sentiments differ from those of some of his brother Health Officers, and are exceedingly unpopular at the Local Government Board. Do small-pox hospitals, and especially has the Small-pox Hospital at Homerton, acted as a focus of disease to the district? Dr. Tripe boldly says—"I believe that it has. . . . . In the streets around the Hospital there happened 73 cases in 1000 inhabitants; whilst in the other streets, which are of a similar character, or nearly so, to those at Homerton, there were 19 cases in each 1000 inhabitants." Even in the worst districts elsewhere there were but "90 cases amongst 1986 people residing in 339 houses, or at the rate of 45 cases in 1000 inhabitants, against 73 in the same number at Homerton. This result is what I expected at the time it was proposed to build the Hospital on its present site, as I believe the number congregated in the wards to be too great to be contained in any one building or any aggregation of contiguous buildings. The cubical space for each patient is sufficient, especially as the wards are well ventilated; but it must not be forgotten that the free ventilation which renders the wards healthful for the patients may also assist in carrying the disease to those outside the building. I believe in ordinary —*i.e.*, non-epidemic—years the number in the Hospital will not be injurious to the district, but I am most decidedly of opinion that so large a number as were usually to be found in the wards last year ought never again to be placed there, but that arrangements should be made for preventing so great an influx of patients. A similar remark may be made as regards the Fever Hospital, which in my opinion should never be filled in any epidemic of fever as the hospitals were with small-pox cases in 1871."(a)

Dr. Tripe gives an account of the energetic and successful methods employed for curbing the epidemic, and gives us a glimpse of the necessity for vigilance on the part of the local authorities:—

"In two cases the magistrate fined washer-women for taking in washing and sending it home without disinfection, when they had small-pox in the house; another person was fined for sending his servant through the public streets to her home when she was suffering from the disease.

"A summons was taken out against an undertaker for removing in an open cart the dead body of a person who had died from small-pox. The summons against the undertaker was dismissed, although I proved that the coffin was covered with cloth and removed to his shop instead of to our mortuary, on the ground that a coffin containing a dead body did not come within the meaning of the Act. The father of a patient was also fined twenty-five shillings for removing the clothes and bedding, which his son had used whilst ill, without previously disinfecting them.

"In consequence of rag and other refuse being thrown into the dustholes at the Small-pox and Fever Hospitals, Homerton, I paid several visits there and wrote some letters, which eventually induced the managers to order all poultices and rags to be burned, and the dust disinfected before removal. This was most essential, as the dustmen were seen to take the rags out of the dust and place them in a bag for sale. The men were warned not to do so for the future if they found any in the dust, even although disinfectants were freely used."

The writer, not content with details, grapples with the higher principles of sanitary science, and, believing that he spies a hole in the Registrar-General's armour, he tilts gallantly against it. Like some other authorities, he looks upon epidemic diseases as things *sui generis*, and that we have not found the key to the laws that govern their prevalence.

"Before passing from the subject of the small-pox epidemic, I desire to express my great objection to the term 'preventible diseases' as used by the Registrar-General. A cursory perusal of his reports would lead many to believe that the best test of the sanitary condition of any given locality is that afforded by the proportion of deaths from 'all causes' to those from epidemic diseases, for all diseases of that class are grouped together as preventible diseases. Now, as I have many times stated to this Board and elsewhere, there are very good grounds for believing that epidemic diseases will never cease to prevail in civilised life, as the ordinary courtesies of society necessitate a certain intermixture of the population, and consequently of persons being exposed to the causes of such diseases. Besides which, as I have before stated, the proportion of deaths from these causes does not ordinarily vary very greatly from year to year, as one or more is almost invariably epidemic at any given period. Further, as the eruptive fevers occur generally but once in a person's lifetime, the prevalence of disease and the consequent mortality will depend in a great measure on the number susceptible to it. In a community containing an excessive proportion of children, as compared with the adult population, we must expect a correspondingly large proportion of scarlet fever, measles, hooping cough, and diarrhœa, so that the death-rate from these causes must be likely to be higher in this district both now and for the future than hitherto, as there are a larger proportion of children and a comparatively smaller number of adults than there were before 1856. It has been suggested that in the same way as there is probably only one force in nature which manifests itself as light, heat, electricity, magnetism, motion, chemical and perhaps vital action, according to the 'material substratum' through which it is rendered cognisable to our senses, so there may be only one zymotic force which can give rise to measles, scarlet fever, small-pox, or fever, according to the part of the body attacked. There is, however, no such proof of the latter proposition as of the former, which, as pointed out in my 'Report on the Past and Present Condition of the Hackney District' (1865), was then pretty fully proved."

We can only mention one more of the thought-compelling topics which Dr. Tripe treats his readers to. He shows, as others have shown, that the deaths of infants from diarrhœa in England are a test, not so much of the abstract unhealthiness of any district as of the social and moral condition of the parents.

"Want of proper nourishment, warmth, and care are more injurious to infant life than even the absence of sanitary appliances. The proportion of mothers who go out to work, leaving the infants to the care of young children or neighbours, with nothing but milk and water or thin gruel, which is sucked from a stinking bottle, is not so great here or in London generally as in the manufacturing districts, although it prevails in London to a considerable extent."

Hackney does not stand so low in this respect as Lancashire.

Here we must stop. We have in Dr. Tripe's work but one specimen of the annual records of forty-four accomplished and

(a) Dr. Stevenson *contrà* says, in his Annual Report of St. Pancras, 1871, that the parish "was thoroughly infected with the disease long before the hospital was opened for the reception of small-pox patients; and as the number of patients in the hospital increased, small-pox decreased in Kentish-town, subsequently increasing as the number of patients in the hospital decreased." Right up to the confines of Hampstead Parish, Kentish-town was steeped in small-pox, and the thoroughfare leading from the hospital to this parish was affected before ever a small-pox patient was admitted into Hampstead Hospital.

intelligent men, engaged (with differing degrees of energy, it is true) in combating disease and its causes in the metropolis. We can but wish for some means of increasing their authority at home and spreading the valuable lessons which they teach.

VACCINATION AND SMALL-POX.—REPORT OF THE METROPOLITAN ASYLUM DISTRICT.

The question of the influence of vaccination on the spread and fatality of small-pox is only to be determined by facts and figures. Mere declamation, empty assertion, and the exhibition of prejudice and passion can have no real influence on a subject of so much importance and gravity. We have, undoubtedly, overwhelming evidence in support of the claims of vaccination to be regarded as a blessing by mankind; but there is a considerable minority, not altogether amongst the ignorant classes, who still reject evidence, and abuse vaccination as a bane and a curse. Hence it is our bounden duty, when the opportunity is given us, to vindicate the opinions we have expressed, and to place upon record facts and figures which may help us to maintain our position. We have now before us a most important document, in the shape of a "Report of a Committee of the Managers of the Metropolitan Asylum District, with Statistics as to the Cases of Small-pox treated in their several Hospitals during the Small-pox Epidemic of 1870-71-72." The evidence adduced in this Report is of the most convincing and satisfactory character, and ought to be sufficient to settle the entire question. We propose to give in brief the results arrived at in the Report, without entering into minutiæ or to the analysis of the four elaborate and exhaustive tables which are appended to it. We must refer our readers to the document itself for further particulars. During the epidemic referred to 11,174 cases reported as vaccinated had been treated, of which 6169 were males, and 5005 females; that 3634 unvaccinated cases had been treated, of which 1884 were males, and 1750 females; and that the rate of mortality in vaccinated cases had been 10·15 per cent., and in unvaccinated cases 44·80, the percentage in both cases being higher in the male than in the female cases. The death-rate on the whole number had been 18·66 per cent., but of the 2763 deaths about 394 occurred within forty-eight hours after admission. If these cases, which can scarcely be said to have been under treatment, are subtracted, the average mortality will be reduced to 16·4 per cent., and, exclusive of children under 5 years of age, to 14 0 per cent. The proportion of children under 10 years of age was 8·79 per cent. of the whole number of vaccinated cases, and 43·86 per cent. of the whole number of unvaccinated cases; that between 10 and 30 there were 73·96 per cent. of vaccinated cases, and 42·39 per cent. of unvaccinated cases; and that the percentage of deaths amongst the vaccinated children under 10 was 8·63 of the whole number of deaths, and amongst the unvaccinated 49·45 per cent. The number of admissions between the ages of 10 and 20 of vaccinated persons was 40 per cent. of the whole number admitted, and the deaths were 20 per cent. of the whole number of deaths, thus showing that the chance of recovery is about twice as great as the chance between 20 and 30, when the death-rate was 36 per cent., and the proportion of admissions 33 per cent. With respect to influence of marks on the mortality, out of 5539 cases treated in the Hampstead Hospital and the Stockwell Small-pox Hospital, which in the whole of the unvaccinated cases was 55·9, this decreased from 15·2 in cases with one mark to 5·5 in cases with five or more marks. The comparative mortality in unvaccinated cases with vaccinated cases in the Homerton and the Stockwell Small-pox Hospitals was as follows:—The cases treated amounted to 3085. In unvaccinated cases the mortality was no less than 47·5 per cent., and in badly vaccinated cases 25 per cent., whilst it varied in well-vaccinated cases from 5·3 in those showing one good mark to 1·1 in those showing four or more good marks; and that of the total of 420 well-vaccinated cases under 15 years of age, the death-rate was only 0·47 per cent., giving a comparative immunity from fatal results. 8053 males and 6755 females were treated, the percentage of deaths being respectively 19·50 and 17·64: this is accounted for by Dr. Grieve, on the "extra wear and tear undergone by the man, his more irregular habits, and his greater liability to contract the disease." The Report refers to the pecuniary part of the question in the following important paragraph:—

"Next, as to the additional cost imposed upon the ratepayers in consequence of non-vaccination and the imperfect manner in which vaccination is often performed. The average duration of treatment of a well-vaccinated case is about twenty-one days. Up to the 30th March last, 14,400 cases were treated, of which 2700 died, and 11,700 remained under treatment until complete recovery. If all these had been properly vaccinated, the duration of their stay in hospital should have been about 245,400 days; but the actual number of days charged to the parishes and unions for these 11,700 cases (allowance having been made for the 2700 deaths) has been 378,700, or 133,300 days more than would probably have been the case had all been well vaccinated—which, as the average cost per patient for maintenance has been 1s. 4¾d. per day, represents an extra charge of upwards of £9300 for maintenance alone, exclusive of the proportionate additional expenditure incurred for the salaries and maintenance of officers, and the other establishment charges of the hospitals."

With respect to the influence of revaccination, "no stronger argument to prove the efficacy of this precaution can be adduced than the fact that, out of 14,800 cases received into the hospitals, only four well-authenticated cases were treated in which revaccination had been properly performed, and these were light attacks." The Report refers to the ground taken by anti-vaccination agitators, that the vaccinated cases received into the hospital are three times as numerous as the unvaccinated cases; but this argument is met by the fact that, even previously to the present epidemic, the vaccinated were about nineteen times as many as the unvaccinated.

This most valuable and important Report proves all that is necessary to be proved by the advocates of the great prophylactic of Jenner. It proves incontestably that in every way the vaccinated person is safer to an immense extent than the unvaccinated. He is less liable to contract small-pox, and, if attacked, far more secure from death; if properly vaccinated, almost secure before 15; and if revaccinated, all but impregnable to the disease. Fanatics and fools who will not admit the force of such evidence as this are not worth "powder and shot."

THE WEEK.

TOPICS OF THE DAY.

Our readers are aware that we have never supported or approved of the partial scheme for a Conjoint Board of Examiners for England which has found favour with the Royal Colleges and the older Universities. Recent events, and especially the vote last week taken on Dr. Quain's motion at the Comitia of the Royal College of Physicians, prove most completely that the scheme, with its machinery, is perfectly untrustworthy, and cannot be accepted by the Profession. The original scheme proposed that a Committee of Reference should be appointed by the Royal Colleges and the Universities, who were "to determine the number of examiners to be assigned to each subject of examination; to nominate the examiners for appointment by the several co-operating Medical Authorities; to arrange and superintend all matters relating to the examinations, in accordance with regulations approved by the co-operating Medical Authorities; and to consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by any of the co-operating Medical Authorities; and to report their proceedings to all the said Authorities." What right the Royal College of Physicians of London and the Royal College of

Surgeons of England have under their Charters to delegate these important matters to such a committee lawyers must determine. We know that competent legal authorities maintain that the whole machinery is illegal, and that examinations and diplomas held and granted by its means would be alike invalid. But beyond the original scheme a Conjoint Committee of the Royal College of Physicians of London and the Royal College of Surgeons of England, without the Universities, have employed themselves in drawing up certain voluminous recommendations on the mode of carrying out the scheme for an Examining Board for England. At a recent meeting of the Fellows these recommendations were laid upon the table, and the Fellows were informed that they were to be accepted, but not to be discussed by the College. This somewhat arbitrary proceeding was opposed at the time by Dr. Quain, but, a point of order being raised, he gave notice of a motion—"That it is desirable that the 'recommendations' of the Conjoint Committee, laid on the table at the last Comitia, be submitted for consideration and approval by the College, prior to their being transmitted to the Committee of Reference now about to be constituted." This very reasonable motion was discussed at the Comitia last Thursday, and was rejected by the narrow majority of two votes. Its rejection leaves the Committee an irresponsible *imperium in imperio*. If the Committee of Reference has a shadow of claim to power, it only derives it from the two Royal Colleges, and we are met *in principio* by the fact that the Fellows of the Royal College of Physicians are not allowed to discuss or express an opinion upon the duties which are to be fulfilled by the Committee, or upon any of the rules which are to regulate its conduct. The regulations themselves which are thus forced upon the College seem to us of a very questionable character, and impose upon the Committee of Reference powers and duties which were never contemplated in the original scheme. For instance, the Committee of Reference—not the Colleges—is to appoint a treasurer "to receive all moneys due on account of the examinations, and to pay the same to the bankers to an account in the name of the Committee of Reference." Thus all revenues are to be in the hands of the Committee of Reference—an irresponsible and probably illegal body. We should think the Council of the Royal College of Surgeons, with the responsibility of the Library and Hunterian Museum on its shoulders, will take time to consider such a proposition. Then, again, the pay of the examiners, the appointment of Registrar (an office which it seems is at present to be shared between the Registrar of the Royal College of Physicians and the Secretary of the Royal College of Surgeons), and the appointment of examiners in the subjects of general education—a thing never contemplated in the original scheme—are all settled in these recommendations, without any interference or check from the Colleges being allowed or even contemplated. The recommendations abolish Forensic Medicine as a separate subject of examination, and Botany is never mentioned. We cannot think that Government or the Profession will for one moment submit to have an irresponsible unauthorised body placed in the seat of the legally constituted Medical Authorities. The effort made by Dr. Quain and the large body of Fellows who voted with him to place the Committee in its proper subordinate position to the College having failed, the arguments derived from the illegality and incompleteness of the whole proceedings obtain tenfold force. We have heretofore shown that the scheme is full of danger to the finances, the influence, and the trusts of the Royal College of Surgeons; it is now equally clear that it threatens the privileges and rights of the Royal College of Physicians. It can effect no good, for the Board which it is to establish is a partial one, which will not attract a large number of English students. The constitution of the scheme is cumbrous and complicated; the examination it proposes is expensive and incomplete; and, to crown all, it is to be superintended by a Committee of Reference who have no place in any legal enactment or charter, who, whilst they are independent of control, because they are unpaid, are absolutely irresponsible to the Colleges, the Profession, and the public for the mode in which they exercise the power delegated to them in the nomination of examiners. Such a scheme ought never to be accepted, and can never work.

The case of Maunder *v.* Wakley, of which we publish a full report in our "Legal Intelligence," has terminated by our contemporary the *Lancet* making (through its counsel, Mr. Serjeant Parry) a full apology to Mr. Maunder for the attacks which it had made upon his professional character, and a complete retractation of the charges and inuendoes which it had published against him. Mr. Maunder has had the boldness to come forward and vindicate his character in a court of law, and we congratulate him upon the result. That the view which the *Lancet* took of Mr. Maunder's conduct, in the unhappy relations in which he found himself placed to one of his colleagues, was not shared by men of high standing and influence in the Profession, was proved by the presence of Dr. Risdon Bennett, Dr. Wilks, Dr. Sutton, Dr. Barnes, Mr. Poland, and Mr. Campbell De Morgan, in the Court at Guildford, who were all prepared to prove in evidence that Mr. Maunder's conduct throughout was consistent with the dictates of humanity, loyalty to the staff of the hospital to which he belongs, and of professional honour. Whilst we would fully uphold the right of the medical press to comment, and to comment freely, upon the conduct of the members of the medical profession in their relations to the public and to each other, we think in every case the facts on both sides should be fairly stated; and, above all things, the public critic should abstain from imputing motives to medical men holding public positions which are not warranted by a fair and impartial examination of their conduct. Mr. Maunder has consistently, and in every way possible, challenged and sought to compel a full inquiry into his conduct. His opponents have not accepted his challenge, and the apology with which these legal proceedings have terminated proves that they were in no degree able to support the allegations they have made against him. We believe that on the side of the defendants not a single medical witness of eminence was present, to uphold their interpretation of Mr. Maunder's conduct. In fact, it was clear that the only way out of the dilemma was an open apology in public court. That apology has been accepted, and Mr. Maunder leaves the court with the satisfactory consciousness that, having acted as he did from a stern sense of duty, he has now compelled his antagonists to acknowledge and respect his motives.

The following Members of the Royal College of Physicians have been nominated by the Council, and were elected Fellows of the College at the last Comitia:—William Brewer, M.D., M.P., 21, George-street, Hanover-square; Edward Ballard, M.D., 7, Compton-terrace, Islington; Thomas Pretious Heslop, M.D., 21, Temple-row, Birmingham; William Chapman Begley, M.D., Hanwell; John Rose Cormack, M.D., 7, Rue d'Agues-seau, Paris; William Henry Robertson, M.D., Buxton; James Tetley, M.D., Torquay; William Herries Madden, M.D., Torquay; Edward Cator Seaton, M.D., Rochester House, Surbiton; Alexander Eugene Mackay, M.D., Admiralty; Joseph Fayrer, M.D., Calcutta; William Cayley, M.D., 58, Welbeck-street; William Murray, M.D., Newcastle-on-Tyne; John Alfred Lush, M.D., M.P., Fisherton House, Salisbury; Robert Liveing, M.D., 11, Manchester-square.

Dr. John Dougall is a candidate for the chair of Medical Jurisprudence in Anderson's University, Glasgow. The chair is vacant by the appointment of Dr. Simpson to the chair of Medical Jurisprudence in the University of Glasgow. Dr. Dougall is the author of various papers on medical and natural science.

The International Ophthalmic Congress has begun its sittings. Science will be judiciously mingled with festivity.

Mr. Bowman receives the members on Thursday, Mr. Critchett on Friday evening, and on Saturday there is to be a banquet at the Crystal Palace. Mr. Spencer Wells has invited all the members who remain after the meeting to his gardens at Hampstead on Monday afternoon. We hope this may prove a pleasant ending to the Congress, or, rather, a little friendly addition to a scientific gathering.

CHOLERA AND ITS PROGRESS.

The present epidemic of cholera seems to be of a more moderate type than former ones. Wherever in Russia the disease has made its appearance it has not proved so detrimental as in former years. In Kiev alone the destruction of life was very great. In St. Petersburg an increase of the fatal cases has taken place from thirty-one on July 18, to eighty-four on the 23rd. In Moscow the epidemic seems to have disappeared; since the 20th no deaths are reported from thence. In the meanwhile it has passed the frontiers and entered Prussia. The first case occurred at Insterberg, a small town in the province of East Prussia, where a soldier was taken ill on the 20th; and nine days afterwards three cases came under notice at Berlin, in one and the same house in "Unter den Linden"—the most fashionable street in the capital. Great anxiety and dissatisfaction prevail there amongst the public, on account of the gross neglect on the part of the local boards, who did not take any precautions against the approaching enemy, the drainage being there in a most miserable state. The epidemic, however, does but spread slowly, and has not developed a very destructive tendency.

BRITISH MEDICAL ASSOCIATION.

The British Medical Association begins its session on Tuesday at Birmingham, when Mr. Barker, the Senior Surgeon to the General Infirmary, will take the chair, and deliver an address. On Wednesday the real work of the Association will begin, and in the evening Dr. Wilks will deliver the address on Medicine; on Thursday Mr. Pemberton will deliver the address on Surgery; and on Friday the work of the Association will terminate. Many valuable papers are promised, and the meeting is likely to prove a most agreeable one in every respect. Many of the Birmingham manufactories will be open to visitors, and excursions will take place to the Black Country, to Kenilworth, Stratford-on-Avon, Leamington, and the many interesting places in the vicinage. Professor Ricord proposes to attend the meeting, attended by his faithful disciple, Mr. Acton, who will read a paper calculated to elicit Ricord's latest views on the political and scientific treatment of syphilis. Next week we shall give our readers an account of the salient points of the early part of the meeting.

SCOTTISH MIDLAND AND WESTERN MEDICAL ASSOCIATION.

The first annual general meeting of the "Scottish Midland and Western Medical Association" was held in the Clarence Hall, Glasgow, on Friday, the 26th ult., at 2 p.m. The meeting was well attended, and we are glad to learn from the General Secretary's report that the Society is in a very flourishing condition. Since its establishment, six months ago, it has been joined by ninety-three members of the Profession, and has been able during that period to accomplish some important objects for the benefit of the country practitioner. The members of the Association afterwards dined together, and spent a pleasant evening, congratulating themselves that such an association had been formed amongst them, which, besides doing much to enhance the pecuniary position of its members, had also already been the means of promoting a spirit of good-fellowship and mutual self-esteem, a feeling which ought to be more assiduously cultivated among country medical men.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

The Quarterly Court of Directors of this Society was held on July 10, at 53, Berners-street. The chair was taken by Charles Hawkins, Esq., V.P. Fifty-eight widows and forty children made application for grants, and the sum of £1312 10s. was distributed amongst them, the amounts varying according to the wants of the respective applicants. Five widows were added to the list of annuitants. A donation of £100 was announced by the Acting Treasurer, James T. Ware, Esq., as having been received from Dr. Hare, to whom a vote of thanks was unanimously passed. The directors again appeal to their professional brethren for assistance to enable them to meet the increasing demands on the funds of the Society.

THE ARTISANS' AND LABOURERS' DWELLINGS ACT (1868) AND UNHEALTHY HOUSES.

An important decision was given last week by the justices at the Westminster Guildhall. It appears that the St. Giles's District Board of Works have put in force the above Act for the removal of thirty of the most wretched houses in that district. The Medical Officer of Health certified that these houses were unfit for human habitation, and the legal notices were given for their demolition. In the case of two, the property was in Chancery, and an appeal was lodged against the decision of the Board. The appeal was heard last week, and the Board's decision was confirmed. It was stated in court that this was the first appeal that had been heard by the justices. We hope this decision will induce other district boards to put in force the Act for the removal of the hundreds of tumble-down and unwholesome dwellings now occupied by the labouring classes in this vast metropolis.

BRITISH MEDICAL BENEVOLENT FUND.

At the usual monthly meeting, held on Tuesday last, the Committee considered twenty-two applications for assistance, and among thirteen of these distributed in grants the sum of £115. Donations were reported of thirty guineas from the Worshipful Company of Merchant Taylors, and fifty guineas from the Worshipful Company of Drapers, also a new annual subscription of £20 from Sir Richard Wallace. Cordial votes of thanks were accorded in each instance.

FROM ABROAD.—M. OLLIER'S OCCLUSIVE DRESSING—PROFESSOR GREENE ON COTTON-WOOL DRESSING—MORTALITY IN THE LEARNED PROFESSIONS IN THE UNITED STATES—CARBOLIC ACID AS A LOCAL ANÆSTHETIC.

In the last two numbers of the *Lyon Médical*, M. Poncet brings forward some new illustrations of the great advantages attending the employment of M. Alphonse Guérin's mode of dressing wounds with cotton, and associated, as recommended by M. Ollier (*Medical Times and Gazette*, May 11, p. 547), with the silicate bandage, so as to constitute what the latter surgeon terms *occlusion inamovible*. The object of these papers is, however, not to set forth the general advantages of this plan, which have now been made pretty widely known, but to show its great utility in warding off those hospital complications which have so often excited terrible effects—pyæmia, erysipelas, and hospital gangrene. During the last *semester* more than 100 of the *bandages ouatés-silicatés* have been applied in M. Ollier's ward (containing 100 patients) to every wounded surface, and not one of these patients has succumbed to pyæmia or been attacked by erysipelas. The bandage in these cases has been kept on for a week or fortnight, and sometimes for three or more weeks; all accidents from such retention being guarded against by paying attention to the pulse, temperature, and feelings of the patients. The bandage has had to be removed wholly or in part in a few cases, on account of the imperfect way in which it had been applied. In all cases, wherever possible, such removal has not been performed

in the ward where the other patients were; the wound being also kept exposed for the shortest possible time; and the quite new, fine cotton taken only from the parcel as wanted. The portion of this brought in immediate contact with the wound has usually been impregnated with carbolic acid or alcohol. In this mode of dressing the minutest details must be observed, and the great object of exclusion of air can only be attained by the superposition of several thick layers of cotton, which must reach very far beyond the surface of the wound. Thus, after an amputation of the leg, it does not suffice to cover the stump with the silicated bandage, but this must also comprise the thigh and the trunk. Without such precautions it becomes a bad mode of dressing, retaining pus which has undergone change from action of the air in contact with the wound. Before the bandage is applied, as many arteries as possible should be secured, and for this purpose the wound should be left exposed for fifteen or twenty minutes.

M. Poncet gives various details concerning the chief classes of wounds which were treated during this period; and he observes that, if these cases were to be taken as conclusive, this procedure might be pronounced as an absolute preservative against these complications. No cases of pyæmia, erysipelas, or hospital gangrene were observed in cases so protected, although the last two affections prevailed in the ward. However, he wishes for no exaggeration upon the subject, and observes that, while failure will occur wherever the bandage is imperfectly applied, even when its adaptation is perfect we only place the wound in the very best condition for healing by preventing complications from without. Its healing, however, of course depends also upon other circumstances. It is a means especially adapted for hospital practice, and is not required in cases treated in localities where the air is not likely to be contaminated. The cases M. Poncet relates were also treated in winter; but in summer the dressing may have to be renewed every five or six, instead of every fifteen or twenty days.

As in some measure connected with the above paper we may refer to one on "Cotton-Wool as a Surgical Dressing" in the *Boston Journal* for May 23, by Dr. Greene, Professor of Surgery in the Medical School of Maine. He states that for the last five years he has used it whenever he desired or expected union by the first intention, while for two years he has to a great extent substituted it for carbolic acid dressings in the treatment of abscess and suppurating surfaces. The most satisfactory results have followed. Of all forms of cotton that which is to be preferred is "French wadding," which is made of the purest cotton, is thick, very soft and elastic, slightly glazed on one side, and on the other presents a beautiful soft fleecy surface. Besides possessing these qualities, Dr. Greene believes it acts as a filterer or intercepter of disease germs, and in that respect is superior to carbolic acid, which destroys the diseased spores that may have gained access. However this may be, he has been quite as successful with the cotton as with the carbolic acid; and it is a much more agreeable application, both to the surgeon and the patient.

While using the cotton, Dr. Greene says—"In the case of ordinary wounds, either accidental or resulting from operations, I have in the last five years rarely seen one that did not unite by the first intention, excepting, of course, in the track of the ligatures." In proof, he refers to several cases of major amputations, ten ovariotomies, and other important operations. Among some of his concluding observations are the following:—

"From what I may safely call an ample experience, I have never seen any management under which wounds heal so rapidly and with such freedom from inflammation and suppuration as this. . . . I desire here to call attention to a very important fact; and to this point the attention of Dr. Gerrish—a most careful observer—as well as my own, has been especially directed. In all cases of recent wounds dressed with cotton-wool, when the compress was so carefully applied as to exclude air around the edges, whether the wounds were closed or open, incised or lacerated, we have never seen a drop of pus upon raising the compress the first time. When oozing has occurred we have found the cotton coated with dry blood and lymph, but no pus. I may state that after such dressing I am very slow to disturb the dressing so long as no symptoms of inflammation are developed. Avoiding, if possible, all lotions, fomentations, or anything of the sort, I am anxious to retain the primary dressing as long as possible."

Dr. Toner, in a communication to the *Boston Journal*, gives a statement, derived from the United States Census Reports for 1870, of the number of deaths which have occurred in the three learned professions during the year ending June, 1870. Unfortunately, he had no means of ascertaining the number of persons engaged in the respective professions during the year. For the year 1850, however, there were returned 28,842 clergymen, 40,564 physicians, and 23,939 lawyers; and for 1860, 37,529 clergymen, 54,543 physicians, and 33,193 lawyers. It is probably fair to presume that the same proportions are still kept up. The number of these deaths occurring in the States and territories of the United States during 1870 was—clergymen 629, physicians 947, lawyers 595. The causes of death are thus assigned:—

	Clergymen.	Physicians.	Lawyers.
Unknown	10	15	7
General diseases	242	344	234
Diseases of the nervous system	77	143	93
ditto circulatory system	54	73	45
ditto respiratory system	84	130	58
ditto digestive system	76	105	61
ditto urinary and generative system	32	37	19
ditto organs of locomotion	3	4	0
ditto integumentary system	1	1	3
Conditions not necessarily associated with general or local disease	39	31	19
Poison	2	18	13
Accidents and injuries	9	46	43
	629	947	595

At a recent meeting of the Medical Society of the County of New York (*New York Journal*, June), Dr. Andrew H. Smith gave an account of some trials he has made on his own person of the action of carbolic acid as a local anæsthetic agent. The results are quite in accordance with the experience already published by Drs. Bill and Squibb:—

"In the first experiment," he says, "I painted a spot on the forearm about an inch in diameter with carbolic acid at about 85 per cent. For a minute there was a slight burning sensation, after which the integument became entirely insensible, the cuticle being whitened and shrivelled, and the spot slightly elevated. I then made an incision with a scalpel about half an inch in extent through the whole thickness of the integument, without even feeling the contact of the knife. The capillary circulation seemed not to be materially interfered with, as the blood flowed as freely as it would from a similar wound under ordinary circumstances. The reparative process also was not interfered with, adhesion taking place immediately. Three hours after the application of the acid a needle could be thrust freely into the skin without causing pain. In the second experiment, ten minutes after applying the acid a blister was placed on the spot and remained eight hours and a half without causing any pain and without producing vesication. In two instances I have applied the acid previous to incising a whitlow. The operation was almost painless; but, as the whitlow was in each case of the superficial variety, the test was not entirely conclusive. Inhaled in the form of spray, I have found the acid very useful in allaying irritation of the bronchial mucous membrane. Coughs which have resisted all ordinary treatment have been immediately relieved, and in the course of two or three days entirely removed.

"I would suggest the use of a strong solution of carbolic acid as a revulsive, in cases in which a continuous impression is desired. While causing but little suffering, it produces an intense hyperæmia of the skin, which persists for eight or ten days, and is followed by desquamation."

PARLIAMENTARY.—CATTLE PLAGUE—MINES REGULATION BILLS—LICENSING BILL—DR. HOOKER AND MR. AYRTON—REGISTRATION OF BIRTHS AND DEATHS BILL.

On Thursday, July 25,

Mr. W. E. Forster stated that a case of cattle plague had

occurred in a herd brought by a Hamburg steamer to Newcastle on Monday. Every precaution had been taken by the Privy Council.

On Friday,

The Coal and Metalliferous Mines Regulation Bills passed through Committee in the House of Lords.

In the Commons the Licensing Bill was advanced a stage.

On Monday,

The case of Dr. Hooker, the Director of Kew Gardens, against Mr. Ayrton was brought before the House of Lords by Lord Derby. He did not move a resolution on the subject, because the case was to be brought before the House of Commons. The Duke of St. Albans, Lord Halifax, and Lord Stanley of Alderley defended the Board of Works.

On Tuesday, in the House of Commons,

The Registration of Births and Deaths Bill was withdrawn.

On Wednesday,

Questions were asked of Mr. W. E. Forster in reference to the importations of animals affected with cattle plague which have taken place to Hartlepool and Newcastle. No outbreak had taken place amongst English cattle.

THE INTERNATIONAL OPHTHALMOLOGICAL CONGRESS.

The first session of this Congress is being held at the Royal College of Physicians, Pall-mall, on August 1, 2, and 3, from 11 a.m. to 1 p.m., and from 3 to 5.

Mr. Critchett addressed the assembled members in excellent French, bidding them all a hearty welcome to London; and, after giving a short history of these ophthalmological gatherings, he proposed, with the cordial assent of all present, that Professor Donders should be elected as president; Dr. Williams, of Boston, U.S., and M. Warlomont, of Brussels, vice-presidents; Mr. Soelberg Wells and Professor Zehender, hon. secretaries.

Mr. Wells being unavoidably absent, Mr. Hulke was substituted.

Professor Donders then took the chair, and delivered an address. He then proposed that the following gentlemen should be elected hon. vice-presidents:—Messrs. W. White Cooper, Critchett, Bowman, Hesse, Giraud Teulon, and Serveri.

The names of the new members were read to the Congress, and some of the contributors of promised papers called upon.

The first paper was read by Dr. Joy Jeffries, of Boston, U.S., "On the Use of Ether in Ophthalmic Surgery." He urged its employment in preference to chloroform, on the ground of its superior safety, and, if properly given with a towel rolled up into the form of a cone, enclosing a sponge saturated with ether, so as to get the patient quickly under its influence, and if the patient was prepared beforehand by fasting, the sickness and other ill-effects did not arise.

Mr. Brudenell Carter, after giving ether a fair trial, had abandoned its use for chloroform, chiefly on the ground of its not producing the same amount of muscular relaxation, and the deaths that had taken place during its exhibition proved that it was not so free from danger as it has been represented.

Dr. O'Leary, Professor of Medicine and Therapeutics, King and Queen's College, Dublin, attributed the fatal results of ether to its impurity.

Mr. Hogg spoke against ether, and recommended bichloride of methyline.

Dr. Jeffries, in reply, stated that a commission of inquiry into the fatal cases had reported that deaths were not the result of the anæsthetic, but of other causes.

Dr. De Wecker, of Paris, then read a paper "On Optic Neuritis," which he attributed to an effusion of fluid within the optic nerve sheath, the pressure of which produces the atrophy and the other symptoms, which he proposed to relieve by neurotomy of the optic nerves. He makes an incision between the exterior aud inferior recti muscles down to the sclerotic, dislocates the globe by a spatula, and makes an incision through the sheath one centimetre behind the globe. He had done the operation in two cases with relief.

Dr. Galezowski, of Paris, had examined fifteen cases of optic neuritis on the dead subject, and only found one in which there was fluid, and that was a meningitis. He was against the operation.

The discussion was continued by Drs. O'Leary and Donders. The former considered it useless, and the latter dangerous.

The next paper was by M. Warlomont, of Brussels, "On Sympathetic Ophthalmia." 1. When an eye has been destroyed, either by accident or disease, or when the globe has become atrophied from either cause, if it remain painful, or even tender to the touch, or if it manifest signs either of acute or chronic inflammation, it may give rise to sympathetic phenomena in the other eye. These sympathetic phenomena may even exist without any appreciable irritation of the eye originally affected. 2. In both cases, whether from injury or disease, it is important to enucleate with as little delay as possible after the manifestation of the first signs of sympathetic mischief. When the sympathetic influence has caused an irido-cyelitis, with exudations, enucleation is almost useless, because it has been delayed too long. 3. When an eye has been destroyed by an injury it is very much for the advantage of the patient that enuclcation be performed under chloroform with as little delay as possible. He is in this way preserved from the consequences that too often follow from this form of injury. Enucleation, therefore, as a preventive measure deserves to be encouraged.

The following communications are announced:—Mr. Bader—Case of pannus; tattooing of the cornea; case of conical cornea. Mr. Bowman—A new method of dividing the iris; a new method of excising stricture in the papillary region; on some new instruments for the treatment of obstructions of the lachrymal ducts; ocular trephining; operations for conical cornea. Mr. Brudenell Carter—The ophthalmoscope and perimetry. Dr. Dudgeon—The mechanism of accommodation. Mr. Jabez Hogg—On atrophy. Mr. Hunt (Manchester)—On cerebral amaurosis. Dr. Joy Jeffries (Boston, U.S.)—Passavant's operation; on the use of ether in ophthalmic surgery. Mr. Power—Corneal transplantation. Dr. Argyll Robertson (Edinburgh)—Cases. Mr. Vernon—Three cases of tumour of the eyeball. Mr. Pridgin Teale (Leeds)—Treatment of symblepharon by transplantation. M. Warlomont (Brussels)—Sympathetic ophthalmia; new method of extracting cataract. Mr. Spencer Watson—Application of cold water to the eye; intra-orbital dermoid cyst. Dr. De Wecker (Paris)—Surgical treatment of optic neuritis. Dr. Wolfe (Glasgow)—On traumatic cataract.

PROFESSOR HOLMES'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

In his fifth lecture Professor Holmes, continuing the subject of the treatment of subclavian aneurisms, discussed the methods of manipulation and galvano-puncture, and considered the propriety of superseding any treatment directed to the aneurism itself by removing the limb.

Manipulation of the sac, as recommended by Sir W. Fergusson in the year 1856, has hitherto been practised in five cases of subclavian aneurism, and two of aneurisms of the lower extremity. It is a suggestion which rests unquestionably on a sound pathological basis, and present experience (the Professor thinks) justifies the repetition of the proceeding in a suitable case of subclavian aneurism. The cases which would be looked upon as favourable for manipulation are those in which there is some evidence of deposit of fibrine in the sac, where the aneurism is not of large size, and where its distal extremity is easily accessible to touch, so that the surgeon has a rational prospect of forcing some of the clot into it.

That in so formidable a disease the operation undertaken should sometimes produce death, is in all probability inevitable; still, the fact that in most of the few cases treated in this way the treatment, when not beneficial, has been at least harmless, is encouraging. It ought to be remembered, too, that the cutting operations which have been practised for this disease are constantly followed by death, and are rarely indeed successful.

Galvano-puncture must be regarded in about the same light as manipulation—viz., as a possible means of cure for cases which can hardly be treated otherwise, except by ligature of the innominate or first part of the subclavian. Mr. Poland has catalogued four cases, and a fifth case so treated has lately been under the care of Dr. Clifford Allbutt. This last was a very encouraging case at first, from the relief from the general symptoms, and the total suppression of pulsation in the tumour

it produced. Death, however, occurred, preceded by jaundice and hemiplegia, produced by plugging of vessels. This shows strongly the need for more definite information about the result of electrolytic action on the blood, and for clearer ideas how coagula may be produced stable enough to lead to definite lamination and the permanent cure of the tumour without such inflammatory action as will prove fatal.

In cases of subclavian aneurism inaccessible to other measures, it has been proposed by Sir W. Fergusson to amputate at the shoulder-joint. The limb being removed, much of the circulation through the diseased vessel, though not all of it, must cease; and by this means it is hoped the progress of the malady will be stopped. The operation has been practised by Mr. Spence in a case in which the arm was threatened with gangrene. The man recovered, and lived four years afterwards, when he died, probably from extension of the disease into the thorax. Here, however, the condition of the arm alone furnished a sufficient motive for the operation; but it is a course which no surgeon could contemplate without repugnance, and it should be reserved for cases in which the limb is gangrenous, or threatens to become so, unless the other methods before discussed should disappoint our hopes. Mr. Spence's case, as well as the anatomy of cases brought forward, proves that amputation must be looked upon at best only as a palliative.

Such is our present experience—gloomy as it is—of the surgical treatment of subclavian aneurism. Professor Holmes, however, is sanguine enough to hope that we are on the eve of a better state of things. Much has been done of late to bring abdominal aneurisms under the command of surgery, and we may expect, by following the same ideas, to obtain similar, if not quite the same, success in the treatment of the still more difficult affection of subclavian aneurism.

The subject of abdominal aneurism next occupied the attention of the Professor. He divided these into three classes —1. Those aneurisms situated so high up as to be inaccessible to any known surgical measure except distal pressure or ligature—*i.e.*, such as affect the artery or its branches on a level with the lower border of the pancreas. 2. Those which arise from the trunk of the artery at a lower point (as the origin of the inferior mesenteric), or which affect one of its branches (superior or inferior mesenteric) at so low a point that their pulsation can be arrested by pressure applied to the trunk of the artery. Here proximal pressure is obviously our first resource. 3. Those which affect the iliac arteries. Here the choice lies between three measures—the Hunterian operation, the old operation, and compression. Galvano-puncture might be added by some, perhaps; but this method, as applied to these aneurisms, could only be proposed in very exceptional cases.

Preparations were produced to show that aneurisms of the aorta as high as the cœliac axis are not on that account incapable of spontaneous cure. These cases, and the instances of temporary cure which have been procured by the treatment advocated by Mr. Tufnell, together with others in which the disease progresses so slowly as really not to interfere with the patient's enjoyment of even active life, should make us cautious of subjecting a patient to treatment involving such grave risk to life as we now know forced compression of the aorta long continued involves. The only case known to Mr. Holmes in which an aneurism seated so high as the cœliac axis has been made the subject of deliberate surgical treatment is Mr. Bryant's recent case at Guy's Hospital. In commenting on this case the Professor thought he was at liberty to use all possible freedom, since the attempt to cure so grave a disease by a method which has not previously been employed is not to be judged of by the unsuccessful result of a single trial, but ought to be repeated if there seems any rational prospect of its success. Now, although theoretical arguments are all against distal compression in aneurisms in this situation, still, if the results of practice should contradict these theoretical impressions, the plan introduced by Mr. Bryant for the cure of aneurisms of the aorta inaccessible to proximal measures will be a valuable auxiliary to the at present very inadequate resources at our command; but the plain and confessed danger of compressing the aorta for nine hours under chloroform, the slow progress of abdominal aneurisms in some cases, and the occurrence of spontaneous cure in others, point to the advisability of giving a patient trial of the internal treatment before resorting to such dangerous measures.

After alluding to a fatal case in which the distal ligature was employed in the treatment of abdominal aneurism, the subject of mesenteric aneurism was touched upon, and a few drawings of the usual forms of this affection were exhibited, and special attention was drawn to a case then under treatment in St. George's Hospital. The present state of surgical experience on the whole leads to the conclusion that aneurisms of the superior mesenteric are frequently so extensive as to be beyond the reach of either pressure or any other external means; but that in exceptional cases they may possibly be cured by compressing the abdominal aorta above the tumour, in which compression the trunk of the mesenteric itself is likely enough to be involved. The fact that instances of spontaneous cure are met with shows that the treatment by rest and diet is rational and hopeful. Aneurisms of the inferior mesenteric artery are rarer than those of the superior; the diagnosis during life is hardly possible, but the lower origin of the aneurism would make its treatment by pressure more easy. Aneurisms of the smaller branches have been found occasionally; though of small size, such aneurisms are prone to rupture from the thinness of the sac and other causes. If they can be detected, therefore, and if compression will stop their pulsation, no hesitation should be felt in attempting their cure by this method, either gradually or rapidly applied, as may seem best under the circumstances. In the year 1862 the lecturer published an essay in which he suggested the use of manual pressure on the aorta with a pad for the treatment of abdominal aneurism. This essay was written before Mr. Lister's or Pancoast's tourniquet came into use, and before the feasibility had been demonstrated of keeping a patient for so long a period under anæsthesia as we now know to be possible; but he still thinks that gradual compression without chloroform may be in many cases preferable to the more rapid method which is only feasible in ordinary circumstances under chloroform.

The credit of being the first to cure an abdominal aneurism by pressure belongs to Dr. Murray, of Newcastle-on-Tyne; and Dr. Murray's case still remains the only one in which it has been proved, by post-mortem examination, that an aneurism situated so high as the abdominal aorta itself, can be thus treated with success. Another case in which a cure was effected by pressure on the aorta, and in which the aneurism was believed to be one of the abdominal aorta, was recently communicated by Mr. Durham to the Royal Medical and Chirurgical Society.

Turning now to those aneurisms which are situated below the bifurcation of the abdominal aorta, we have the choice of several methods of treatment. A few years ago if treated surgically they were always subjected to the Hunterian operation on the aorta, the common or external iliac, according to the height to which the aneurismal sac extended. The present practice is to attempt the cure of all such aneurisms by the total and rapid compression of the great trunk above.

The propriety of reintroducing into general practice the old operation in the treatment of aneurisms was then discussed. John Bell, and after him Guthrie, showed conclusively that the ligature of both ends of the vessel was a far more trustworthy proceeding than ligature of a higher part of it, in the case of a recent wound; and Guthrie strove to introduce the ligature of both ends of the vessel, even in situations where (as in the case of a wound of the internal carotid from the mouth) they are hardly accessible without the gravest risk—even if accessible at all—and where the Hunterian ligature has often proved successful. Reasoning from theory and his great experience, Guthrie, in his lectures delivered before the College of Surgeons, showed that the practice of incising the sac and applying ligatures on the two ends of the artery was the one which ought to be pursued in the varicose aneurisms which result from careless bleeding at the bend of the elbow, and might often be pursued with advantage in traumatic aneurism. It is, however, to Mr. Syme that the Profession in England is chiefly indebted for the renewed prevalence of the old operation; and he founded his proposal on the undoubted fact that very frequently the orifice of the aneurism is accessible far below the upper limit of the sac. Mr. Syme's opinion, at least as far as axillary aneurisms are concerned, can hardly be said to be entirely novel, since the same idea of the greater applicability of the old than the new operation in this form of aneurism had been held by Velpeau, who says that the old method "ought to be preferred in diffused superficial aneurisms, in those which affect the brachial artery very near the axilla, in those of the axillary itself when the shoulder is infiltrated or so far deformed as to render it dangerous to attempt to operate in front of or above the clavicle, and in aneurisms in general when very voluminous or when gangrene of the sac is threatened, or when it is in the neighbourhood of an important and large collateral branch. Finally, in varicose aneurism it is necessary to tie the artery above and below the opening." Nor was Mr. Syme's practice absolutely novel,

since Sir James Paget had performed a similar operation about two years previously, and another case is related by Mr. Skey. Still, there is no doubt Mr. Syme's views were perfectly original, and that it is to his energetic advocacy and masterly operation that whatever prevalence this treatment has obtained is owing.

The controversy between those who support and those who assail the old operation resolves itself into the following questions:—Is it true, as Mr. Syme says, that in every aneurism there is only a limited portion of the vessel contained within the cavity of the sac or embraced by its wall? Is that limited portion capable of supporting the ligature and taking on reparative action? Can the operation be performed with certainty on the part of the surgeon that he will complete it? And, finally, allowing that all this is so, is it a preferable method to the other ways of treating a given case? The discussion of these questions was postponed till the next and last lecture.

PROFESSOR HUMPHRY'S LECTURES ON HUMAN MYOLOGY

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Lecture III.

In his third and last lecture, on June 21, Professor Humphry continued the discussion of the museles of the limbs. The coraco-brachialis, biceps, and brachialis anticus he showed to form one series corresponding with the adductors, the semimembranosus, and semitendinosus, and the short portion of the biceps cruris, while the long portion of the last muscle is a derivative from the extensor mass—the gluteo-rectus series—which, inclining to the plantar aspect, has acquired a flexor action. The tendinous intersection in the semitendinosus he regarded as corresponding with a similar intersection in the eryptobranch found at the junction of the caudal muscle with the flexors of the leg, and its persistence in man is to be associated with the great length of the fibres of the muscle, owing to the distance of its insertion in the leg from the eentre of motion at the knee, and the consequent great range of its aetion. The fibres of this muscle in a woman of ordinary stature measured ten inches, while those of the semimembranosus measured only three inches, and those of the biceps six—the length in each instance being proportionate to the distance of the insertion from the eentre of motion. The quadriceps cruris is evidently the serial homologue of the triceps brachii; and in the bat, where the rotation of the hind limb is the reverse of that usual in mammals, the rectus cruris arises from behind the glenoid eup. The several muscles on the flexor and extensor aspects of the middle and distal parts of the limbs were described as derivatives or segmentations from pronato-flexor and supinato-extensor masses, which are found in a simple form in tailed batrachians, but are more complicated in man. The divisions of these were described at some length. The supination and pronation in the upper limb, and the throwing out of the heel-bone in the lower limb are the features which necessitate the chief differences in the disposition of the muscles in the two limbs. A large proportion of the fibres on the plantar aspect in the hind limb are eoncentrated upon the heel, and subserve to the flexion of the ankle; whereas the eorresponding fibres in the fore-limb minister to pronation of the forearm and flexion of the digits, as well as to flexion of the wrist. Hence the representatives of the flexores carpi and the flexor sublimis digitorum, as well as of part of the pronator teres, are to be found in the outer head of the gastroenemius, and the soleus and the plantaris (which in many animals is continuous with the flexor brevis digitorum pedis) which are remnants of the primitive pronato-flexor masses, which have attachments to all the bones of the limbs. The former is present in the chimpanzee, but is not again met with till we reach the reptiles, where it constitutes a pronator intermedius connecting the pronator teres with the pronator quadratus. Its use is to carry on pronation during the flexed condition of the elbow when the humeral fibres of the muscle lose their power. The use of the accessorius is in like manner to maintain the influence of the flexor digitorum upon the toes in the flexed position of the ankle. A well-marked accessorius, corresponding with that in the hind-limb, is found in the fore-limb of some of the saurians; but there is no such muscle in the fore-limb of birds or mammals. The Professor concluded his course by some remarks on the difference between a hand and a foot—first controverting the distinction drawn by the Rev. Professor Haughton from a supposed difference between the flexor tendons in the two. He observed that we must eliminate the features of difference between the terminal parts of the hind- and the fore-limbs, forasmuch as these relate to the distinction between the two limbs, rather than to the distinction between a hand and a foot. This, he said, had not been sufficiently attended to by those who had recently considered the question, and therefore they had argued it upon a wrong basis. After pointing out the features which distinguish the hand of man from the terminal part of the fore-limb of ordinary mammals, he remarked that a corresponding modification either of a fore- or a hind-limb would eonstitute a hand, although the features distinguishing either from the other were still present. Judged by this rule, the terminal part of the hind-limb of a gorilla or a chimpanzee, notwithstanding its projecting heel and the presenee of a peroneus muscle, has as much claim to be called a hand as the terminal part of the fore-limb of the same animal. There is, therefore, no sufficient anatomical reason for rejecting the word "quadrumanous" as applicable to them, or the word "bimanous" as characteristic of man.

REVIEWS.

History and Results of the Regulations proposed by the Board of Medieal Poliee and Public Health against Prostitution at Rotterdam.(a) By A. M. Ballot. (From the *Nederlandse Tijdschrift voor Geneeskunde.*) 1872. Pp. 24.

There are no laws existing at Rotterdam against prostitution, but the police authorities of that place have thought it proper to issue regulations from time to time to check profligacy and disease. In his short essay Dr. Ballot gives first a short account of the different measures which the police magistrates at Rotterdam have chosen to inflict upon unfortunate women from olden times up to the present day, and then he dwells on the benefits which seem to have been conferred by these various Aets.

To state it at once, his investigations do not eneourage by their results that sort of legislation. All restrictions and experiments made to enforce morality on the community have proved an utter failure in the eyes of all not superficially looking on. It is pretty clearly shown that all prohibitions are eluded by those they are directed against, and that the figures of official reports, and the statistics based upon such figures, are anything but trustworthy and to be relied upon.

Three kinds of disorderly houses are licensed by the worthy police at Rotterdam—1. Disorderly houses properly so called (*publik huizen*), with a certain limited number of women kept therein for the bodily enjoyment of the customers. The houses are constantly under the control of the police, and the unhappy female inhabitants are regularly examined by the medical officer attached to that body—frequently enough to insure to their visitors the utmost possible impunity in the exercise of their libidinous designs. Then there are (2) the *rendezvous*—meeting or assembly rooms—where young people are used to find each other, and may enjoy occasionally an impure cohabitation. The 3rd class consists of the *cafés chantants* and dancing halls for amusement's and company's sake alone.

Strange to say, according to the official reports, the number of prostitutes entered in the books of the police has been gradually decreasing, while, on the other hand, the population was eontinually augmenting, and the growing of eommerce and traffic was bringing a good many sailors and strangers to that town, the proportion between the number of the population and the prostitutes having fallen from 1 to 275 in 1856 to 1 to 408 in 1870; or from 1 to 20 for 1859 to 1 to 32 or 33 in 1870, counting only the young unmarried men between 18 and 40.

That this, however, was not the result of an amelioration of morality and more abstinent habits, is obvious not only by the increase of the *eafés* and pleasure halls, but much more by the shocking height of the death-rate amongst children, as may be seen from the table viii., p. 23, which, since forty years, is rising more and more, owing nearly alone to the increase of births amongst unmarried women and prostitutes. Moreover, we learn by tables vi. and vii., pp. 20 and 21, that the births of illegitimate and dead children are getting more; and in the subsequent explanations there are reasons making it but too probable why the returns upon these points should not reveal the full truth. From all this it is easy to presume that secret or *elandestine prostitution* is spreading as fast as the number

(a) "Vervolg der Verslagen van de Commissie voor Geneeskundige Politie en oppenbare Gezondheidsregeling over de Werking der Reglementen op der Prostitutie; overgedruckt uit het *Nederlandsch Tijdschrift voor Geneeskunde.*" Jaargang. 1872.

and the wealth of the inhabitants are augmenting, notwithstanding all the blows and contrivances the police are striking against all within their reach, the greatest part escaping it. It would be a miracle, indeed, if it were otherwise: human nature will always remain the same, and will never be mended by the interference of the police.

That regular medical attendance is mighty to diminish disease and to mitigate its character, one might see by tables ii. to v., pp. 14 and 15. Out of 100 females frequently visited by the police doctor an average of not quite two were found ill, against 24·3 and 30·7 per cent. from amongst the hidden prostitutes, their malady bearing at the same time a much more malignant form. But we must observe that secrecy itself must needs lead to a much worse appearance than the state of things really may be. It is indeed acknowledged amongst all experienced men that cleanliness is one of the most powerful agents and preventives against venereal diseases.

NEW BOOKS, WITH SHORT CRITIQUES.

Modern Hydropathy; with Remarks on Baths, including the Russian Vapour and Electrical Steam Baths, in Acute and Chronic Disease, etc. By John Williams, M.D., etc., Malvern Cross. London: Baillière. 1871.

*** This little book seems intended for the public rather than the Profession. Hydropathy and baths have been too much neglected as curative agents by medical men in England. They are undoubtedly amongst the most powerful therapeutic agents we possess, and we are glad to see that regularly trained physicians like Dr. Williams, of Malvern, are anxious to rescue these modes of treatment from the imputation of empiricism.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

Edinburgh, July 29.

The Lord Ordinary on the "Ladies'" Academical Rights.

In the action raised by Miss Jex Blake and others against the Senatus and the Chancellor of the University of Edinburgh, Lord Gifford has now issued an interlocutor. He holds the regulations for the medical education of women, which were approved of by the Chancellor in November, 1869, to be binding. He further thinks that, when the pursuers have completed the prescribed studies in compliance with all the existing regulations of the University preliminary to graduation, they are entitled to proceed to examination for degrees in the manner prescribed by the regulations of the University. He is also of opinion that the Senatus Academicus are bound, on their fulfilling these conditions, to examine them for degrees; and that, on their being found qualified, the Chancellor of the University is bound to confer on them the necessary medical degrees.

The Lord Ordinary refuses, however, "to ordain the defenders, the Senatus, to make regulations whereby the pursuers shall receive such instruction in the University as is required for graduation in Medicine, and, in particular, that they should direct and appoint the various professors, whose duty it is to give instruction in Medicine, to permit the attendance of the pursuers upon their classes along with the male students."

His ground for refusal is that it is beyond the power of the Senatus to compel the professors to teach the ladies, and, as the competent authorities—the University and University Court—are not parties in the present action, he cannot deal with them.

The University is now caught in its own self-made trap, for the whole question now appears to hinge upon the resolutions passed in 1869.

"At the debate," says the Lord Ordinary, "it was felt on both sides that these resolutions formed almost the turning-point in the case."

I can say little or nothing in extenuation of the extraordinary conduct of the University authorities, but I hope they will find some means of extricating themselves from their present undignified position, and of saving the University from suffering for all time to come the evil consequences of their hasty rashness.

In the meantime, the position of the female students, if not worse than before, is really not much better. The dead lock in their progress still continues, and is likely to continue. Before the professors can be compelled to undertake the distasteful task of lecturing to the ladies separately, a new action must be brought against the University and the University Court, who alone can exercise this power over the professors. It is to be hoped, however, that the decision of the Lord Ordinary will be reversed.

Regret must be felt that the Lord Ordinary, who in his explanatory note starts fair by saying that "he has endeavoured to approach the consideration of the questions dispassionately and free from all prejudices or prepossession," has thought it necessary, further on in his remarks, to animadvert on parties with whom he had nothing whatever to do as parties in the case. His remark, that "their [the ladies'] demand for degrees, and the announcement of their intention to practise as physicians, has aroused a *jealousy* which the Lord Ordinary is very unwillingly obliged to characterise as unworthy; and hence this strife," is as singularly out of place as it is unwarranted.

All will heartily concur with the Lord Ordinary when, in concluding his observations, he expresses his earnest desire to see the termination of "the unfortunate controversy which has raged so long."

GENERAL CORRESPONDENCE.

STATEMENT OF MILITIA SURGEONS: IRISH MILITIA SURGEONS.

Letter from Mr. H. Wilson.

[To the Editor of the Medical Times and Gazette.]

Sir,—The militia surgeons of Great Britain and Ireland must and do feel grateful and deeply indebted to you for your able advocacy of their cause in your impression of this date (July 27).

The document referred to in your highly valued article is entitled "Statement of Militia Surgeons." Your allusions to Irish militia surgeons might, if unexplained, lead our English brethren into a misapprehension which we in Ireland are most anxious to avoid. The Statement emanates no doubt from Ireland, but it is intended to apply equally to England and Scotland, and it was sought to omit everything of a local character.

Mr. William Stokes and I wrote to several of our English brethren, hoping to effect a united action, but as yet no decided steps have been taken towards such a desirable co-operation. I hope, however, that a meeting of militia surgeons may take place at Birmingham on the 7th prox., at which representatives from Great Britain and Ireland will unite and adopt measures for the benefit of the entire body. Our cause is a common one, and our action should be united. I am, &c.,

H. Wilson, Surgeon Dublin Artillery.

29, Baggot-street, Dublin, July 27.

REUNION OF DIVIDED PARTS.

Letter from Mr. John Smith.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your correspondent cannot have read Sir Astley Cooper's surgical lectures, or he would surely not have written the paragraph referred to in your last number. Pray call Mr. Belcher's attention to the above-named work, published in 1827, vol. iii., page 153 *et seq.* And if it be not impertinent in a humble country surgeon to add a word or two in corroboration of so high an authority, please publish the following facts which occurred in the ordinary practice of the writer:—

Nearly thirty years ago I was told (while dressing) that a woman required my attention, whom I found with her hand wrapped in a handkerchief, and who told me she had been chopping some wood, and had cut off a portion of her finger—about an inch of the last phalanx. I inquired for the removed portion, and sent her back for it. She shortly after returned, bringing the piece covered with sawdust, etc. Having well washed it I adjusted the parts and placed the whole on a splint, enjoining perfect rest. This it was difficult to obtain, as the patient was subjected to some amount of ridicule. However, on removing the dressings, I was delighted to find that union had taken place, and a useful limb was the result. Many years after the above, when resident in another part of the

country, I was called to attend the village organist, who in cutting some bread had removed a portion of skin and muscle from the little finger. The loss of this to most persons might have been of small consequence; but to a musician it would make all the difference. I therefore placed the parts in careful apposition, and had the satisfaction to find that adhesion took place perfectly, and my patient's playing was unaffected by the accident. I am, &c.,

Addlestone, July 25. JOHN SMITH.

LETTER FROM MR. H. W. HOLMAN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you kindly insert the following notice in the next edition of the *Medical Times and Gazette*. In a former number of the *Medical Times and Gazette* (August 22, 1868,) Mr. J. D. Hill published two cases of restoration of nerve-force after accidental and unavoidable division of large nerves. The following case may therefore be found worthy of note:—William S., aged 23 years, farm labourer, was admitted into the Royal Free Hospital on June 25, suffering from a lacerated wound of the forearm in the region of the ulnar nerve, close to the internal condyle, received from a mowing machine. The patient arrived at the Hospital twenty-four hours after the accident, the wound having been closed up by a surgeon in the country. He has had complete loss of sensation from the time of the accident in the little finger and half the ring-finger, and loss of motion of the muscles supplied by the ulnar nerve. A fortnight since he complained of numbness of these parts, and two days subsequently they became icy cold and of a tallowy-white appearance. During the next few days the temperature rose, and at the present time he has almost complete restoration of sensation, and motor power is returning.

I am, &c., H. W. HOLMAN (Dresser).

Royal Free Hospital, Gray's-inn-road, W.C.

METROPOLITAN ASYLUM DISTRICTS AND AUTHORITIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Next in order after the Metropolitan Asylum District, to which I referred last week, was formed the Poplar and Stepney Sick Asylum District, comprising the Poplar Union—population (1871) 116,277—and Stepney Union—population 57,578: total number of parishes, 7. Five managers are elected by the guardians of the Poplar Union, four by the Stepney Union, and three are nominated by the Local Government Board. The qualification required of the latter is that they shall be rated at not less than £40 to the poor-rate of some parish within the district. The whole of the managers hold office for three years.

The managers have under their care an asylum at Bromley, Middlesex, specially erected for such paupers chargeable to either of the above Unions as may be sick and require to be treated in a hospital or infirmary. The Asylum is capable of accommodating 586 patients, and was opened on August 7 last.

The Central London Sick Asylum District was formed in 1868, and comprises the Strand Union, population 41,244; Westminster Union, population 51,142; St. Pancras, population 221,596; St. Giles-in-the-Fields, and St. George, Bloomsbury, population 53,429: total number of parishes, 11. The Strand Union is represented by four managers, Westminster Union by five, St. Giles by three, St. Pancras by seven, and the Local Government Board are empowered to nominate six. The qualification and tenure of office are the same as in the case of the Poplar and Stepney District.

These managers were enabled to begin the real work of treating patients very much earlier than their colleagues at Bromley, as, instead of erecting an asylum for themselves, they took over a building at Highgate which was intended as an infirmary for the parish of St. Pancras—that parish being at the same time added to the district. The building is capable of accommodating 523 patients; but, owing to the unwillingness of the guardians of some of the places comprised in the district to make full use of it, it is not entirely occupied.

Turning to the next question of your correspondent—"Whether there has been any general distribution of different classes of paupers in different workhouses (under clause 50), and how such classification succeeds?"—I find that such an arrangement as is contemplated by the section has been carried out completely in the Poplar and Stepney Unions only; where the Poplar Workhouse is set apart entirely for the able-bodied, the Stepney Workhouse for the aged and infirm; but this step towards the fulfilment of the intention of the Legislature has attracted the favourable notice of the guardians of other unions, who are contracting with those of Poplar to receive able-bodied poor. As the cost of the maintenance of all the able-bodied in the workhouse is repaid from the Metropolitan Common Poor Fund this is a long stride towards the equalisation of metropolitan poor-rates. At the same time the tendency to grant outdoor relief is checked—no cost under that head being repaid.

It is impossible to give any reliable comparative financial results until the Act has been longer in force. It is quite certain that expenditure for each pauper relieved has much increased, but it is also certain that the sick, infirm, and imbeciles are incomparably better treated than in the days of the doings which called into being the Workhouse Infirmaries Association.

I think it will be useful to show the extent to which the poor-rates of the metropolis have been equalised since the passing of the Act, and I therefore append a statement of the amounts repaid to the guardians of the several unions and parishes from the Metropolitan Common Poor Fund to Michaelmas, 1870, the date of the last published return:—1868, £319,211; 1869, £379,461; 1870, £404,942.

I have still to deal with the dispensary portion of your correspondent's inquiries. I am, &c.,

July 30. MEDICO-LEGAL.

LETTER FROM DR. J. ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I entirely agree with a "Provincial Physician" as to the usefulness just now of an historical sketch of the administration of the Metropolitan Poor Act since its introduction in 1867, and, should I not be forestalled by any other gentleman—to whom, by-the-bye, I will readily give place—shall take steps during the ensuing autumn to collect such information as will enable me to lay before the Profession and the public a succinct account of all that has been done, and thereby strive to give an answer to certain of the points raised in your correspondent's letter. I am afraid that in many respects the information I shall be enabled to furnish will not prove very satisfactory to those who, like myself, believed a better era in Poor-law administration was dawning when the Act was passed; for very unfortunately some of the admirable provisions in the Act of 1867 were subsequently repealed, whilst some of the promises made by the central department when the Bill was in committee—notably as to the efficiency of the infirmaries, etc.—have been quietly ignored.

Upon one point there is satisfactory evidence of marked beneficial pecuniary results—viz., in those unions (alas! too few) where dispensaries were at once established, such as at Poplar. Thus it has been observed that there has been a marked diminution of in- and out-door paupers, and consequently of outlay on poor relief, whilst the contrast between these and other unions where the old vicious medical relief system has been persisted in, as to the relative proportion of sick to other inmates, has been most striking. This and other matters I will hereafter more clearly exhibit.

33, Dean-street, July 29. I am, &c., JOSEPH ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—The reply of "Medico-Legal" to my inquiry contains much valuable information, for which I and other of your readers are thankful. I hope that he will have the goodness to furnish further explanations on the following points:—

The Metropolitan Asylum District, he says, comprises thirty unions and parishes. Are the remaining unions and parishes in the metropolitan division formed into asylum districts?

In 1868 the following "sick asylum districts" were announced:—

1. Newington, with St. Saviour's, etc. 2. Rotherhithe, with Bermondsey. 3. Kensington, with Westminster, etc. 4. Stepney, with Poplar, etc. 5. Central London, with New Strand, New Westminster, and the Bloomsbury parishes.

In 1869 a return to the House of Commons mentioned six districts for sick asylums. Now, are these districts still in existence? If so, are they independent of the Metropolitan Asylum District? If not, what has become of them?

I regret that "Medico-Legal" does not think it expedient "to publish figures." In a measure of such great public importance, affording so much by way of example or caution to the provincial districts, there ought to be the fullest publication of results, statistical and financial.

I hope that the Local Government Board is not about to

follow the precedent of the late Poor-law Board, which mystified facts by including a number of essentially different particulars under single heads; so that, for instance, it is quite impossible from the Blue-books to get at the actual number of each description of medical officers employed, or their cost to the public. The Reports of the Irish Medical Charities are, in this respect, a pattern worthy of English imitation.

July 29, 1872. I am, &c., A Provincial Physician.

TREATMENT OF IMPENDING SUFFOCATION FROM BRONCHOCELE.

Letter from Dr. F. J. Brown.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Bristowe's remarks on the treatment of bronchocele by puncture under certain circumstances, recalls to my mind the relief afforded by incision in a case of impending suffocation that occurred in my practice several years since.

A middle-aged woman, during convalescence from a febrile seizure, was taken with suffocative paroxysms attended by hardness and swelling of a small-sized bronchocele. After a few days the symptoms of suffocation became urgent, and I resolved to relieve the tension by dividing the fascia binding down the thyroid gland, which I did to the extent of about one and a half or two inches. The woman was greatly relieved, and no ill-consequences ensued. There was scarcely any bleeding.

I am, &c.,

Rochester, July 30. Frederick J. Brown, M.D.

RATING OF HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

Sir,—A few days ago Sir F. Hicks, Kt., Treasurer of St. Thomas's Hospital, wrote to the *Times* complaining that the funds of that institution do not pass through his hands rate-free. I remember a similar outcry in another case of the kind. It may be a consolation to such complainants to quote Horace's view of the advantages of stewardship. (Ep. I., xii. 1.)

"Ad Iccium.

"Fructibus Agrippæ Siculis quos colligis, Icci,
Si recte frueris, non est ut copia major
Ab Jove donari possit tibi; tolle querelas;
Pauper enim non est cui rerum suppetit usus."

July 27. I am, &c., Nemo.

OBITUARY.

CHARLES JAMES BERRIDGE ALDIS, M.D. Cantab., F.R.C.P.

"Nihil plerisque post labores assiduos, post vires fractas, et post consilia sine mercede sæpissime data, restat, nisi bene actæ vitæ memoria. *Veruntamen, pertranseunt benefaciendo.*"—*Oratio ex Harveii Instituto, etc.*, 1859. *Auct. C. J. B. Aldis.*

This well-known physician and sanitarian is at last at rest from unceasing toil. Poor fellow! it is not too much to say that nothing in his life was so easy as his death. He came home about three o'clock on Friday, July 26, after having fagged all the morning in seeing dispensary patients, and seemed "not more exhausted than usual." He dined early in the afternoon, as was his custom, and was sitting in his easy chair for a few minutes of repose. Then the great change came upon him tranquilly and without a pang. He was found sitting in an easy attitude, with his spectacles on his forehead and a book in his lap. His servant thought he was enjoying a good rest, and so he was—but it was the sleep of death.

Dr. Aldis was born on January 16, 1808. He was the son of a medical practitioner in Nelson-square, Blackfriars-road, who was afterwards well known as Sir Charles Aldis of Old Burlington-street. Sir Charles was a remarkable man, a great antiquarian, who kept his health and activity up to nearly the age of 90; but he did not bequeath his vigour to his children, for the subject of our memoir was the only survivor of fourteen infants, and his mother died early. He always seemed delicate, *chétif*, and not of robust configuration. Nevertheless, at the early age of 7 he became a scholar of St. Paul's School, the early hours and rigid discipline of which at that time would seem not very propitious to a delicate child. He passed through the various classes with credit, and was sent to Trinity College, Cambridge, in 1829. Here he obtained the degree o B.A. in 1831, M.B. in 1832, and, having attended the medica practice at St. George's Hospital, he was admitted Fellow of the Royal College of Physicians in 1838. We soon find him lecturing on the Principles and Practice of Medicine at the Charlotte-street or Hunterian School of Medicine, in conjunction with Dermott, Ryan, and the other functionaries of that private school. He afterwards lectured at the Aldersgate-street School, and at his own house. He also published an "Introduction to Hospital Practice;" and then he very soon fell into the grooves in which he worked unceasingly until within an hour of his death.

One of these grooves was the dispensary system. In 1838 Dr. Aldis was elected Physician to the London Dispensary, in Church-street, Spitalfields; in 1841 he was elected Physician to the Surrey Dispensary, in Great Dover-street, Borough; soon afterwards to the Western Dispensary, in the Broadway, Westminster; and lastly, to the St. Paul and St. Barnabas Dispensary, which was established by the Rev. J. W. E. Bennett, perpetual curate of those churches, after the cholera of 1848. This is not the place to indulge in the indignation which everyone who can look behind the scenes must feel at the hollow delusion and mockery of charity exhibited in the establishment and conduct of the dispensaries "supported by voluntary contributions"; but who can look back without a groan at the spectacle of a highly educated physician spending the flower of each and every day during the thirty or forty years of the flower of his life in an occupation so noisome, monotonous, thankless, useless, and hopeless as that of attending the dregs of the pauperised classes in Spitalfields, in the Borough, and in the Westminster Broadway—to inhale the odour of the unwashed and of their garments; to prescribe for monotonous cases all bearing the same stamp—45 per cent. dyspepsia, and 50 per cent. bronchitis in winter; 45 per cent. dyspepsia and 50 per cent. diarrhœa in summer—all the fruit of dirt, impure air, cribbed and cabined habitations, gin, and all that the French idealise under the term *la misère?* And yet to know that all this work is hopeless—hopeless to the poor patients, and hopeless for the physician! The patient, we will say, goes away soothed by the kind words of the physician, and by her faith in some liquid which she carries away in a bottle; but the causes of her misery are untouched, neither is she encouraged to help herself; whilst, as for the physician, he gets nothing. Dispensary practice does not lead to professional advancement, for the physician cannot follow out and explore his cases, or add to scientific knowledge, as if they were in hospital beds. The idea that it will lead to reputation and practice is a delusion, for, instead of a gift, medical advice is looked upon as a right by the poor. The "patrons" and "benefactors" of the "charity" hug themselves in the notion that they sacrifice a guinea a year, for which they exact their full tale of "benefits" to their workmen and servants, and they imagine that the physician finds it "answer his purpose," and that his work somehow brings its own reward. The Rev. Mr. Bennett said that the St. Barnabas Dispensary was established as a thank-offering for the cessation of the cholera in 1848. How the people of Pimlico were to express their thanks for preservation by setting up an institution in which Dr. Aldis was to labour unpaid so many hours a week is a thing which seems hardly comprehensible. It puts one in mind of one of the stories in that treasury of wit and wisdom, the "Colloquia" of Erasmus:—A certain man's mother-in-law was sick, and prayed to the saints, vowing that if she got better her son-in-law should go on a pilgrimage to St. James of Compostella. The poor man hardly saw the reason of this, no more than we see how the gratitude of Pimlico should be evidenced by the vicarious toil of Dr. Aldis. In miserable truth, whatever good the dispensaries do is done solely by the kindness and

sympathy of the physician, and with the satisfaction that he does his duty the physician must be content. If we want an example, let us picture to ourselves Dr. Aldis setting out from his house in Chester-terrace after an early breakfast, and finding his way to Spitalfields, or Dover-road, or the Broadway, and not able to get back till from one to three o'clock, complaining that both breath and stomach were poisoned by the bad air. It is true that part of the labour, time, and expense of his appointments was diminished of late years by the facilities of locomotion given by the Metropolitan Railway and the improved system of omnibuses. We must also say that the dispensaries contributed from £20 to £40 each for payment of cab-hire, although they left the professional work quite unpaid for. But it is no secret that his dispensary appointments brought Dr. Aldis no practice, and that he can hardly be said to have had a regular professional income.

The other groove in which Dr. Aldis worked led to a more fortunate issue, and was a source of comparative prosperity and comfort during the last few years of his life. It was impossible that even the blindest dispensary physician could be ignorant of the fact that to give medicine to the sick poor and to leave them in the enjoyment of the filth and nuisances which invited sickness, was an act of miserable hypocrisy and folly. Dr. Aldis had the good sense to act upon this, and allied himself with the various associations promoted by Lord Shaftesbury, Mr. Chadwick, Dr. Southwood Smith, Dr. Guy, Dr. Farr, the late C. R. Walsh, W. H. Rumsey, and the earlier sanitarians, for the purpose of getting sanitary laws passed, and putting them into execution. Hence he gave evidence before the "Health of Towns Commission" in 1844, and by various lectures and essays became known as a sanitary authority, till, when the Metropolis Local Management Act passed in 1855, which rendered the appointment of Medical Officers of Health obligatory on the vestries and district boards, he was almost by general consent elected to that office in the parish of St. George, Hanover-square. Soon afterwards the duties of Examiner of Gas (without salary) were added to his sanitary duties, which he performed punctually, unobtrusively, and thoroughly up to the day of his death. Of sanitary work there are two branches—one in which the earlier Officers of Health underwent a good deal of drudgery, which might as well be done by Inspectors of Nuisances and partly by the Poor-law Medical Officers in the regular course of their work; the other, the higher, finer, statistical, or consultative work. We believe Dr. Aldis did his full share of the former, whilst as to the latter his exertions in carrying out the Workshops Regulation Act, especially as regards the limitation of hours of labour of milliners, the success with which he invoked the law for the suppression of nuisances when he had occasion to appear before a magistrate, and his great knowledge of sanitary law, showed his industry and his conscientiousness, and clearness of head. His opinion was often sought as an *expert* in disputed cases of nuisance, and he was highly respected by the magistrates.

Dr. Aldis, in his turn, enjoyed the dignity of Harveian Orator to the Royal College of Physicians, and was one of the latest orators who addressed that learned body in Latin. It may be no disrespect to say that the oration is deficient in unity of subject and breadth of grasp, and that the Latin bears the mark of haste, and is somewhat Anglicised; yet there are bits that sparkle with true scholarship, and others which speak from the heart to the heart with the truest pathos, as they point to the toils and rewards of a dispensary physician. The orator describes the beneficence of Medicine, exercised not only in the homes of the rich, or even in hospitals,—"precipua hujus gentis decora et ornamenta,"—but in the close and squalid court, full of disease and misery,—"in angiporta obscura, morbis et miseriis plena, qua sol vix unquam cubicula penetrat." Then he goes on to say that in return for these benefits, no doubt large gifts, many favours, and many honours are given; but that these fall to the lot of few, "whilst for very many, after incessant toil and shattered strength, and counsel given without fee, there remains nothing but the memory of a well-spent life. Nevertheless, they still go about doing good." These lines (which we have prefixed as a motto to this article) contain the secret of poor Aldis's life. He knew the hopelessness of his career, yet worked on as if the highest honours and profits were within his grasp. His pen was not idle; he published some interesting observations "On the Poisonous Effects of Coal-gas" (Med.-Chir. *Trans.*, vol. xlv.), "On various Epidemics of Small-pox and Scarlet Fever in Belgravia," and other papers in our own and other medical journals. He was a frequent attendant at the Epidemiological, the Social Science, the Association of Officers of Health, and other meetings for the discussion of sanitary and hygienic affairs, where he always supported the "orthodox" kind of sanitary view, and was always to be seen in deputations to the Home Secretary or other Government functionaries. He held the post of Honorary Physician to a dozen of obscure institutions—many of them, it must be confessed, remarkable for nothing but impecuniosity. The promoters of "benevolent" institutions were but too glad to add the name of a Cambridge M.D. and Fellow and Counsellor of the Royal College of Physicians to the list of their officers, whilst he seemed as eager as the youngest beginner to get "his name before the public," and consented to squander his scanty leisure and strength in the interests of any institution which tended to give him a superfluous popularity. In fact, he was a man whom early struggles and enforced frugality and asceticism had marked with an indelible stamp, but yet had not, so to say, dried up the springs of a naturally genial disposition. Those who knew Dr. Aldis intimately could testify to his quiet reserved fun, a love of gentle (never ill-natured) sarcasm, and a conversation relieved by reminiscences of Horace that survived from old Pauline days, and indications of artistic taste that might have flourished under more prosperous surroundings; whilst his probity and sense of honour were unimpeachable. His patience and kindness to the poor were indomitable, and he had skill as a practitioner which unfortunately never found a remunerative field of employment.

One thing not to be omitted, which gilded his latter years, was the presentation, in 1867, of a silver cup filled with sovereigns by a few friends, amongst whom Dr. Synnot and Dr. Frederick Farre deserve mention, and who were honoured by the concurrence of Lord Shaftesbury, the Right Hon. W. Cowper Temple, and other philanthropists. This gave him immense pleasure. But evil days were at hand. No one could look at that prematurely old, bowed, and stooping form without seeing the effects of almost lifelong anxiety and hope deferred. At last he began to die, not of disease, but of the wear and tear of tissues never indulged, ill-nourished, overworked, and never sufficiently rested; for an autumn holiday was a rare thing for Dr. Aldis. One day in January, 1861, whilst at dinner, he had a slight attack of aphasia, with defective power of articulation; this soon passed off, but other signs of decay of the nervous system soon showed themselves. He began to suffer from bronchitis and asthma—under which names are really meant angina pectoris and heart failure. He was liable, too, to attacks of faintness, which caught him sometimes in the street, sometimes when attending a committee. All these signs, combined with his shrunken and pallid appearance, told an unmistakable tale. He attended the meeting of Officers of Health on July 15, looking very ill and exhausted, but for the last few days of his life seemed unusually cheery and in good spirits; yet, when the final event came, it evidently was not without warning.

Early in life Dr. Aldis married Miss Brome, by whom he leaves a son and two daughters. Of the latter, the elder is married to a beneficed clergyman in Norfolk; the younger, who had been for years her father's secretary and amanuensis, relieving him of the drudgery of writing reports and statistical tables, is, we fear, slenderly provided for, and it would be but an act of justice if some small pension could be given her out of the Civil List, or otherwise, in consideration of the long and ill-requited labours of her father.

WILLIAM CHARLES CALTHROP, M.R.C.S.

Mr. Calthrop, who died at his residence, at Withern, near Alford, Lincolnshire, on July 14, of angina pectoris, was born at Gosberton, in Lincolnshire, on November 3, 1819. His family has long been known in Lincolnshire, and an excellent representative he was of an old county family.

Mr. Calthrop studied his Profession at King's College and Charing-cross Hospital, and was for a time House-Surgeon to the last-named Hospital. He took his M.R.C.S. in 1840, and L.S.A. in 1841, and became Surgeon to the Royal West London Lying-in Institution. He finally settled at Withern, where he carried on a first-class general practice, was Admiralty Surgeon and Agent, and Surgeon to the Lincolnshire Seaside Convalescent Home. In 1863 Mr. Calthrop was elected a corresponding member of the Medical Society of London, and was awarded the silver medal of the Society for a most able paper on division of the axillary artery. A paper on the treatment of cholera also came from his hand. Living the life of a country gentleman, while pursuing assiduously the duties of the Profession, Mr. Calthrop cultivated that pleasure of country

existence so markedly belonging to the English—the improvement of the breed of horses; and at the last great horse-show in London he won several prizes. "I love the beautiful animals" was the almost last remark he made to the writer of this short notice; and indeed he toiled for them—for improving their physical development up to the highest standard—with an enthusiasm rarely met with. This was his hobby, but he did not ride it to death; he worked hard at physic, read up medical papers carefully, and in every relation in life filled up the character of a thorough English gentleman.

For many years Mr. Calthrop suffered from symptoms of cardiac apnœa, and the presence of aortic disease was known to his intimate professional friends. His attacks of difficult breathing were frequent and most severe—sometimes nearly fatal. In one of these attacks he ceased altogether to breathe, on the 14th of last month, some increased professional exertion having intensified the seizure. Drs. Sharpley and Best, of Louth, were summoned, but arrived too late to find their friend alive. Within twelve hours of his death he attended, seven miles from his residence, a lady in her confinement, and on his return home at midnight visited an old patient three miles away. Truly it may be said he died in harness. His funeral was attended by a large concourse of neighbours and patients, who thus paid their last tribute of respect to one whom they will ever remember as a fine representative of a profession in which the goodness of the man is esteemed hardly less worthily than the skill of the healer. The deceased had for some time been aware of his critical state, and had sought the advice of local and London physicians, many of whom he could reckon as old and attached friends.

HENRY CURRAN, L.K.Q.C.P.I., L.R.C.S.I.

Some ten months ago Mr. Curran suffered from an extremely severe attack of fever—so severe, indeed, that a report of his death appeared in the daily and medical papers. From this illness he never completely rallied, and the additional labour imposed upon him in consequence of the prevailing epidemic of small-pox determined an affection of the kidneys, which proved fatal to him on the morning of July 25. Mr. Curran was one of the Physicians to the Mater Misericordiæ Hospital and to the North City Dispensary (District No. 3), and was a Lecturer on Anatomy and Physiology in the Carmichael School of Medicine. As a practitioner, among the poor he was universally respected and esteemed, and his having died while actually in harness has tended to increase the general feeling of regret at his untimely end. Dr. Curran was buried in Downpatrick Cathedral.

LEGAL INTELLIGENCE.

MAUNDER *v.* WAKLEY.

Guildford Summer Assizes, July 31.

(*Before* Mr. Baron Martin *and a Special Jury.*)

Counsel for the Plaintiff: Mr. Hawkins, Q.C., Mr. Day, Q.C., Mr. Talfourd Salter.

Counsel for the Defendants: Mr. Serjeant Parry, Sir George Honyman, Mr. A. L. Smith.

Mr. Hawkins: May it please your Lordship—Gentlemen of the Jury,—I am very happy to say that the forty minutes in which we have been engaged since we first of all entered the Court has not been thrown away. I am very happy to tell you that the result of this discussion has been that you will be saved a very long inquiry. The action, which is now, I am happy to say, arranged on the terms which I will mention in a minute or two, is an action brought by Mr. Maunder, a surgeon of very considerable eminence—one of the surgeons of the London Hospital—for the purpose of vindicating his character against what he believed to be a most unwarrantable attack made upon him in the columns of the *Lancet*. They had charged him with gross professional misconduct, and they had charged him with being a spy and informer against his colleagues; and, of course, imputations of this sort were imputations which no gentleman occupying any position in his profession could by any possibility pass over in silence. They charged him, too, with acting, as Mr. Maunder thought, with improper motives in a certain investigation which he had caused to be made. I need not tell you the subject-matter of that investigation here, because I think it might give pain to others, and I am quite sure there is nothing further from Mr. Maunder's wish than that I should refer to anything which might give pain to others. Mr. Maunder's object in bringing this action was to vindicate his own character. His object in bringing this action was to show by a public investigation, if that were needed, that in all that he did and all that he said upon the occasion to which I have referred, and indeed upon every other occasion which would be inquired into, he was actuated by the purest and best motives, and actuated by feelings of the deepest interest for what he considered to be the welfare of the hospital of which he has the honour to be one of the surgeons. That is the object of this action, and I am quite certain no gentleman who brings an action of this sort, which only ought to be brought for the vindication of character, will refuse to receive a retractation of every single imputation which has been made upon him, and everything that reflects upon his private or professional character. The object of the action is attained; and although my client thought that a public investigation before you might be more satisfactory to him, I have myself told him, and I hope I have at last satisfied him, that the whole object of this action is attained by the withdrawal of every imputation, and by the disclaimer of every imputation, and by letting it go forth to the world that the character, both professional and otherwise, of Mr. Maunder stands above reproach. Of course people have a right to discuss matters amongst themselves—that is a mere matter of opinion; but I believe my Lord would have told you, in the result, that anything like an attack upon character is that which could not be justified. I understand that my learned friend, Mr. Serjeant Parry (who appears on the part of the defendants in this action, who are the proprietors of the *Lancet*, in which the objectionable libels appeared), is willing to admit that Mr. Maunder, in accepting the compromise—compromise I can hardly call it, but in accepting the verdict which he is willing to accept, of 40s., with the certificates which are usual, to indemnify Mr. Maunder against the expenses of this action—will leave this Court, having attained the whole object for which this action s brought, namely, the vindication of his character as a gentleman and a professional man.

Mr. Serjeant Parry: May it please your Lordship—Gentlemen of the Jury,—Mr. Hawkins has stated, on the part of the plaintiff, the object with which this action was brought. The defendants—the Messrs. Wakley—are the sons of the late Mr. Thomas Wakley, whom many of us knew, and who was Coroner for Middlesex. They are the proprietors of the *Lancet*—a publicasion which, I believe, has existed for above fifty years, and a publication which has done great good in the medical profession, according to universal testimony. I may be permitted to say, on their behalf, that Dr. James Wakley, who is sitting behind me at this moment, and who is the responsible editor of this paper, is utterly unacquainted with Mr. Maunder. The articles that have been written were written in respect of a controversy that was going on at the London Hospital between Mr. Maunder and another gentleman. It was absolutely impossible that a journal like the *Lancet* could pass over such a controversy in silence. It was desired, and has always been desired, by the editors and proprietors of the *Lancet* in every article they write commenting upon the history and the affairs of the medical profession, to steer clear of any approach to an imputation of motives against individuals. I can say on their behalf that they entirely acquit Mr. Maunder of any motive otherwise than should actuate a gentleman in the conduct which he pursued. If there are expressions which may be construed against him in these articles, and especially the expression of "spy and informer" which my learned friend Mr. Hawkins has used, on behalf of Dr. Wakley and his brother I assure Mr. Maunder, in this public court, and in the presence of a large body of the medical profession, that there never was the remotest intention to apply such words to him. If the language of the article might have been construed into such an application, I am sure no one would more deeply regret it than the defendants, because they were commenting simply upon what was a public matter of scandal in the Profession. It was the talk of the whole Profession; and, in making these comments, all they sought was to state fully and fairly their views of Mr. Maunder's conduct, and they never desired in any way to impute motives to him; and except, as I say, for one or two unfortunate words in this article, which very properly Mr. Maunder might have taken offence at, I can assure him that, as regards any personal imputation of any sort or

kind against him, or any imputation that would offend him, I entirely, on behalf of Messrs. Wakley, withdraw any such imputation, if imputation is conveyed in the articles which are complained of. I hope, gentlemen, this will be a satisfactory termination of this matter. I may add a final word that Mr. Maunder has for many years himself been a contributor to the *Lancet;* and although I am perfectly certain that Mr. Maunder's motives are pure, I am equally certain that if this matter had been inquired into, probably Mr. Maunder himself would have admitted that the subject in controversy was a fair subject for public comment and criticism.

Mr. Baron Martin: This is a verdict for the plaintiff for 40s. ?

Mr. Hawkins: Yes, with all certificates.

Mr. Baron Martin: Yes, I would wish to say with respect to this case that, judging from what Mr. Hawkins and Mr. Serjeant Parry have both said, I believe that the object that was desired to be attained could not be attained in this action; for in an action for libel I would not have allowed the matter to have been gone into which both of them suggest. I would have tried the action for libel, and I would have tried nothing else.

Mr. Hawkins: I am obliged to your lordship for expressing your opinion, because my client desired it.

Mr. Baron Martin: I could not allow the real matter in dispute to be entered into. An action for a libel is an utterly different thing.

Mr. Serjeant Parry: On my own behalf I should not have sought to go into any irrelevant matter; nor do I believe my learned friend Mr. Hawkins would. I believe we were both at one as to what was the real issue before the Court.

Mr. Baron Martin: I have not the slightest doubt you were both of that opinion. I concluded that from what was going on. What the parties thought was a matter of discussion neither of you thought to be so, in which I entirely agree.

The Deputy-Chairman of the London Hospital, Dr. Risdon Bennett, Dr. Robert Barnes, Dr. Samuel Wilks, Mr. Campbell de Morgan, Mr. Alfred Poland, and others, were in Court, prepared to state that in their opinion the cause of humanity and the interests of a hospital and school must be paramount to all personal considerations; and that Mr. Maunder was fully justified in calling upon the lay authorities to investigate the conduct of a colleague.

JEX BLAKE AND OTHERS *v.* THE SENATUS ACADEMICUS OF THE UNIVERSITY OF EDINBURGH.

The Lord Ordinary's Judgment.

The following interlocutor has been issued by Lord Gifford:—

"Edinburgh, July 27, 1872.—The Lord Ordinary having heard parties' procurators, and having considered the closed record, statutes, charters, and writs founded on and whole process, repels the first plea in law stated for the defenders, the Senatus Academicus of the University of Edinburgh, that all parties are not called: Finds that the resolutions or regulations passed and enacted by the University Court of the University of Edinburgh, dated November 10, 1869, and approved of by the Chancellor of the said University, of date November 12, 1869, form part of the regulations now in force in the University of Edinburgh, and must receive effect as such: Finds that, according to the existing constitution and regulations of the said University of Edinburgh, the pursuers are entitled to be admitted to the study of Medicine in the said University, and that they are entitled to all the rights and privileges of lawful students in the said University, subject only to the conditions specified and contained in the said regulations of November 12, 1869: Finds that the pursuers, on completing the prescribed studies, and on compliance with all the existing regulations of the University preliminary to degrees, are entitled to proceed to examination for degrees in manner prescribed by the regulations of the University: Finds that the defenders, the Senatus Academicus of the said University, are bound, on the pursuers completing the prescribed studies, and complying with said regulations, to admit the pursuers to examination as candidates for medical degrees, and on the pursuers being found qualified, to recommend them to the Chancellor of the University for having such degrees conferred upon them; and finds that the defender, the Right Honourable John Inglis, as Chancellor of the said University, is bound, upon such recommendation being made by the Senatus Academicus, to confer medical degrees upon any or upon all of the pursuers who are found qualified therefor, and recommended as aforesaid, and in terms of the above findings, and to the effect thereof, finds, decerns, and declares, under the declaratory conclusions of the summons: Further decerns and ordains the defenders, the Senatus Academicus, on the pursuers respectively completing the prescribed studies, and complying with the existing regulations of the University preliminary to degrees, to admit the pursuers to examination as candidates for medical degrees; and on the pursuers being found qualified, decerns and ordains the said Senatus Academicus to recommend the pursuers to the Chancellor of the said University for having such degrees conferred upon them; and decerns and ordains the defender, the said Right Honourable John Inglis, as Chancellor of the said University, on receiving the requisite recommendation from the Senatus Academicus, to confer upon the pursuers respectively the medical degrees for which they are recommended: *Quoad ultra*, dismisses the remaining conclusions of the action, excepting the conclusion for expenses, and decerns: Finds the defenders, the said Senatus Academicus, liable to the pursuers in expenses, subject to modification; and in the circumstances, modifies the same by deducting one-fourth from the taxed amount: Remits the account of said expenses, when lodged, to the auditor of Court to tax the same, and to report; and reserves all questions of relief as between the minority and majority of the Senatus Academicus: Finds no other expenses due in the cause, and decerns. Ad. Gifford."

"*Note.*—It is not easy to over-estimate the importance of the questions involved in the present action. The decision may affect in various ways not only the interests of the pursuers, and of all who are similarly situated, but also the future welfare of the University, and indirectly the well-being of the community at large, who are interested in securing the services of thoroughly educated and accomplished medical practitioners.

"The Lord Ordinary has endeavoured to approach the consideration of the questions dispassionately and free from all prejudices or prepossessions. He has also endeavoured to keep in view that his functions are merely judicial and not legislative, and that his duty is simply to declare and apply the law as it at present stands, and in no way to endeavour to amend it, however strong his convictions of what the law ought to be.

"The object of the present action may be shortly stated to be—1st. To declare the right of the ten ladies who are the pursuers of the action to prosecute their studies as students at the University of Edinburgh *with a view to the profession of Medicine;* 2nd. To declare their right on finishing their studies and being found duly qualified to obtain from the University, through its students and Chancellor, the usual and customary medical degrees; and 3rd. And with a view to enforce these rights, to compel the Senatus to make arrangements for the complete instruction of the pursuers, and to do what is necessary for the examination of the pursuers, and for their reception as medical graduates of the University.

"The importance of the question to the present pursuers, and to all ladies who, like them, may contemplate the practice of Medicine as a profession, lies in this, that by the provision of the 'Medical Act' of 1858 no one is entitled to be registered as a medical practitioner without possessing a medical degree from one or other of the universities of the United Kingdom, or a licence equivalent thereto from certain established medical bodies mentioned in the Act. A foreign or colonial degree is not available, and does not entitle to registration unless the holder thereof has been in practice in Great Britain previous to October, 1858. Unless the pursuers thereof succeed in obtaining degrees, they will be practically excluded from the profession of Medicine, for they are not in a position to demand licences from any of the authorised medical bodies; and it can scarcely be expected that they will prosecute their medical studies merely in order to be hereafter classed along with empirics, herbalists, or medical botanists, or with those who, in common language, are denominated quacks. Without legal registration under the Medical Act of 1858, the pursuers would be denied all right to recover fees, they would be incapable of holding any medical appointment, and they would be subject to very serious penalties if they so much as assumed the name or title of medical practitioners.

"It is a fact, whatever may be its effect in law, that no University in Great Britain has ever granted a medical degree to a lady. The Medical Register of Great Britain only contains the names of two female practitioners—Dr. Elizabeth Blackwell and Dr. Garrett Anderson. Dr. Blackwell obtained her degree in America, and, being in practice in Great Britain before 1858, she obtained registration in virtue of the exception in the Act. Dr. Garrett Anderson obtained a licence from the Apothecaries' Hall, London, and is registered as such; but since her admission regulations have been made which prevent any other lady from hereafter obtaining a licence from

the Apothecaries' Hall. Accordingly, the course pursued by Dr. Blackwell and Dr. Anderson is not open to any of the pursuers, and their only hope of being allowed to practise Medicine in Great Britain rests upon their being able to obtain a degree from one or other of the Universities.

"Practically, therefore, the questions are now raised for the first time, Can a lady obtain a medical degree, and is any lady to be allowed to practise Medicine in Great Britain?

"The Lord Ordinary is clearly of opinion that by the law of Scotland—indeed, he may say that by the law of every civilised country—there is no inherent illegality in women prosecuting the study of the science of Medicine, using the word in its largest sense, or in their engaging in the practice of Medicine as a profession.

"It would really be a waste of time to argue in support of this proposition, and it was not impugned by the counsel for the defenders.

"There is no natural impropriety in a woman becoming an educated and accomplished physician or surgeon, and no unsuitableness or impropriety in her practising the profession. Indeed, some branches of the profession are peculiarly appropriate to women, and peculiarly inappropriate and unsuitable to men. For example, in obstetric practice and in numerous diseases of women a male practitioner is singularly out of place, and nothing but the deadening effect of habit would ever reconcile the community to the anomaly both in name and in reality, 'a man midwife.'

"The practice of all civilised nations—indeed, of uncivilised nations also—testifies most loudly at once to the fitness and to the suitablencss of many, if not most, of the branches of the medical profession being undertaken by women. . . . . Indeed, Britain is almost the only country in which the right of women to graduate in and practise Medicine has not been fully recognised. One object of the present action is to try whether the right accorded in other countries does not exist also in Scotland. . . . . The law of Scotland, like that of many other countries, has in many instances been unjust to women, but it has never gone so far as to exclude them from the legal practice of Medicine as a profession."

These extracts from Lord Gifford's *Note* will give a good idea of its general scope, but it is too long to be transferred *in toto* to our columns.

MEDICAL NEWS.

University of London.—The following are lists of candidates who have passed the recent examinations:—

Preliminary Scientific (M.B.) Examination.

First Division.

Barnard, John H., private study.
Blake, Wm. H., University College.
Blamey, James, University College.
Briggs, Harry B., King's College.
Carrington, R. E., Guy's Hospital.
Claremont, C. C., University College.
Evans, C. W., University College.
Fox, Richard H., London Hospital.
George, G. A., University College.
Goodchild, Francis, Epsom and University Colleges.
Hillier, John B., Leeds School of Medicine.
Henderson, George C., University College.
Hopwood, Wilfred F., Manchester Grammar School.
Le Quesne, Edwin J., St. Bartholomew's Hospital.
Lowe, Howard G., Queen's College, Birmingham.
Marshall, Arthur M., B.A., St. John's College, Cambridge.
Mercier, Charles Arthur, London Hospital.
Neale, John E., University College.
Stewart, H. D., King's College.
Tirard, Nestor Isidore C., King's College.
Whitelegge, Benj. A., University College.
Witton, James Cecil, private study.
Worthington, William B., Owen's College.

Second Division.

Anderson, R. J., Belfast College.
Baker, Albert de Winter, Guy's Hospital.
Batterbury, R. L., King's College.
Blake H., St. George's Hospital.
Bury, Judson S., Owen's College.
Duke, Herbert, Guy's Hospital.
Ferrier, John C., Guy's Hospital.
Finch, Alfred, Guy's Hospital.
Giles, G. M. J., St. Mary's Hospital.
Gray, Alexander, Guy's Hospital.
Hancock, John G., King's College.
Hunt, J. W., University College.
James, Alfred, University College.
Jude, Richard H., Christ's College, Cambridge.
Kidd, Walter A., Guy's Hospital.
Maberley, William H., Edin. Univ.
Miller, Frederic D., King's College.
Pinnell, T. M., University College.
Powell, Joshua, University College.
Roughton, Jas. W., King's College.
Seward, W. J., University College.
Simmonds, W. A., Guy's Hospital.
Snell, Edward A., King's College.
Vanes, Arthur B., Queen's College, Birmingham.
Wilding, S. P., University College.

Royal College of Physicians and Surgeons, Edinburgh.—Double Qualification.—The following gentlemen passed their first professional examination during the recent sittings of the examiners:—

Allen, William Henry, Cork.
Coates, Samuel, Cork.
Gregg, Thomas Huband, Ballymahon.
Henry, George, Newry.
Hughes, R. J., Birkenhead.
Hunt, Robert Edmund, Gort, Ireland.
Leslie, Louis Gordon, Hants.
Matthews, James Snodgrass, Londonderry.
Rhodes, John Wilson, Manchester.
Russen, Henry Kirke White, Manchester.
Smith, William Beattie, Walker-on-Tyne.

And the following gentlemen passed their final examinations, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Barry, Francis, co. Wexford.
Brodie, Terence Benjamin, Limerick.
Brooke, William, Castlerea.
Campbell, Alexander Bowerbank, Kingston, Jamaica.
Fitzgerald, Francis John, county Kerry.
Findlater, James, Ayrshire.
Fox, Edward Charlton, Derbyshire.
Godfray, Alfred Charles, Jersey.
Hartford, Richard Alexander Henry, Templemore.
Hill, John, Clare.
Huggins, Horatio Nelson Fairbairn, St. Vincent, West Indies.
Hussey, Edward, Somersetshire.
Leslie, Edward James Louis, Hants.
Lucas, Thomas D'Arcy, Nupanee, Canada.
Mackay, George, Kinross-shire.
McGill, George, Wigtownshire.
Milne, Alexander Watson, Canonbie.
Parry, David Lewis, Liverpool.
Philpots, John Richard, Banbury.
Playfair, John, Perthshire.
Renton, James Crawford, Auchtermuchty.
Roe, Robert George, Dublin.
Simpson, James, Glasgow.
Stanistreet, Thos. Dawson, Clonmel.
Wilde, Frederick George Stanley, London.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 25th and 26th inst., viz.:—

Adams, John, Kingsbridge, Devon, student of St. Bartholomew's Hospital.
Armstrong, Thomas B., Leeds, of the Leeds School.
Armstrong, Robert S., Bedford, of Guy's Hospital.
Atkinson, Walter M., L.S.A., Cheshunt, of the Charing-cross Hospital.
Blackburn, Herbert B., Petworth, of Guy's Hospital.
Brewer, R. E. W., Newport, Monmouthshire, of St. Bartholomew's Hospital.
Brown, James, Edinburgh, of the Leeds School.
Burgess, Edward A., L.S.A., Bethnal-green-road, of Guy's Hospital.
Carolan, James F., Maida-hill, of St. Mary's Hospital.
Cole, William J., Harrow-road, of St. Mary's Hospital.
Collinson, Alfred C., Elgin-road, W., of St. Mary's Hospital.
Godding, Charles C., Portsmouth, of Guy's Hospital.
Greenfield, William S., Haverstock-hill, of University College.
Hansell, William C., Caen, Normandy, of Guy's Hospital.
Heald, George H., Leeds, of the Leeds School.
Hex, Henry, Plymouth, of the Charing-cross Hospital.
Hughes, Robert H., B.A. Cantab., Putney, of Guy's Hospital.
Irving, William G., Long Bennington, Grantham, of University College.
Kebbell, Alfred, Hackney, of the London Hospital.
Lawrence, James, M.D. Queen's Univ. Ire., Portrush, of the Belfast School.
Mawson, William A., Boston Spa, Tadcaster, of the Leeds School.
Measures, John W., Spalding, Lincolnshire, of St. Thomas's Hospital.
Mutch, Robert S., Prince Edward's Island, Canada, of Guy's Hospital.
O'Reilly, W. W. J., M.D. Queen's Univ. Ire., Sydney, of the Belfast School.
Parry, Thomas S., Mold, Flintshire, of University College.
Poignand, Malcolm, Jersey, of St. Bartholomew's Hospital.
Porter, Joseph F., Dublin, of the Dublin School.
Robinson, John E., Rotherham, of St. Bartholomew's Hospital.
Smithard, Charles L., Manchester, of the Manchester School.
Smith, Henry H., Devonshire-place, W., of the Middlesex Hospital.
Snell, John, Leeds, of the Leeds School.
Sobey, Arthur L., Saltash, Cornwall, of St. Bartholomew's Hospital.
Spencer, Lawrence W., Preston, of King's College.
Stocker, Charles J., Stratford, Essex, of the London Hospital.
Welsh, W. K., Cornwall-road, W., of St. Mary's Hospital.
White, George B., Nottingham, of the Birmingham School.
Williams, Howell, Great Hamston, Cardiff, of University College.
Williams, William, Drim-Fishguard, Pembrokeshire, of Guy's Hospital.
Willmott, J. J. E., Penge, Surrey, of St. Bartholomew's Hospital.
Woodhouse, Robert H., Ansly, Dorsetshire, of the Middlesex Hospital.

The following gentlemen having obtained Medical qualifications elsewhere, were also admitted Members of the College, viz.:—

Dorin, A. F. L., L S.A., Thistle-grove, Brompton.
Harrison, Henry B., L.S.A., St. Lawrence-road, Notting-hill.

Out of the 158 candidates examined thirty-three were rejected.

Royal College of Surgeons, Edinburgh.—The following gentlemen passed their first professional examination during the July sitting of the examiners:—

Laidlaw, Robert, Ayrshire.
Pryse, Alexander Stainforth, East Bengal, India.

And the following gentlemen passed their final examination, and were admitted Licentiates of the College:—

Creery, William, Dublin.
Ritchie, Thomas George Gordon, Prestonpans.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of

Medicine, and received Certificates to practise, on Thursday, July 25, 1872:—

Bomford, Gerald, Vernon-place, Bloomsbury.
Canton, Frederick, Great Marlborough-street, Regent-street.
Dorin, Arthur Frederic Loch, Thistle-grove, Brompton.
Emms, Alfred Wilson, Ilminster, Somerset.
Groves, Matthias, Radipole, Weymouth.
Harrison, Henry Baskcomb, St. Lawrence-road, Notting-hill.
Hynes, John O'Connell, Park-street, Nottingham.
Wallis, William, Hartfield, Sussex.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Rendall, John, Guy's Hospital.
Thomas, Herbert Henry, University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Blair, James Ogden, M.D., M.B., C.M.—Medical Officer for District No. 2 of Newbury Union, Berkshire.

Hunt, Frederick Everard, M.D., L.R.C.P. Edin., M.R.C.S. Eng.—Medical Officer of the Sydenham District of Lewisham Union.

Major, Herbert Coddington, M.D., C.M.—Assistant Medical Officer to West Riding Asylum, Wakefield.

May, Augustus Square, M.R.C.S. Eng., L.S.A.—Medical Officer of the Forest-hill District of Lewisham Union.

Stephen, William, A.M., M.D., L.F.P. and S. Glasg., L.M.—Medical Officer for the parish of Fettercairn, Kincardineshire.

BIRTHS.

Brown.—On May 10, at Fraserburg, Cape of Good Hope, the wife of John Brown, M.D. Aberd., of a daughter.

Gibbon.—On July 21, at 39, Oxford-terrace, Hyde-park, the wife of S. Gibbon, M.A., M.B., M.R.C.P., of 11, Finsbury-place South, E.C., of a son.

Hood.—On July 24, at The Grange, Bletchingley, the wife of Charles Hood, M.B., of a son.

Hosford.—On July 27, at Bothwell Villa, Burntash-lane, Lee, S.E., the wife of T. Stroud Hosford, M.R.C.S. Eng., of a son.

Lawrenson.—On July 28, at Ridgehill, Dartmouth, the wife of R. C. Pasley Lawrenson, Surgeon Royal Navy, of a daughter.

Myrtle.—On July 27, at Harrogate, the wife of Andrew S. Myrtle, M.D., L.R.C.S., of a son.

Tayler.—On July 23, at Claremont Villa, Upper Lewisham-road, the wife of F. T. Tayler, M.B., of a daughter.

Walker.—On July 22, at 48, Stanley-road, Bootle, the wife of George Charles Walker, M.D., of a son.

MARRIAGES.

Fothergill—Maclean.—On July 24, at the parish church, Kew, Charles William Fothergill, Captain Royal Marine Artillery, youngest son of the late Captain H. Fothergill, H.M.'s 67th Regiment, to Edith Kathleen, third daughter of Andrew Maclean, M.D., Deputy Inspector-General R.M.C., Sandhurst, granddaughter of the late Donald Maclean, W.S., of Kinloch, Argyleshire.

Harris—Johnson.—On July 24, at St. Barnabas, Homerton, Henry Harris, M.R.C.S.E., of Coldharbour-lane, Camberwell, to Ada, third daughter of R. S. Johnson, Esq., of Chesterton House, Homerton.

Johnston—Blackwell.—On June 5, at H.B.M.'s Consulate at Shanghai, and afterwards at Trinity Church, James Johnston, M.D., to Annie, third daughter of the late Thomas Blackwell, Esq., Edinburgh.

King—Case.—On July 31, at Christchurch, Lancaster-gate, Robert King, B.A., M.B. Cantab., M.R.C.P. Lond., of 48, Harley-street, Cavendish-square, to Esther, eldest daughter of Robert Case, Esq., 70, Inverness-terrace, Kensington-gardens, W.

Macdonell—Deshon.—On June 25, at St. John's Church, Secunderabad, India, George Bean Macdonell, Captain R.A., to Mary Edith, second daughter of the Rev. H. C. Deshon, M.D., vicar of East Teignmouth, Devon.

Munday—White.—On July 30, at Barnes Church, David Munday, Esq., Civil Medical Officer, Bombay Presidency, East Indies, to Hannah Branford, fourth daughter of the late James Larwood White, Esq., Lowestoft, Suffolk.

Potter—Blyth.—On July 24, at St. Michael's, Paddington, John B. Potter, M.D., of 20, George-street, Hanover-square, to Celina, daughter of Alfred Blyth, Esq., of 38, Westbourne-park.

Rawson—Johnstone.—On July 24, at Belleaire, Greenock, Edward A. Rawson, M.B., Carlow, Ireland, to Agnes Cuthbert, eldest daughter of David Johnstone, Esq.

Salt—Spooner.—On July 25, at St. Thomas's Church, Walton, near Stafford, Henry Salt, M.B., C.M., of 29, Gordon-square, to Janet Sarah, second daughter of William Spooner, Esq., of Walton Lodge, Stafford, Judge of the North Staffordshire County Courts.

Smith—Hudson.—On July 27, at St. Augustine's Church, Victoria-park, South Hackney, Robert Harman Smith, B.A., M.R.C.S.E., of Homerton, to Mary Elizabeth Crossley, eldest daughter of Henry Hudson, L.S.A., South Hackney, formerly of Somerby, Leicestershire.

Thompson—Watkins.—On July 25, at St. John's Church, Potter's Bar, Edmund Symes Thompson, M.D., of Upper George-street, Portman-square, Physician at the Brompton Hospital, to Elizabeth, younger daughter of the Rev. H. G. Watkins, M.A., vicar of Potter's Bar.

Whitehead—Davies.—On July 30, at Edgbaston Parish Church, Spencer Whitehead, of Lower Norwood, second son of Bickerton Whitehead, Esq., of Bristnall, to Catherine Ellen, youngest daughter of J. Birt Davies, M.D., of Edgbaston.

DEATHS.

Aldis, C. J. B., M.A., M.D. Cantab., F.R.C.P.L., suddenly, at 45B, Chester-square, S.W., on July 26.

Barrow, Frederick Angelo, youngest son of Thomas Waller Barrow, Esq., Inspector-General of Hospitals, at 1, Nightingale-terrace, Woolwich-common, on July 23, aged 16.

Lovegrove, Joseph, M.R.C.S., L.S.A., at Leyton, Essex, late of Kensington, and previously for nearly thirty years of Horsham, on July 27, aged 67.

Morris, Matthew, L.R.C.P., at 12, Colebrooke-row, Islington, on July 29, aged 44.

Pincoffs, Dr., M.R.C.P., of Naples, at Munich, on July 17.

Pringle, Margaret Anna, infant daughter of R. Pringle, M.D., Surgeon H.M.'s Bengal Army, at Mussoorie, N.W.P., India, on June 19, aged 10 months and 10 days.

Purcell, Mary Augusta, wife of Staff Assistant-Surgeon T. A. Purcell, second daughter of William Walter Cargill, Esq., at Yokohama, Japan, of rheumatic fever, on May 28, aged 22.

Riccard, Edward Jackson, M.B., M.R.C.S. Eng., at his residence, Wellington-street, Port Louis, Mauritius, formerly of South Molton, Devon, on April 16.

Sommers, Jane Carhampton, wife of John Charles Sommers, Esq., London, and daughter of the late Sir Alexander Morison, M.D., at 19, Dalrymple-crescent, Edinburgh, on July 26.

Sumner, Allen Morbeck, eldest son of W. A. Sumner, M.R.C.S. Eng., L.S.A., of 35, Wellington-road, St. John's-wood, accidentally drowned in Millwall Dock, on July 25, in the 22nd year of his age.

Wood, Anne, wife of Miles Astman Wood, M.R.C.S. Eng., L.S.A., at Ledbury, on July 25, aged 61.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bradford Infirmary.—Junior House-Surgeon. Applications, with testimonials, to C. Woodcock, 65, Market-street, Bradford.

Brighton and Hove Dispensary.—Resident House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Committee of Management, Queen's-road, Brighton, on or before August 5.

Dover Hospital and Dispensary.—House-Surgeon. Candidates must possess both medical and surgical qualifications, and be registered. Applications, with testimonials, to Mr. Edward Elwin, jun., 13, Castle-street, Dover, on or before August 13.

Hamadryad Hospital Ship for Seamen of all Nations.—Port of Cardiff. Resident Assistant Medical Officer. Candidates must possess a surgical qualification. Applications, with testimonials, to David Roberts, Secretary, 17, Church-street, Cardiff, on or before August 8.

Hereford County and City Lunatic Asylum.—Assistant Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to the Medical Superintendent, on or before August 5.

Infirmary for Consumption and Diseases of the Chest, 26, Margaret-street, Cavendish-square.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

Kildalton, Islay.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen.

Lambeth Parish.—Resident Medical Officer and Dispenser for the Workhouse. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to W. B. Wilmot, Clerk to the Guardians, on or before August 12.

Leeds Public Dispensary.—Junior Resident Medical Officer. Candidates must possess at least one legal qualification (registered). Applications, with testimonials, to John Horsfall, 31, Albion-street, Leeds.

Liskeard Union.—Medical Officer for the Callington District. Candidates must be duly qualified. Applications, with testimonials, to Albert C. L. Glubb, Clerk to the Guardians, on or before August 24.

Liverpool Royal Infirmary School of Medicine.—Lecturer on Comparative Anatomy and Zoology; also, Demonstrator of Physiology. Applications, with testimonials, to R. Harrison, Registrar (from whom further particulars may be obtained), on or before August 10.

Newtown and Llanidloes Union.—Candidates must possess the qualifications set forth in Art. 168 of the Consolidated Orders of the Local Government Board. Applications, with testimonials, to David Smith, Clerk to the Guardians, on or before August 13.

Northampton General Infirmary.—Dispenser. Applications, with testimonials, to S. P. Bennett, Secretary, on or before August 30.

Parish of St. Leonard, Shoreditch.—Dispenser. Candiates must be Licentiates of the Apothecaries' Company of London, or duly registered under the Pharmacy Act, 1868, or other authority of law in that behalf. Applications to be made on forms to be obtained of Edward S. Parker, Clerk to the Guardians, 213, Kingsland-road, and returned, endorsed "Dispenser," not later than noon on Thursday, August 8.

Rotherham Hospital and Dispensary.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification. Applications, with testimonials, to J. Barras, Hon. Sec.

Royal Hospital for Diseases of the Chest, City-road.—Physician. Candidates must be registered as Fellows or Members of the Royal College of Physicians of England. Applications, with testimonials, to the Secretary, before August 6.

Royal National Hospital for Consumption, Ventnor.—Resident Medical Officer. Applications, with testimonials, to Ernest Morgan, Secretary, 20, John-street, Adelphi.

St. Pancras and Northern Dispensary.—Honorary Physician. Particulars may be obtained from S. S. Wigg, Esq., Honorary Secretary, 33, Gordon-street, Gordon-square.

Surrey Dispensary.—Physician. Applications, with testimonials, to R. G. Minshull Jones, Secretary, before August 20.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WARNEFORD LUNATIC ASYLUM.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

WESTMINSTER HOSPITAL.—House-Surgeon. Candidates must be qualified to practise under the Medical Registration Act of 1858, and must produce certificates of having served the office of surgeon's dresser to the in-patients for a period of not less than six months in some recognised hospital. Candidates will be subjected to a competitive examination, and must send in their names to the Secretary on or before August 10.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Alston-with-Garrigill Parish.—Dr. George Henry Savage has resigned the Second District; area 22,600; population 3486; salary £8 per annum.

Portsea Island Union.—Dr. Johnson has resigned the Railway District; salary £90 per annum. Dr. Gillmore has resigned the Landport District; salary £70 per annum.

Sudbury Union.—Mr. George Stevens has resigned the Sixth District; area 7686; population 2590; salary £41 per annum.

APPOINTMENTS.

Bolton Union.—Thomas F. Pickering, L.R.C.P. Edin., L.R.C.S. Edin., to the Little Bolton (No 2) District. James Hall, M.B., C.M., L.R.C.S. Edin., to the Sharples District.

East Ashford Union.—Edmund J. Kent, L.F.P. & S. Glasg., L.S.A., to the Fifth District. Charles S. A. Atkinson, M.R.C.S.E., L.S.A., to the Sixth District.

Edmonton Union.—Henry W. Down, M.R.C.S.E., to the South Hornsey District.

Honiton Union.—Robert F. Mayne, L.R.C.P. Edin., M.R.C.S.E., to the First District.

Newent Union.—James H. Scott, L.R.C.S. Ire., L.K. & Q.C.P. Ire., to the Dymock District and the Workhouse. William N. Marshall, M.R.C.S.E., L.S.A., to the Newent District.

Prescot Union.—Edward Millner, L.F.P. & S. Glasg., L.S.A., to the Rainford District.

West Ham Union.—Walter A. Grogans, M.R.C.S., L.S.A., to the Stratford District.

MR. TEEVAN has been elected a Corresponding Fellow of the Medical Society of Odessa.

DR. LEWIS has received the thanks of the Indian Government for his report on the rations supplied to the troops.

Dr. SHARPLEY, of Louth, has been elected to the vacant aldermanship in that town.

MR. PHILIP COWEN has been appointed by the Guardians of Islington, Resident Medical Officer of the Islington Workhouse and Infirmary, at a salary of £200 per annum.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—By order of the Council, the library will be closed from August 12 to September 12, both days inclusive.

A SCHOOL of Medicine, in connexion with the hospital which the Maharajah of Bulrampore has already built at Lucknow, is about to be established and endowed by his Highness.

THE Hackney Board of Guardians have increased to £100 a year the salary of Mr. Dukes, the Dispenser at the District Dispensary, Dalston.

THE admissions (says the *Friend of India*) to hospital and the deaths from cholera in the Bengal Presidency from the first appearance of the disease this year up to June 17 were—admissions sixty-five, and deaths forty-three.

A DRAPER named Barraud has been fined £5 by the Barrow magistrates for sending home by the railway one of his assistants who was suffering from small-pox.

THE EFFECTS OF SANITARY SUPERVISION.—The Medical Officer of Health reported to the meeting of the Vestry of St. Luke's last week that the deaths during the past month had only been seventy-eight, as compared with ninety-three last year, and that no case of fever had occurred in the parish for the last two months. Such a state of things is highly creditable to the sanitary committee and their officers.

THE annual meeting of the Governors of the Sheffield Hospital and Dispensary was held last week. Dr. J. C. Hall, the Hon. Secretary, read the fortieth report of the Weekly Board. The funds placed at their disposal during the year amounted to £3443 17s. 9d.; the expenditure had been £3280 4s. 6d., being £597 1s. 5d. less than last year. The balance in favour of the institution was only £163 13s. 3d. The balance in the hands of the treasurer in 1870 was £1776 5s. 4d.; in 1871 it decreased to £768 13s. 11d.; this year it had still further decreased to £163 13s. 3d. After some opposition Mr. Thomas Chesman was re-elected Surgeon to the institution.

ENGLISH EDUCATION.—A native East Indian paper, the *Duyan Bodhak*, mourns over the increasing prevalence of the vice of drinking in the country, particularly among those who have received an English education, and beseeches Government to take some effectual measures to check the spread of this great evil.

INTERESTING TO SURGEONS.—An improvement in the instruments for probing for bullets and extracting them from the body has recently been introduced in Melbourne. The instruments consist of a probe and forceps fitting into a case which contains also a small galvanic battery. When the probe is inserted, and an obstacle believed to be the bullet is felt, a point previously sheathed is pushed forward, and the instant this touches the bullet or any metal a little bell in the case rings, and continues ringing as long as the probe touches the bullet. The position of the object embedded in the flesh is thus shown, as whenever the probe is moved from the metal the bell ceases ringing. The same thing applies to the forceps, which cause the bell to ring as soon as both points touch the metal. The invention is called the De Wilde's patent electrical bullet probe and forceps, and the principal improvement consists in the application of electricity to indicate the moment the bullet is found when the operator is groping for it.

MILK AS AN AID TO LACTATION.—Dr. Harris, of Pennsylvania, states that he has made many successful trials which prove the great value of milk as a food for delicate mothers who desire, and are unable, to suckle their own infants. The milk is taken as an addition to, not as a substitute for, the ordinary meals. Many women on making the trial cannot tolerate the milk diet in sufficient quantity to be of service; but many others like it, and digest it well, and experience wonderful benefit from taking it, not only being able to nurse infants which they must otherwise have abandoned to wet-nurses, but greatly improving in their own health and appetite, and preventing the drain of the system so often consequent on lactation.—*Boston Journal*, June 13.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Ishmael.—Parkes on Hygiene.

M.R.C.S., Stilton.—There may, perhaps, be a meeting of the Midwifery Board next week. Write to Mr. Trimmer, the Secretary of the College.

Bookworm.—The Library and Museum of the College of Surgeons will be closed as usual during the ensuing month (September). The book mentioned is in the Library, and is a work of great rarity. You will find a full account in the *Medical Times and Gazette*, vol. xviii.

Inquirer.—The Convalescent Home at Mablethorpe was opened in May last. It will accommodate twenty men and nineteen women.

Mesmerist.—The resolution passed by the Council of University College, London, on December 27, 1838, was as follows:—"Resolved that the Hospital Committee be instructed to take such steps as they shall deem most advisable to prevent the practice of mesmerism or animal magnetism in future within the hospital."

Alisma Plantago for Hydrophobia.—A correspondent sends us a translation from the *Moniteur Universel* of August 7, 1867, on the use of the *Alisma plantago*:—

"The *Alisma plantago* has been tried in Russia as a specific against madness. It is powdered and strewn over a slice of bread-and-butter, and if eaten effects a cure. The learned Councillor Lewshin was very sceptical on the subject till an accident under his own eyes proved its efficacy. 'One of the sporting dogs of my brother, who lived in the country with me, became mad and bit the huntsman. The ordinary operation was performed to prevent the spread of the venom; the wound was cured, and all inquietude ceased. But at the end of a few weeks the fatal symptoms manifested themselves of hydrophobia, and they were obliged to secure the huntsman by cords, but very cautiously, he being furious. There being no doctor in the village, I advised he should be taken to the Old Soldier in the village of Sokorolotewo, in the *cercle* of Belewski, who had told me he had often cured men and animals with this simple remedy after having been bitten by mad dogs. The Old Soldier gave the huntsman two doses of his remedy—one in the evening, the other the next morning. He said they might untie him and lead him home without fear. At the end of a few days he found himself perfectly well, and lived eighteen years after without any recurrence of the symptoms.' The Soldier said, while he was serving in the army he had learnt this receipt from a peasant of Archangel. . . . This plant flourishes all the season, but the best time to gather it is the end of August. The roots must be well washed and dried in the shade; lastly, reduced to powder, and administered as before said—on a slice of bread-and-butter. The Soldier declared that for twenty years he had used the remedy, and had never failed. The government of Tula furnished a great many examples of this cure.'

This remedy is not new to us, although we cannot lay our hands on a reference to its use; but we venture to say that it would be a most difficult thing to get a hydrophobic patient to eat a slice of bread-and-butter covered with a dry powder, or to drink anything to wash it down. Moreover, how was the huntsman taken to the Old Soldier? A hydrophobic patient can't be led like a horse with a halter, for he has fits of convulsions. The history needs criticism.

A Correction.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you kindly alter a mistake in your last number of the *Medical Times and Gazette*. In the list of men who have passed the Royal College of Surgeons' final, you have put mine as a student of St. Mary's; it ought to be of the London Hospital. I am, &c., W. L. Morgan.

London Hospital, July 29.

Effects of Trusses on the Skin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The only remedy I have ever discovered for the distressing effects on the skin of a truss, is a piece of fine fur to fit the pad. "Debilis" will thank you for many a day for the information. The truss should have the upward thrust. I am, &c., Debilis et Senex.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am in the predicament of some other correspondents in being obliged to wear a truss; and, although it fits like a glove, I am conscious of a good deal of irritation in hot weather, and especially from certain grooves which it makes in my skin round the hips, which itch terribly. But the quecrest effect is this—Where the pressure of the pad tells I am subject to little tumours, the size of half a pea, which itch most annoyingly. One of these felt like a little sebaceous follicle or wen, and I opened it with the point of a lancet, and found that it contained altered blood. Since then I have studied the formation of them, and find that little lengths of cutaneous veins become blocked at either end, and then become little rounded cysts. If I get thinner or shift the pressure they go away of their own accord; if not, they are punctured, let out a drop of blood, and heal straight. For its wholesome effect on the skin commend me to Wright's *sapo carbonis detergens*.

I am, &c., R.

COMMUNICATIONS have been received from—

Mr. John Smith; Dr. Major; Dr. Walker; Dr. Tripe; Mr. H. W. Holman; Mr. B. Clarke; Dr. MacCormack; Mr. Teevan; Mr. J. B. Blackett; Mr. S. Lee; Dr. Brakenridge; Dr. Birdwood; Dr. Rogers; A Provincial Physician; Dr. John Brown; Dr. F. J. Brown; Dr. Gibbon; Dr. R. Moffat; Dr. Robert C. R. Jordan; Mr. T. M. Stone; Mr. F. A. Bulley; Dr. Phillips; Mr. William Paul Swain; Mr. Teevan; Dr. Bruce; Professor Flower; Mr. Metcalfe Johnson; Mr. H. Wilson; Dr. Dougall; Ishmael; Mr. W. L. Morgan; Dr. Felce; Messrs. J. B. Lippincott and Co.

BOOKS RECEIVED—

Twenty-sixth Report of the Commissioners in Lunacy to the Lord Chancellor—The Beginnings of Life, by H. Charlton Bastian, M.D., F.R.S.—A Manual for Hospital Nurses, by Edward J. Domville, L.R.C.P. Lond., M.R.C.S. Eng.—The Graft Theory of Disease, by James Ross, M.D.—On the Functional Diseases of the Renal, Urinary, and Reproductive Organs, by D. Campbell Black, M.D., L.R.C.S. Edin.

PERIODICALS AND NEWSPAPERS RECEIVED—

North British Daily Mail—Science Gossip—Monthly Microscopical Journal—Dublin Medical Journal—The Cosmopolitan—Food, Water, and Air.

APPOINTMENTS FOR THE WEEK.

August 3. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

5. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

6. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

7. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

8. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

9. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 27, 1872.

BIRTHS.

Births of Boys, 1087; Girls, 1071; Total, 2158.
Average of 10 corresponding weeks, 1862-71, 2006·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	833	810	1643
Average of the ten years 1862-71	836·7	784·1	1620·8
Average corrected to increased population	...	...	1783
Deaths of people aged 80 and upwards	...	...	43

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	4	6	1	...	7	1	2	...	68
North ...	751668	11	4	2	4	13	...	2	...	86
Central ...	333887	...	5	...	...	5	...	2	...	55
East	638928	6	2	3	...	7	2	4	...	94
South	966132	12	8	1	1	18	...	4	4	91
Total	3251804	33	25	7	5	50	3	14	4	394

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·738 in.
Mean temperature	71·1°
Highest point of thermometer	90·9°
Lowest point of thermometer	57·3°
Mean dew-point temperature	64·6°
General direction of wind	Variable
Whole amount of rain in the week	1·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 27, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending July 27.	Deaths Registered during the week ending July 27.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2158	1643	90·9	57·3	71·1	21·72	1·00	2·54
Portsmouth ...	115455	12·1	71	54	81·6	53·2	65·7	18·72	1·77	4·50
Norwich	81105	10·9	39	39	86·5	56·0	70·3	21·28	0·22	0·56
Bristol	186428	39·5	122	87	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	50	24	85·3	52·4	68·3	20·17	2·14	5·44
Birmingham ...	350164	44·7	226	149	85·3	53·0	67·6	19·78	1·25	3·17
Leicester	99143	31·0	75	56	...	...	...	...	...	...
Nottingham ...	88225	44·2	54	47	88·7	53·9	70·1	21·17	1·29	3·28
Liverpool	499897	97·9	292	255	82·5	52·2	65·6	18·67	2·80	7·11
Manchester ...	352759	78·6	205	175	89·0	52·2	69·7	20·94	0·48	1·22
Salford	127923	24·7	89	57	85·7	50·9	68·3	20·17	0·55	1·40
Oldham	84004	20·2	53	52	...	...	...	...	...	...
Bradford	151720	23·0	88	72	86·4	55·0	69·0	20·56	0·69	1·75
Leeds	266564	12·4	180	161	88·0	55·0	68·4	20·22	0·80	2·03
Shefficld	247847	10·9	171	136	85·5	53·0	68·9	20·50	1·45	3·68
Hull	124976	35·1	90	83	86·0	48·0	66·0	18·89	1·06	2·69
Sunderland ...	100665	30·4	81	36	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	121	60	81·0	48·0	60·8	16·00	1·30	3·30
Edinburgh	205146	46·3	118	80	75·0	52·7	62·3	16·83	2·05	5·21
Glasgow	489136	94·8	344	250	...	...	...	...	...	...
Dublin	310565	31·9	128	136	78·1	50·0	63·9	17·72	0·42	1·07
Total of 21 Towns in United Kingd'm	7393052	34·0	4755	3652	90·9	48·0	67·3	19·61	1·20	3·05

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·74 in. The highest was 29·92 in. at the beginning of the week, and the lowest 29·63 in. on Tuesday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

BRITON
MEDICAL AND GENERAL LIFE ASSOCIATION.

CHIEF OFFICE—429, STRAND, LONDON.

Trustees.

General Sir J. E. DUPUIS, K.C.B. | Sir W. FERGUSSON, Bart., F.R.S. | R. PARTRIDGE, Esq., F.R.S. | W. TYLER SMITH, M.D.
Sir JAMES DUKE, Bart. | FRANCIS WEBB, Esq. | MILLIS COVENTRY, Esq.

Actuary and Secretary—JOHN MESSENT, F.I.A., F.S.S. Assistant-Secretary—WILLIAM BEAMAN.

Every practical system of Life Assurance business transacted at moderate rates. The Association issues "Special Settlement Policies" under the provisions of the "Married Women's Property Act, 1870," whereby a sum of money may be secured to the Wife, or Wife and Family, of the Assured Member without the risk of such provision becoming subject to the claims of creditors.

New Premiums for the year 1871 ... ... £20,191 7 9
Total Income from Premiums, Interest, and other miscellaneous receipts 245,824 18 8

The next Valuation, with a view to the declaration of a further Bonus, will be made at the close of the present year.

Detailed Reports, Prospectuses, and every information may be obtained on application, personally, or by letter addressed to the Actuary and Secretary of the Company, at its Chief Offices, 429, Strand.

Special advantages allowed to Members of the Medical Profession upon effecting or introducing Assurances.

SKIN DISEASES.

McDOUGALLS'
MEDICAL CARBOLIC SOAP,

An Antiseptic and Healing Detergent.

Invaluable as a Wash or Lotion for Cutaneous Affections, Sores, and Wounds, as an Antiseptic and Disinfecting Agent for internal or external application.

McDOUGALL BROTHERS—London, 11, Arthur-street West, London-bridge, E.C.; Manchester, Port-street.

WESTERTON'S PATENT
ZYMOTIC DISINFECTING FLUID

Prevents the spread of infection; protects the nurse and those about the sick-room. Sponging over the body with the Fluid disinfects the emanations from the skin and (being volatile) exhalations from the lungs of the sufferer. Destroys the noxious properties of the excretions, and purifies the atmosphere.

PREPARED BY

W. C. WESTERTON, 85, Abingdon-villas, Kensington, London;

and may be had of all Chemists, in bottles, 1s., 1s. 9d., and 3s. 6d.; 10s. per gall.

LIEBREICH'S CHLORAL HYDRAT.

To be obtained through all the Wholesale Druggists of the United Kingdom.

Sole Wholesale Agents, A. & M. ZIMMERMANN, 7, Fen-court, Fenchurch-street, E.C.

BOUDAULT'S PEPSINE.

In 1854, after many experiments, PEPSINE was obtained in a pure state by **M. BOUDAULT**, Chemist, and Dr. L. Corvisart.

Boudault's PEPSINE was honoured with two Reports at the Academy of Medicine, Paris, and with having its formula inserted in the New French Pharmacopœia.

The International Jury of the Universal Exposition, Paris, 1867, awarded to Boudault's PEPSINE the ONLY MEDAL given for PEPSINE and its preparations. (Silver Medal, 1868.)

Boudault's PEPSINE is the only one that has been furnished to the Hospitals in Paris since 1854.

PEPSINE Wine (Sherry), in bottles, 4/ and 8/. Dose—a tablespoonful before each meal.

PEPSINE Lozenges, in bottles, 4/. Dose—3 before each meal. PEPSINE Pills, in bottles, 4/. Dose—3 before each meal.

Boudault's PEPSINE or Poudre Nutrimentive. Dose—15 grains; sold in 1-oz., 4-oz., 8-oz., and 16-oz. bottles.

HOTTOT BOUDAULT, 7, Avenue Victoria, Paris.

London: A. & M. ZIMMERMANN, 7, Fen-court, E.C.

May be obtained through all Chemists.

ORIGINAL COMMUNICATIONS.

THE PHYSIOLOGY AND CLINICAL USE OF THE SPHYGMOGRAPH.

By F. A. MAHOMED,
Assistant Medical Officer to the Central London Sick Asylum.

No. VII.

(*With Photo-lithographic Plates.*)

Aortic Incompetency—Its Effect on the Pulse-wave—Variations produced by different Pathological Conditions—Aortic Obstruction—The Forms of Pulse produced by it.

The diagnosis by the stethoscope of disease of the aortic valves is usually easier than that of the mitral, for the bruits which attend it accompany the sounds of the heart, which therefore serve as guides to their distinction. No form of aortic disease will produce a bruit commencing during the periods of silence and corresponding to the presystolic bruit. Though the bruits produced are caused, as in mitral disease, by the contractions of two distinct cavities—namely, the left ventricle and the elastic aorta—still the occurrence of these contractions cannot alter in their relation to each other, for that of the aorta is merely a mechanical action, and of necessity immediately succeeds the termination of that of the ventricle, while the contraction of the auricle is of a physiological nature, and liable to variations in rhythm, according to the conditions under which it is placed.

While speaking of the stethoscopic indications of this disease, it may be noticed, as to the intensity of the bruits heard in the two conditions, that the reverse obtains to that which was found in mitral disease; for whereas in the latter the regurgitant murmur is the loudest, being produced by the powerful contraction of the ventricle, while the obstructive murmur, dependent on the more feeble auricle, is often indistinct and sometimes absent, in aortic disease the ventricle produces the obstructive murmur, which is accordingly loud, and is always readily diagnosed, while the regurgitant murmur is produced by the contraction of the elastic coat, and is sometimes, especially when the aorta through disease has lost its elasticity, only faintly, if at all, audible.

But the fact of there being a systolic or diastolic bruit audible over the aortic valves does not by any means put us in possession of the whole truth. It leaves us still in ignorance whether the damage to the valve is much or little; whether it is chiefly obstructive or regurgitant; whether it began in the aorta or the heart; whether the heart is efficient or inefficient. Now, on many of these points the sphygmograph will enlighten us. Both the pathology and sphygmographic characters of a case where the disease commenced in the aorta, as endarteritis deformans, and gradually crept on to the valves, differ so much from one in which the disease commenced in the heart itself, that the two have been separated in the plate.

Much more difficult to separate are those cases in which the disease is regurgitant and those in which it is obstructive; for in nearly all cases where one condition is present the other more or less obtains. Perhaps of the two it is obstructive disease that is most frequently found alone, or, rather more correctly speaking, a systolic aortic bruit is more frequently found alone than a diastolic one. As in mitral disease, so in aortic, we must not look to the sphygmograph for a certain diagnosis, but only as an aid to one. It will exhibit especially the different characters the pulse may assume in this disease, and indicates the general condition of the circulation.

It is evident from the situation of the aortic valves, and the part they play in the mechanism of the circulation, that when they are affected by disease, modifications in the pulse-wave will be produced of a more characteristic nature than by any other valvular lesion.

It will be remembered that the dicrotic wave in the normal pulse was due in great measure to the closure of the aortic valves. It was seen that on the contraction of the elastic coat of the aorta they prevented the blood flowing back into the ventricle, and by so doing compelled it to pass along the arteries, producing the dicrotic wave or diastolic expansion. This may be proved both by experiment and by pathology, for on removing or disabling the aortic valves the pulse loses its dicrotic character, as seen in Fig. 1, Pl. v., obtained from the schema after the removal of the aortic valve. This loss of dicrotism will be found to be the leading character of the pulse of aortic regurgitation, and the extent to which it has decreased is the gauge of the amount of valvular imperfection. But besides this, the "water-hammer," "splash," or "Corrigan's" pulse has other characteristics—*i.e.*, it is unsustained; the impulse is sudden, sharp, hard, and full; the pulse is visible, and is easily felt in the smaller arteries, such as the digital. It is essentially a large, forcible, monotonous pulse, occurring in empty arteries. These characters are all represented in a sphygmographic tracing. The want of sustainment in the pulse is due to the absence of the dicrotic wave or diastolic expansion; the blood that should have formed it has been forced back by the elastic aorta through the inefficient valves into the ventricle, instead of along the arteries, which are therefore empty, or comparatively so, during the diastolic period.

Proof of this empty condition of the arteries is afforded by the two following well-known facts—viz., that when the arm of the patient is raised above the level of the heart, the splash or collapse of the pulse is rendered more apparent, while it is diminished by holding the hand below the heart's level, for then the blood-stream is assisted by gravitation. Again, if the ear be applied over the radial, a bruit transmitted from the valves by the column of blood will be heard when the hand is placed below the level of the heart; when raised above it the bruit is no longer audible, the blood-column not being sustained. These observations, though not true of all cases, are noticeable in many.

The size and hardness of the pulse are indicated sphygmographically by the height of the upstroke and the amount of pressure employed—these are gauges of the amount of hypertrophy of the heart. The sharpness and force of the pulse are indicated by the development of the percussion-wave.

Having noticed the characters of the typical pulse of aortic regurgitation, a study of the tracings reproduced in the plate will show how these characters may vary somewhat according to the condition of the heart and valves.

Fig. 1, obtained from the schema without the aortic valve, has been already referred to. It does not present all the characters of an aortic pulse as found in the human subject, for the other conditions have not altered, but the dicrotic wave is markedly absent.

Fig. 2 illustrates the pulse of A. G., a woman admitted under Dr. Wilks into Clinical Ward during January, 1872. It somewhat resembles that obtained from the schema. The sensation imparted to the finger was not that of the pulse of aortic regurgitation. During life a "to-and-fro" bruit was audible over the aortic valves and down the sternum, the cardiac impulse was imperfectly felt, and the apex-beat ill defined. The tracing is characterised by the total absence of the dicrotic waves indicating free regurgitation. The upstroke is short, the percussion-wave absent, and the pressure employed light—*i.e.*, one ounce and a half—all indicating a condition of dilatation. Moreover, the tidal wave is too much sustained, due either to atheroma of the arteries or an increased capacity of the ventricular cavity. Either condition appears to produce it, though when present in so marked a manner, as in this case, it may generally be safely ascribed to atheroma. These deductions were drawn from the pulse-tracing before death. An autopsy revealed a left ventricle hypertrophied and much dilated; aortic valves thickened, puckered, containing calcareous masses, and allowing of very free regurgitation; the mitral valve was also thickened, the orifice contracted, not admitting two fingers; the right heart was dilated; the aorta was atheromatous, thickened, rough, and irregular.

The next tracing in the plate (Fig. 3) was obtained from J. G., a man admitted under the care of Dr. Habershon into Clinical Ward in November, 1871. Systolic and diastolic bruits were heard over the sternum. The tracing shows an absence of the dicrotic wave; the percussion-wave is exaggerated and the upstroke increased. Free aortic regurgitation was diagnosed, and an hypertrophied heart. A post-mortem discovered ulceration of the aortic valves permitting extensive regurgitation, a somewhat hypertrophied left ventricle, and a calcareous globular aneurism about one inch and a half in diameter occupying the situation of one of the sinuses of Valsalva; the aorta was otherwise healthy. He died from an attack of cerebro-spinal meningitis.

The pulse of J. C., a man under the care of Mr. Cooper Forster in May, 1871 (represented in Fig. 4), is highly characteristic of free aortic regurgitation, accompanied by a hypertrophied heart and atheromatous arteries. The dicrotic wave has almost disappeared, and the arteries are peculiarly empty during the diastolic period; the percussion-wave is greatly exaggerated, the pressure used considerable—*i.e.*, six ounces; the tidal wave is sustained, and forms a considerable curve, the concavity of which looks downwards. The physical signs were

unmistakable: there was a loud double bruit over the aortic valves, the apex of the heart beating external to the nipple, and the arteries that could be felt were rigid and cord-like.

The tracing of the pulse of J. P. (Fig. 5), a man under the care of Dr. Wilks, is of much interest from its enormous size; in this case, contracted kidneys and the attendant arterial changes existed together with incompetency of the aortic valves, producing a double bruit, audible over them and down the sternum. The incompetency probably was not very great, as the dicrotic wave has not disappeared, while the enlargement and hypertrophy of the heart, indicated by the huge upstroke and percussion-wave, appear to be enormous. The sphygmograph in this case forms a good gauge of the amount of regurgitation. Strikingly opposed to the last is the next tracing in the plate (Fig. 6), obtained from a man under the care of Dr. Pavy, in whom the physical signs of aortic regurgitation were unquestionable. In this instance the pulse is a typical one of this disease: the upstroke long, the percussion-wave much increased, the pressure employed great—*i.e.*, eight ounces—all indicating hypertrophy; while the total absence of the dicrotic wave, and the empty condition of the arteries during diastole, announce free regurgitation.

Fig. 7 was obtained from a patient in Clinical Ward, under the care of Dr. Wilks, during February, 1871, in whom a to-and-fro aortic bruit was audible. The percussion-wave is greatly increased, and bears no proportion to the small tidal wave; the dicrotic wave is very slight; it represents one form of pulse associated with aortic disease, but not a typical one. The aortic valves were found at the post-mortem to be covered with vegetations, and to permit free regurgitation; the mitral valve was very slightly affected.

The remaining three tracings in this section were obtained from a patient of Dr. Moxon's. A. Y. first came under treatment as an out-patient in January, 1871; Fig. 8 illustrates his pulse at this period. His chief complaint was pain in the front of the chest on exertion, and shortness of breath; he had never suffered from rheumatism; there was a double bruit to be heard over the aortic valves and down the sternum, the diastolic being the loudest. The tracing shows an entire loss of dicrotism in the pulse; at the same time there is no compensating hypertrophy, for the upstroke is short; still, the heart is acting forcibly, for the pressure employed is great and the percussion-wave is well marked. Evidently the disease was recent, and a diagnosis of a retroverted valve was ventured. He was soon after admitted into the Hospital. His præcordial pain and dyspnœa were increased greatly; the heart pulsated visibly in the epigastrium; two bruits, one a systolic, the other diastolic, were audible all over the front of the chest; cardiac dulness most marked between the fourth and seventh ribs, about an inch to the inner side of the left nipple. Fig. 9 was obtained in August. The pulse has now altered greatly; the upstroke has become much longer as the heart has dilated and hypertrophied, the dicrotic wave is more marked, and the arteries are fuller during diastole than formerly. This can only be accounted for by the general obstruction to the venous circulation, which had now become well marked, and by the increased amount of blood sent into the aorta at each contraction of the heart, from the increased capacity of the ventricle, both of these conditions being favourable to the development of the dicrotic wave.

A tracing of the heart was obtained at the same time as the last pulse-tracing, and is reproduced in Fig. 10; it is peculiarly unsustained, its summit being pointed instead of flat. This unsustained contraction appears, as far as a small experience in cardiographic tracing permits of deductions, to be characteristic of dilatation of the heart.

A month or two after these tracings had been obtained the patient died, subsequently to the operation of paracentesis abdominis, performed for the relief of his dropsy. At the autopsy his heart was found to weigh twenty-one ounces; the left ventricle was greatly dilated and somewhat hypertrophied; the pulmonary artery was thick-walled; the mitral valve admitted five fingers, but was not disproportionate to the size of the ventricle; the aortic valves were very bad, shallow, narrow, and eroded, with some few stringy vegetations, and more than one smooth hole; the junction between them was greatly defaced; the aorta was healthy. (*Vide* Dr. Moxon's report.)

The figures in the next section of the plate exhibit the forms assumed by the pulse in aortic obstructive disease. When the obstruction is great it presents one of two forms; when slight no indication is afforded. Fig. 11 was obtained from the schema, the aortic orifice being much obstructed. The contractions of the heart were made as forcibly as before, when the normal pulse was produced. The upstroke has become sloping and the summit rounded, for the influence of percussion is lost; the tidal wave alone remains. This condition we see produced under similar conditions in the human pulse. In Fig. 12, for instance, we find a similar form of pulse occurring in a man who attended the Sussex County Hospital as an out-patient under Dr. Moore. In this patient a very localised bruit was heard over the aortic valves accompanying the first sound of the heart. No diastolic bruit was audible, and the case was looked upon as one of pure aortic obstruction. This diagnosis was confirmed by the sphygmograph. Fig. 13 was obtained from a man attending Dr. Moxon's out-patient room at Guy's. The physical signs were the same as in the last case; and after a very careful examination, Dr. Moxon diagnosed aortic obstruction. Without any knowledge of the opinion already formed or the physical signs present, I was able to arrive at the same diagnosis by the sphygmograph alone.

In the two following tracings (Figs. 14 and 15), obtained from another patient at different periods, the same form of pulse is seen to be a permanent condition:—

M. H. attended as an out-patient under Dr. Moxon in January, 1871. The diagnosis was then made of aortic obstruction. Fig. 14 illustrates her pulse at this period. In the following May she was admitted under the same physician. The tracing reproduced in Fig. 14 was then obtained. Some amount of hypertrophy seems to have taken place; otherwise the characters of the pulse are the same as before. In this case, as well as the systolic aortic bruit, there was another soft murmur, which followed the second sound, but whether it was due to aortic regurgitation or mitral contraction was undecided.

The case of C. K., of whose pulse Fig. 16 is a representation, is one of some interest. This man was admitted under Dr. Moxon into Clinical Ward in May, 1871, suffering from all the symptoms of heart disease, but no bruit was audible. During the time he was in the Hospital a soft localised bruit, apparently diastolic, was developed, and his disease was diagnosed as aortic incompetency. The tracing obtained of his pulse, in which the dicrotic wave was well marked, did not confirm this; and though no signs of obstruction were apparent in the tracing, still regurgitation was negatived by the presence of the dicrotic wave. At the post-mortem, considerable aortic obstruction was found to be produced by the adherence of two of the sigmoid valves. Slight regurgitation was permitted, and great hypertrophy had been produced.

The other striking form of pulse accompanying aortic obstruction is seen in Fig. 17, obtained from G. G., a boy under the care of Dr. Pavy in Clinical Ward during March, 1872. A systolic bruit was heard over the aortic valves, and transmitted in the course of the large vessels. The tracing obtained is very peculiar from the marked separation between the percussion and tidal waves; the apparent double beat in the pulse is probably the "*thrill*" described by several eminent authorities on heart disease as present in the pulse when there is obstruction about the aortic orifice; the percussion-wave is formed and transmitted as soon as the heart commences to contract, while, on account of the obstruction to the exit of blood, it does not expel its contents so quickly as in the normal condition, causing the tidal wave to be slightly postponed. Death was occasioned by Bright's disease. A post-mortem revealed a large amount of aortic obstruction, produced by the partial adhesion of two of the valves and a large number of warty growths blocking up the passage; there was very little, if any, regurgitation permitted. The heart was only slightly hypertrophied, as the disease was somewhat recent.

Fig. 18, obtained from a patient under Dr. Rees, in Clinical Ward, during November, 1870, represents another pulse of the same type as the last. In this case also there was a loud systolic murmur over the aorta; the second sound was clear. The heart was much hypertrophied, the impulse being forcible and heaving, and the apex-beat considerably external to the nipple.

Fig. 19, obtained from a boy, an out-patient of Dr. Moxon's, is of a more doubtful character, a double murmur being heard over the aorta; but the character of the pulse, and the fact that the tracing obtained from his heart shows a slow and gradual contraction, make the diagnosis of considerable aortic obstruction very probable.

The last two tracings in this plate are intended especially to demonstrate the dangerous effect of digitalis on an hypertrophied and efficiently acting heart. T. D., a lad, aged 18, was under the care of Dr. Wilks, in Stephen ward, during December, 1870. A loud systolic murmur was audible over

the aorta, together with a faint diastolic one in the same position. The area of cardiac dulness was increased; the cardiac impulse was very forcible, and the apex-beat external to the nipple. Fig. 20 represents his pulse before digitalis. It has no peculiarity; indeed, it is apparently normal. Fig. 21 was obtained four days afterwards, he having taken mx. of tr. digitalis three times a day for four days. The enormous size to which the pulse has now attained, owing to the increased action of the heart, speaks for itself; in a patient whose arteries were atheromatous the probable result is evident. It should be stated that the patient had taken some exercise previous to this tracing being obtained. To this, perhaps, some of the great increase may be due.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CASES UNDER THE CARE OF MR. WOOD.

Case 1.—*Compound Comminuted Fracture of Tibia, and Simple Comminuted Fracture of Fibula (Left Leg)—Carbolic Dressings—Amputation.*

S. L., aged 70, admitted January 1, 1872; discharged June 24; days in hospital, 176. Patient was mounting a ladder for the purpose of cleaning out a tank. The surface upon which the foot of the ladder rested being wet, the ladder slipped, and he fell, his left leg passing through, and being caught between the spokes of the ladder. The ladder then fell with him to the ground.

The condition of the leg on admission was as follows:—A wound, two inches above the internal malleolus, extended from the internal margin of the tibia to the tendo Achillis. The tibia was smashed across about two inches above its lower extremity, and the upper line of fracture was about one and a half to two inches higher, thus leaving a portion of about that length, which was broken into two pieces longitudinally, and these pieces were lying slightly attached by the periosteum. There was considerable hæmorrhage.

January 2.—The limb was placed to-day between Cline's splints. The splint with the foot-piece was applied along the outer side, while the inner splint was interrupted opposite the wound.

The dressing of the wound upon Lister's plan was as follows:—The wound having been subjected to the free application of the carbolic acid spray, was then covered with a layer of the "protecteur," and over this, still under the action of the spray, the carbolic gauze was placed in eight layers; between the seventh and eighth layers was placed the "jaconet."

Since the limb was first put up, the dressings were left undisturbed for a week, the external surface being sprayed upon every day. It was then found that suppuration had occurred, so the dressings were removed, and under the influence of the spray a slough was removed, and the wound redressed. Sand-bag applied to keep up extension; wound dressed in the same way every other day—sprayed on alternate days. Small bed-sore on right buttock. Wound looks well, and there is comparatively little discharge.

30th.—The wound is inactive. A considerable surface of the upper fragment lies exposed and necrosed. The patient's condition is on the whole good. There is an abscess over the back of the heel.

February 5.—There is a surface of bare bone to be felt at the back of the os calcis; poultice. The Cline's splints were removed, and a McIntyre's splint used instead. Much pain and swelling of leg; pus formed, and several openings were made, and drainage-tubes were passed.

14th.—A piece of bone came away this morning from the upper extremity of the lower fragment. Pus still shows a tendency to bag. Discharge copious and fetid.

17th.—McIntyre's splint removed, and a single Cline's splint was put on the outer side. Back is somewhat better; more comfortable.

20th.—It is quite evident that there is no reparative action going on, whilst the tissues, which at first gave support, are becoming thinned by disintegration, and formation and infiltration of pus. The bedsore, though somewhat better in appearance, leads down to the surface of the sacrum. The condition is so grave that it is decided to amputate as soon as a little extra feeding and stimulation have been tried as a means of improving the strength.

24th.—The leg was amputated to-day under the carbolic spray. The flaps were semilunar—the upper by incision from without inwards, and the under one by transfixion; but the muscles were cut across on a level with the osseous section. Vessels tied with carbolised catgut; wound dressed with carbolic dressings. The patient improved in health, and the back also improved. The flaps did not look very healthy for some time, and there was a threatening of ulceration over the anterior edge of the extremity of the tibia. Swelling behind thigh. The stump eventually did very well. The swelling subsided in the thigh, which was bandaged. Patient is now (May 7) greatly improved in health, and gets about freely on crutches.

Case 2.—*Chronic Disease of the Left Wrist-joint—Amputation of Hand by Teale's Flaps.*

Sarah F., aged 72, admitted March 15, 1872; discharged, May 25; days in hospital, 41. The disease commenced eight years ago, after a fall. The wrist was swollen and deformed; and a second fall still further injured it, till it became as bad as it is now about six years ago. The hand is flexed almost at a right angle on the forearm, and the carpus is dislocated from the radius; the fingers are flexed; the hand is drawn towards the ulnar side; the wrist is slightly movable, but not without pain; the fingers cannot be flexed; styloid process projecting; skin tense and shining. Three sinuses on the back of the hand, and all lead to bare bone.

On the 27th Mr. Wood, under the carbolic spray, removed the hand, doing a Teale's amputation, the bones being divided about an inch above the wrist-joint. The stump was then dressed with the greatest care by Professor Lister's method.

On April 4 the dressings were removed, and flaps were found all sloughed, and the wound very fetid. The wound was brought together by strapping. There was a great deal of discharge, and some more sloughing, with hæmorrhage on two occasions; tendency to burrow; poulticed. The matter which was burrowing burst out on radial side of forearm, about mid-way between the stump and elbow; charcoal and linseed poultices.

May 23.—The stump, which has progressed very slowly, is now almost quite healed. The bones, however, owing to sloughing of the flaps, are only fairly covered. Health improved.

Case 3.—*Strangulated Inguinal Hernia—Sloughing of Sac and Exposure of Testicle—Recovery.*

M. W., aged 52, admitted April 14, 1872; discharged, June 22; days in hospital, 69. Cure, apparently radical; truss worn. Suffered for last twenty-six years from large inguinal rupture on the right side; generally reducible on lying down, but could never be completely kept back by means of a truss. On admission was in a very weak condition; had vomited freely, and all the efforts made at reduction were unavailing.

Mr. Wood in the evening proceeded to operate. The tumour was very firm, and on opening the sac a large mass of omentum protruded. This being unfolded, a knuckle of intestine was found, in a very dark condition. The stricture was divided, to enable the intestine to be reduced, and the vessels supplying the protruded omentum, three or four in number, were separately ligatured, and the mass cut off. (The omentum was in parts adherent to the sac, and could not therefore be reduced.) The sac was then stitched up, and attached to the omental stump by four sutures, so as to secure, if possible, occlusion of the canal. An abscess formed in the sac, and had to be opened, and a drainage-tube was passed. A slough formed, which has exposed the testicle, which protrudes. Retained in position as far as possible by strapping. The abscess was poulticed. The ligatures came away on the 29th.

May 23.—The wound from the operation is now healed. The testicle is still exposed, but does not protrude so much as before. No tendency of the hernia to come down on coughing.

June 22.—There is still a slight wound on the right side of the scrotum, but the testicle has assumed its proper position, and is almost covered in; does not interfere with application of a truss. Discharged to-day.

Case 4.—*Necrosis of Superior Maxilla following Cancrum Oris.*

Henrietta M., aged 7, admitted May 8, 1872; discharged, June 25; days in hospital, 48; cure. In consequence of a severe attack of cancrum oris, this child has since that attack suffered from a very fetid discharge from the mouth, and foul breath. The angle of the mouth on the right side is much

dragged upwards and backwards by a band of adhesion, the result of the healing after ulceration. The band is very firm, and the alveolar edge of the superior maxilla is felt to be bare from the canine fossa to the last molar.

May 17.—Under chloroform Mr. Wood easily removed an irregularly shaped piece of bone by slight traction with the sequestrum forceps. No hæmorrhage.

The child did well; the fetid discharge and offensive breath ceased, and granulations rapidly sprang up, filling in the fossa left by the operation. The distortion of the mouth, however, remained.

On June 4 the adhesion was divided, and the soft parts were freely dissected up from the bone, so as to free the angle of the mouth, causing, however, a raw surface of a somewhat triangular shape. Mr. Wood then dissected up a flap of mucous membrane of corresponding shape from the lower lip near the angle of the mouth, and, turning it up, attached it so as to cover in the raw surface, using two wire sutures. The mucous membrane adhered perfectly, and the aspect of the face immensely improved. The mouth is very nearly symmetrical.

FORTIETH MEETING
OF THE
BRITISH MEDICAL ASSOCIATION,

HELD AT BIRMINGHAM ON AUGUST 6, 7, AND 8, 1872.

THE PRESIDENT'S ADDRESS.

By ALFRED BAKER, F.R.C.S.,
Senior Surgeon to the General Hospital, Birmingham; President of the Association.

AFTER congratulating the Association on its increase and prosperity, Mr. Baker continued, and, giving them a warm welcome to Birmingham, usefully devoted a short time to the mention of certain local peculiarities which affect the health of the inhabitants:—

Situated at the north-western extremity of the county of Warwick, forming most probably a part of the old forest of Arden, the town is built on the eastern slope of three undulating hills, on the banks of two streams, the Rea and the Tame, and is one of the highest towns in the kingdom. All the approaches are by ascent, excepting that from the west, where the highest point of the borough is reached. This spot, at the top of the Hagley-road, is 617 feet above the sea-level, whilst the lowest point, at Saltley, on the east, is 288 feet. Between these extreme points, the ground-level of St. Philip's Church, in the centre of the town, is 462 feet, and that of King Edward's School, in which we are assembled, is only 30 feet lower. The absence of any dominant hill surmounted by a lofty public building prevents these elevations from being realised at a glance, but the height and the undulations in surface may be inferred from the fact that most of the streets pursue a diagonal course so as to lessen the declivities.

The ground is naturally poor, in an agricultural sense, and consists of sand, gravel, and clay. The substratum is of new red sandstone, which passes from the river Tees southward to Birmingham, and thence northward to the Mersey.

The southerly and oldest part of the town, running from High-street to Deritend by a deep descent, is the lowest and the dampest portion. It is here crossed by the river Rea, and has much clay in the subsoil; this clay extends up the valley of the stream to Sparkbrook, and ceases only at Moseley, which has a higher level and a sandy subsoil. From the conformation of surface, and the character of the ground, it is clear that nature has supplied every requisite for surface drainage into the streams, and for the rapid percolation of storm-water through the porous subsoil: hence floods are rare.

In order to render the drainage of the town more perfect, a system of deep artificial sewers has been designed and nearly completed. By means of these channels, all sewage is conveyed to a spot at the extreme east of the borough, three miles from its centre. At this outlet the mains are large in dimensions, are placed five feet above the level of the top-water of the Tame, and have storm-outlets to aid in carrying floods into the river. These sewers, constructed according to the dictates of modern science, are on the gravitating principle, so as to require neither machinery nor steam-power. The levels are so arranged between eleven (the minimum) and forty-two feet (the maximum depth) as to insure a current that will carry refuse from the most distant part of the borough to the outlet within the space of two hours. This rapid flow is said to prevent decomposition and the generation of foul gases in the sewers; but pedestrians in close weather may complain that unsavoury odours occasionally escape through the ventilators into the roadway, and that some contrivance for insuring the conveyance of these gases to a higher level, where they would be speedily diluted, oxidised, and diffused by the upper currents of air, would be very acceptable, and must be contributory to health. There is one part of the borough, the Small Heath District, which is unconnected with this system of drains. It is on the south side, consists of 930 acres of ground, of which 750 are under cultivation, has a population under 6000, and has a daily dry weather flow of sewage of 214,000 gallons, which passes into a tributory of the river Cole.

The area of the borough, 8420 acres, when divided between 350,164 inhabitants (the estimate of the last census), gives upwards of 124 superficial square yards to each person—an allowance that probably accounts for our freedom from typhus, as fully as the absence of marshes and bogs explains our immunity from ague. The distribution of this area, however, is not so equal as might be wished for sanitary purposes: the space per head varies in the different wards from 695 square yards in Edgbaston, to 31 yards in St. Martin's Ward. Seven other wards yield a smaller superficial area than 100 square yards for each inhabitant. The density of population in the central and older parts of the town may be comprehended, but that districts which have been built since the importance of sanitary rules has been known should have been allowed to exceed the limits of health in house-accommodation, is only to be attributed to the anomalous position of a corporate body which, whilst endowed with powers to levy rates and govern the town, has no authority to curb the crude and ignorant designs of the building speculator, who, in order to secure a large immediate return for a small outlay, is at liberty to construct a court of scanty surface, approached by a narrow alley, with rows of sheds called houses, built back to back, so as to support each other: defying through ventilation, yielding scanty space for the admission of pure air, and as little for the escape of that which has been exhausted by respiration.

From these courts, possessing not a single sanitary attribute, containing open middens of faulty construction, arise fetid exhalations that pollute such air as enters the still enclosure; the leakage from the ash-pits through the soil into the wells from which water is drawn gives rise at times to an excessive mortality from scarlatina, typhoid, diphtheria, diarrhœa, and other preventible diseases of a like type. Let contagion enter a space thus circumscribed, and the result may be safely predicted.

For the tenants of these defective courts the only airing-grounds are the streets, which fortunately present many open spaces in various parts. Well might Dr. Greenhow declare that "more than half our annual mortality results from diseases which prevail with a very great range of difference in proportion as the sanitary circumstances are bad or good," and that the mortality from preventible disease in certain districts "raises the death-rate of the whole country 33 per cent. above the death-rate of the healthiest part."

The powers wanted to suppress this evil need not be vexatious. They are required only for the protection of the poor, embrace the simple questions of ventilation, space, and sewage, and might be safely dictated by a health officer, aided by the borough surveyor.

Before quitting this part of my subject I must briefly refer to the disposal of our sewage, of which a large portion has been hitherto discharged into the river Tame. It is easy to accept and adopt an alliterative cry like that of "Rainfall to the river, sewage to the soil," and the application of the principle, if possible, would promise an inestimable advantage. The Town Council of Birmingham has attempted to carry out a modification of this scheme, by seeking power to enable them to purchase land for the disposal of the fluid sewage by "intermittent downward filtration," and the conversion of the more solid matters into an element of fertility to the land instead of danger to its occupants. This intention has been thwarted temporarily by the inconsiderate vote of a small majority of our legislative assembly, but the question cannot be thus summarily settled; it must again, and speedily, enforce Parliamentary attention; and, unless the value of a few acres of land is to be recklessly staked against human life, the convenience of the few must yield to the urgent necessities of the many.

Whilst sympathising with the Corporation in their efforts

and their defeat on this question, there is one marked and culpable defect in the official appointments of this borough which demands severe animadversion. The imperfections that have been mentioned could not have existed unremedied had there been a well-qualified medical officer of health possessing technical knowledge of hygienic rules, capable of guiding the deliberations of the Council on this subject, and of framing comprehensive plans for the prevention of disease and the promotion of health. Such an officer, rendered independent by an adequate salary, freed from the cares of medical practice, exclusively devoted to sanitary science, and armed with power to exact information and aid from all the executive officers of the borough, would secure to the inhabitants that skilled care which they have a right to expect, would represent faithfully the views of our Profession, and would be competent to contribute to those discussions between the "associated officers of health," which have materially advaneed our knowledge of scientific hygiene. The cost of such a man would be more than compensated by a diminished rate of illness and pauperism, a more steady capacity for labour, and a smaller ratio of crime. All of these points materially affect the financial expenditure of the borough.

By the Public Health Bill this defect will be remedied, and the town will be placed beyond the reach of amateur legislation, which has too often resulted in unscientific experiments, with a population as the *corpus vile* for their trial.

A sound, highly educated man should be selected from the members of that Profession which has supplied those philosophical "Privy Council Reports" of the sources of disease and death that have guided our imperial Government, have formed a magnificent contribution to sanitary science, and have tended to make popular the broad rules of hygienic knowledge. This course, the only proper one, will rescue our corporate body from the humiliation of seeking, as it has done, the gratuitous guidance and opinions of their medical fellow-citizens, whose special learning has been acquired by devoted labour and technical education, which are estimated in other and ordinary transactions by an equivalent money value.

The large surface over which Birmingham is spread, and which has led to its being declared by Mr. Rawlinson "the most openly built town in the kingdom," contributes materially to its healthiness. Our streets are of fair width, excepting in the old town, in the main thoroughfares of which efforts to approximate them to our present requirements will be obvious to all. The buildings are low, rarely consisting of more than three or four storeys, and therefore offering little obstruction to the currents of air, with which an elevated table-land is sure to be visited. In some thronged business parts, such as High-street and Bull-street, the increasing value of land and the necessities of trade have led to more aspiring erections, but they have not yet reached the height of the Manchester warehouses, or obscured the sky like the buildings in the old part of Edinburgh. The streets are macadamised and cleanly, being kept in good condition after they have been accepted by the Corporation. Recently formed streets in the suburbs are often defective in drainage and fouled by refuse. The danger from this source may be conceived when I mention that a thousand houses are annually added to the existing number.

The climate is dry, having a smaller rainfall, and one-third more of dry days than are experienced in Lancashire.

Four parks, forming admirable breathing spaces and yielding abundant opportunities for rational amusement and exercise, are opened to our people. On the eastern side of the borough, Aston Park, consisting of forty-three acres, has been rescued from the grasp of building societies by the combined subscriptions of the people and of the Corporation. The Saltley Park, presented by Sir C. B. Adderley, comprises ten acres. On the west Calthorpe Park, of thirty acres, has been the only recreation ground until lately; but within a few months an estate of fifty acres, called Cannon Hill, rurally situated, well timbered and watered, with a varied surface, has been presented to the town by Miss Ryland.

Few of our manufacturing processes are directly detrimental to health. The entire class of grinders, metal and wood polishers, and moulders are exposed to pulmonary irritation from the inhalation of dust, whilst "wet grinding," as it is called, superadds damp clothes and wet feet. A few suffer from heat only, as the lacquerers and glass-blowers. The majority of our workpeople, however, are more influenced by constrained positions whilst at work, by defective ventilation in crowded manufactories, and by atmospheric vicissitudes, than by any special risk or danger. For some of these evils remedies have been provided by the employers of labour; but self-will and intractability on the part of the mechanics at times render these precautions useless.

There is no cellar population. As a broad rule, every family has its own dwelling-house, so that excessive overcrowding, with its consequences, is avoided.

These circumstances probably explain the favourable records of mortality, which have scarcely varied during the last thirty years, and have been a fraction below 25 per 1000.

A supply of pure water has been called a "natural right," and Professor Gairdner says that "wherever water has become matter of private sale or barter, there has been a dereliction of duty on the part of the community as represented by the local authorities." It appears to me that the means of cleansing and purifying and lighting should be secured to every dwelling-house. To the poor these adjuncts to health and comfort are necessities to moral and physical wellbeing. An irreparable mistake was committed here when the local authorities, evading or failing to perceive their proper responsibilities, permitted duties that should have been municipal to escape them, and allowed the control and the profits of the water and gas supplies to pass into the hands of private companies.

In 1828 the late Dr. Darwall declared the water-supply of the town to be defective. Drawn from springs and wells, the best water was hard, and contained two or three grains of muriate of lime in the pint. Wells in the vicinity of manufactories were impregnated with copper and tin, so as to be nauseous and sometimes emetic; and the majority of waters near the centre of the town contained nitrates from sewage pollution. For domestic purposes the inhabitants at that time were chiefly supplied from pumps in Digbeth, which were found by the late Thomas Southall to contain seven grains and a half of the nitrates of lime and potash to the pint. Hence you will probably agree with me, that the time was ripe for any scheme that promised potable water to a thirsting population.

The first service of our Waterworks Company was laid on in 1831, the supply being drawn from the river Tame. Much prejudice existed at first against the water, and this may have been preservative; for in 1832, when cholera ravaged Wolverhampton, Willenhall, Walsall, Bilston, and other places through which the Tame flows, and from which it receives drainage, the Water Company supplied only a small district of the town, and that chiefly for manufacturing purposes. It is, however, a curious fact that, although the sewage of many populous places pollutes the stream through its tributaries, such is the purifying power of running water in oxidating and rendering innocuous their refuse, that at Hamstead, some five miles below the last sewage entry into the Tame, fine and healthy trout are frequently taken by the angler.

As the advantage of a free and constant water-supply became felt, the Company obtained additional powers, and wisely excluded rivers that, from running near towns, may be contaminated by sewage matters. Discarding the Tame, their supplies are now drawn from streams passing through purely agricultural districts (notably from the Sutton Basin) and from Artesian wells bored into the new red sandstone, which promise an abundant supply of pure, well-filtered water. It has been roughly estimated that nearly two-thirds of the town are thus supplied, and that the daily consumption amounts to upwards of eight millions of gallons, or between thirty and thirty-five gallons per head.

Whatever criticism may be passed upon its purity, the water may be drunk without fear. It is vastly superior to that of the old wells, the aëration of which was so pleasant to the palate as to conceal its impurities. Our borough analyst, Dr. Hill, has declared it to be superior to the standards accepted by the Brussels Congress and by Dr. Parkes.

One of our greatest evils is the smoke issuing from the tall chimney-stacks of our manufactories, and perceptible for some miles beyond the town. It is curious that, whilst solemn predictions are issued as to the exhaustion of our coal-fields, and the approaching substitution of some other fuel, whilst the press dispenses Jeremiads on the increasing cost of coal, this wasted carbon is permitted to obscure the sky, to fill the air with fuliginous impurities, and to return to us as smuts for the encouragement of the laundress. No scientific mechanician impressed with the motto "*ex fumo dare lucem*" has yet invented a perfect machine, acceptable to employers of labour and of moderate cost, by which this waste fuel may be utilised without the aid and imperfections of a human stoker. . . . In archæology we have few attractive remains. . . . It has been well said that this town "is the most remarkable centre of manufacturers of metal in the world." "Whatever metal *can* do, Birmingham will make it do—from a pin's head

to a steam-engine, from a pewter pot to a copper boiler, from a gilt button to a brass bedstead." Certainly the metals, precious and base, are here, by mechanical agencies or manipulative skill, made to assume every shape—from the delicate ornament vying in capillary tracery with gossamer, from the frail threads of wire that bind our island to distant continents and establish intercommunications incredibly rapid, to those monstrous masses of metal which span the chasm or rushing stream. Here you may witness the chemico-galvanic process of metallic deposit, conceived and perfected by one of our professional brethren, the late Mr. Wright, and worked by Messrs. Elkington and Mason.

One noiseless craft to which I would call your attention is the papier maché trade, which is almost peculiar to Birmingham. Derived first from India and China, it was introduced here more than a century ago by Mr. Taylor, a large and ingenious employer of labour, for the production of snuff-boxes and trays. So wide is its applicability, that it is now used, not only for knick-knacks, but for the construction of such massive domestic articles as sofas, bedsteads, sideboards, and chairs. The prepared surface of this paper-pulp receives a high polish, and is capable of such complex decoration by mother of pearl, artificial gems, gold, and painting, as to conceal its texture, and render the material unrecognisable.

It has been too much the custom to consider Birmingham as a hive of busy artisans not over-refined—a nest of metal workers so expert in imitative art, and so little troubled by qualms of conscience, as to be constantly engaged in the production of "lacquered shams and bad halfpence." It is lamentable to see such accusations made in London newspapers whenever our population disagrees in view with a literary Jupiter, or offends the delicate susceptibilities of some writer of political and other "leaders." To such men it is useless to suggest that a community cannot fairly be saddled with the sin of an individual. . . .

Boulton's time was the Augustan era of Birmingham. The names of Boulton, Watt, Withering, Priestley, Galton, Keir, and Berrington are sufficient to prove the assertion. . . .

In this town, also, Dr. Roebuck introduced the use of the lead-chamber in the production of sulphuric acid as a substitute for the two old methods of burning sulphur under bell-glasses, or distilling sulphate of iron at red heat. By this improvement he rendered the process continuous, increased the power of production, and reduced cost. The value of his discovery may be estimated, when it is remembered that sulphuric acid is essential to all the metal trades, and that without it the present gigantic works for the production of alkali and artificial manure could not exist. . . .

The two subjects, politics and theology—inseparable in this country—have rarely borne a free discussion. The *odium theologicum*, once fulminated, is antagonistic to human progress. To this may be ascribed the terrorism which prevailed in 1791, when Priestley, the philosopher, chemist, and scientific inquirer—when Baskerville, the greatest printer that England has produced, the founder of the most perfect type known, whose edition of the Bible is sighed after by bibliographs, whose exquisite productions of the ancient and modern classics, and of William Hunter's work on the uterus, are considered to be treasures of the typographic art—were, with other citizens who did not conform to the views of the mass, persecuted relentlessly by the destruction of their houses and property, and they themselves narrowly escaped the *auto-da-fé* of a popular, though unreasoning, inquisition.

The medical annals of this town furnish a full list of distinguished men. The philanthropic Dr. Ash, who founded the General Hospital, earned the highest local fame. Failing health caused his removal to London, where he was made a Fellow and Censor of the Royal College of Physicians. Dr. Withering, his immediate successor, was widely known by his botanical publications. He lies in the parish churchyard of Edgbaston, close to the Hall in which he passed many years of life. Dr. Male, highly esteemed as a sound physician and most honourable man, rested his literary fame upon his "Juridical Medicine." To say that Dr. Edward Johnstone was a highly cultivated physician; that his brother John—your President in 1834—was an accomplished scholar, an intimate friend of Dr. Parr, with whom he sympathised in classical lore; and that Dr. James—the President of your last meeting here—won esteem by his acquirements, his courtesy, and his kindness, would be a work of supererogation to the older members of this Society.

Whilst paying merited honour to our physicians, it is due to the surgeons of the town to state that the literature and practice of our art have been ably represented by those who have preceded us. George Freer, a surgeon to the General Hospital, was the first who successfully applied a ligature to the external iliac artery for the cure of femoral aneurism, as suggested by Abernethy.

From the study of this and other cognate cases, his pupil, the late Mr. Joseph Hodgson, probably derived the bias that led to that admirable memoir, "On the Diseases of Arteries and Veins," which obtained the Jacksonian prize of the Royal College of Surgeons, became a surgical authority, and secured for him that character for sagacity and judgment that he subsequently enjoyed. More recent Jacksonian prizemen may be named. My colleague Mr. Crompton earned this distinction by an essay on "Diseases of the Tongue"; the late Frederick Ryland by a valuable monograph on the "Throat and Larynx"; and Mr. John Clay by a treatise on "Ovarian Disease." It is to be regretted that the essays of Mr. Crompton and Mr. Clay have remained unpublished.

Having referred thus briefly to the older officers, who were necessarily connected with the General Hospital, as the only large medical charity in existence, I must now be permitted to say that examples nobly set have been zealously followed, and that a variety of institutions, secondary perhaps in scope, but paramount in popular interest and sympathy, have been established amongst us. The Queen's Hospital, founded by Wm. Sands Cox, in connexion with the Queen's College (which it was his dearest object to convert into a great Midland University), graced by the favour of Royalty, and approaching in magnitude to its elder sister, competes with it for support. The General Dispensary; the Midland Eye Hospital, founded by Dr. De Lys and Mr. Hodgson; the Hospital for Sick Children, so eloquently advocated by Dr. Heslop; and a Special Hospital (recently established) for Women—appeal, and not in vain, to the sympathy of contributors. A sanatorium is in course of erection, designed to furnish ample space, the most perfect hygienic arrangements, and life-giving air from the breezes that play over the hills of Bromsgrove Lickey. This will form an adjunct to all the medical charities, and will be suited to invigorate frames that have been exhausted by disease, and are unfitted to encounter the evil influences of a close residence in a polluted atmosphere.

Under the auspices of my friends Dr. Fletcher and Mr. Kimbell, an institution has been founded at Knowle for the treatment of imbecile children upon the principle of the Earlswood Asylum. From the adaptation of a cottage to the wants of a few inmates, they have so completely established the benefits that may be conferred upon these piteous claimants for human care and benevolence, that the sympathy and co-operation of the wealthy have been secured, and a noble building has been commenced, which promises to administer adequately to our local necessities.

You will share with me in an expression of deep regret that personal illness has prevented our associate Dr. Fleming from delivering the Address in Medicine, and from taking that prominent part in this meeting which he was invited to assume by your Council, and for which his literary and practical acquirements and his known accuracy so peculiarly fitted him.

THE ADDRESS IN MEDICINE.

By SAMUEL WILKS, M.D., F.R.C.P., F.R.S.,
Physician and Lecturer on Medicine at Guy's Hospital; Examiner in Medicine at the Royal College of Surgeons, etc.

In the first place, I shall declare to you that I have no conservative feelings in respect to doctrines and practices in our Profession which have long gone by, but have a strong faith in progress. As everything having a scientific basis must naturally grow better and better, so, I take it, must Medicine. But it becomes often very difficult to distinguish between absolute truth and the offspring of the human brain. The future professor may be unable to decide, when studying our literature, whether certain diseases were prevailing at certain times, or whether they were merely fashionable complaints of the hour; he may at one time read of fibroid phthisis, at another of ataxia; and he may wonder whether ulceration of the womb, which was once so common, and has now given way to displacements of the organ, shows how disease flows in waves or merely represents the undulations of the medical mind.

With regard to our general notions of disease, I consider that, during the last few years, our opinions have made a rapi

advance. I naturally take the period during which I have been in the Profession, and reflect upon what was implanted in my own mind by lectures and by books twenty-five years ago. Of course it is necessary to remember that, as our ideas are matured, there is a great liability to transfer one's own earlier and cruder notions to the teachers whom we misunderstood; but, allowing largely for this explanation, I cannot but think that the last twenty or thirty years of pathological progress must have made material alteration in our general opinions regarding disease. For example: A common method of teaching was by the description of acute inflammation occurring in healthy subjects; but the disappointment I felt, in common with other students, in not seeing these cases in the wards of the hospital, soon convinced me that something was wrong. We saw abundance of chronic disease, occasionally an acute affection; but this was generally patched on to some other chronic disorder; so it soon became evident that, with the exception of acute affections of the chest due to vicissitudes of weather, an acute inflammation occurring in a healthy person was of the rarest possible occurrence. Morbid anatomy has been mainly instrumental in making the discovery; and, in fact, this could not have been reached without its aid, since apparently sudden and fatal illnesses were constantly occurring in persons of previously good health. It is true, for example, that persons died of acute peritonitis, and, without post-mortem examination, the cause was attributed to that universal evil—cold; but inspections have now invariably disclosed some old and long latent mischief in an organ which lighted up the fatal attack. To suppose that a healthy person can suddenly have an acute arachnitis or acute peritonitis, may perhaps involve an actual pathological absurdity. Even the acute inflammation of the chest occurring in healthy persons under the aggravated causes of wet and cold is far less common than is generally supposed. When—many years ago—a paper was read at a medical society advocating the early treatment of acute disease lest it should become chronic, I took the opportunity of remarking that an opposite suggestion might have been with more propriety advanced—viz., the advantage of arresting chronic processes lest they should become acute. There are far more acute diseases carrying off chronically diseased people than there are chronic diseases which have had their origin in acute affections. What we might more advantageously direct our minds to, are the insidious and slow-working changes in the organs and tissues, to see if we can grasp these in their beginnings and check them at their source. What we are too often asked to do, however, is to arrest an acute inflammation, which is an evidence only of the beginning of the end. Hippocrates himself says, "Diseases do not fall upon men instantaneously, but, being collected by slow degrees, they explode with accumulated force." I believe, in teaching, there is no more important fact to impress upon the minds of students than that diseases come insidiously and slowly; and the circumstances which induce them are those most worthy of attention. When the older text-books spoke of attacking acute disease in a healthy subject, it appears to us almost as Quixotic as making a thief suddenly honest, or making the French a tranquil people by a new form of government.

In studying how various morbid processes are produced, several circumstances have to be considered, more especially the mode of life which favours them, and the original temperament of the individual, which renders him more susceptible to certain agencies than to others. A question arises whether these predisposing and exciting causes of disease are not the same. It seems remarkable that, with the production of gouty men like Lord Palmerston, of whom the country is for the most part proud, we should develope, also, the individual inclined to consumption. It may be that such persons are overbred. They certainly are inclined to die early, but often not before they marry, and propagate their kind. If this were not so, it is probable that the sickly race would be kept under, and, in a more natural state of society, would actually die out—that is, where there were no doctors; for the artificial aid so strenuously given to keep alive the ailing individual tends to preserve its existence. Therefrom arises another large question which must constantly obtrude itself upon the mind of the medical man—Whether he is not interfering with the natural laws of the world. I confess I do as others do—shut my eyes to these speculations, and do that duty to my fellow-creatures which is closest before me—attempt to relieve their suffering; yet it cannot be gainsayed that, if the Darwinian doctrines be in any way true, they are applicable to the *genus homo* as well as to any other race of beings; and that we, by preserving the puny, the wretched, and deformed, are assisting in the degeneration of the race.

Some philosophers, when contemplating the scarcity of individual life compared with the myriads of germs which are destroyed, have seen in epidemics a mode by which population is kept under, and have a kind of belief that Nature is not to be cheated of her victims; for, if man should devise the means of escaping from one plague, he will be overcome by another, although it appears under a new guise. We cannot, however, concur in this speculation, disagreeing, as we do, with philosophers that the sickly are specially selected for removal. I shall presently show that this is not the case.

I have already said that the body has hereditary tendencies to morbid changes of special kinds, rather than to mere accidental diseases, and, therefore, that the various tissues are liable to their own peculiar degenerations. When we speak, for example, of a gouty man, we imply much more than his liability to an attack of arthritic trouble; he may have, or not, a *materies morbi* in his blood, but he is liable to temporary and organic derangements of a given kind—such as granular kidney, diseased heart and bloodvessels, articular inflammation, and gravel. In tuberculosis, in like manner, there is a tendency to changes in the epithelium of the cutaneous or mucous surfaces, whether bronchial or intestinal. In the nervous temperament the nervous system is liable to be thrown into unstable equilibrium. But not only in hereditary, but in acquired diseases we find that the morbid changes are of a particular kind, and that special organs and tissues are also affected. Thus in chronic alcoholism we find a tendency to fibrous thickening of the tissues, whether these be in brain, liver, or kidney. We find, again, degenerations of a particular kind in syphilis, and in lardaceous disease, which is sometimes its sequel. From other causes we may find the whole of the bony skeleton diseased, or the lymphatic glands, or the skin. Thus, as before said, it is but a short-sighted view to see special organs only affected by disease, rather than a general morbid condition affecting particular tissues, and occurring under given determinate circumstances.

Whilst I am on this subject, I must say a word in reference to another piece of pathology, on which a dissection of the dead can alone throw a light, and one which ere this (I own a personal shame) ought to have been perfected; it is akin to the matter of which we have been just now speaking. If it be true that the morbid changes are found progressing through tissues rather than affecting particular organs, as it were, by accident, it follows that these different tissues have their own special morbid changes, and none others. What we ask ourselves, therefore, is this question—What are the morbid changes to which each tissue is liable? Now, it is constantly assumed that degenerations may occur, and new growths of all kinds spring up spontaneously in every part of the body, but this is certainly not the fact. If we take, for example, the list of diseases framed by the College of Physicians, which is in all your hands, it would seem as if there were certain morbid states—such as inflammation and its consequences—as well as various morbid growths, which may attack in turn every part and tissue of the body. But is this really so? The morbid anatomist ought long ago to have answered the question; and I believe, had my own attention been directed to this subject earlier, the amount of material passing under my hand would have been amply sufficient to have afforded a satisfactory solution to it. I will explain my meaning: suppuration of the lung is rightly not regarded as a stage of idiopathic pneumonia; consequently, if an abscess be found in the lung, we know that the seeds of it are brought thither from a distance, and we find the source of the pyæmia in some other part. Cancer, again, when found in the lung, has, in my experience, been secondary to cancer elsewhere, and thus we suppose the seeds of it have been thereto carried. Intra-thoracic cancer may be primary, but generally commences in other tissues than those of the lung. Then, again, as regards other classes of tumours—as fibroid, myeloid, osteoid, etc.—they are invariably found existing there as secondary deposits. Now, if what I say be true, the primary morbid changes in the lungs are strictly limited; the epithelium may produce well-formed cells, as found in pneumonia, and ill-formed ones, as met with in the chronic degenerations, but beyond this the lung may be incapable of alteration. The same with other organs; the kidney undergoes certain limited changes, as seen in nephritis, but these do not terminate in suppuration, suppurative inflammation being always secondary; the liver also has certain definite changes, beginning either in the cells or the areolar tissue. The stomach has its own special changes, and is incapable of producing many new formations; as, for example, tubercle. It is thus probably very far from being true that abscess, tubercle, cancer, and other growths occur in all parts

and tissues of the body; but, on the other hand, that all these have their favourite or perhaps special seats, and when met with elsewhere must be regarded as secondary formations. It is remarkable how surgeons have always tacitly acknowledged this fact; for, when meeting with a malignant tumour on the surface of the body, they have seldom hesitated to operate from the fear of any internal complication, since their experience has taught them that the growth on the surface has been primary. On the other hand, the teaching of the surgeon with regard to inflammation and its consequence, as occurring on the skin, having been made applicable to the internal organs, has been the cause of a long series of pathological errors. A knowledge, therefore, of the special changes to which each tissue is liable is vastly important; the materials for furnishing us with the knowledge are always at hand, and the possession of it must be near.

I must say yet one word more in favour of the study of morbid anatomy—its necessary aid to diagnosis. No amount of clinical observation or acumen could enable the medical man to form an opinion of the nature of many cases without an acquaintance with the diseases which post-mortem examinations alone can reveal. This implies that symptoms do not carry with them the interpretation of their cause; that symptoms are not, in fact, pathognomonic. The time has not yet arrived to enable us to associate symptoms with certain definite lesions, and we must be content at present to act on the doctrine of probabilities. When a cancer in the chest will produce the same symptoms as an aneurism, or an arachnitis the same cerebral symptoms as a diseased kidney, our diagnosis must rest on other considerations than symptomatology, and we are led to guess in one direction rather than another from extraneous facts. A slight sore throat in a boy at school where the epidemic of scarlatina exists, suggests this disease, not from the symptoms but from a knowledge of its presence in the house. Diagnosis being thus made by considering the probabilities in favour of the existence of one disease rather than another, in order to form a judgment a thorough acquaintance with all diseases is necessary, and the man who has the largest knowledge of morbid states is he who will most likely arrive at the surest conclusion. It is clear, then, that mere acumen at the bed-side is not sufficient; the quick eye and ear may discern all that can possibly be learned, and yet the interpretation be wanting, simply because the observer has not had a sufficiently extensive knowledge of all the phases of disease by which he can explain the symptoms. This fact I have constantly observed. Therefore, if it be true, as I think it undoubtedly is, that that man forms the best opinion of a case who has the widest experience of disease, it follows that not only is a study of the living necessary to diagnosis, but also that of the dead. Diagnosis is made up of two parts—the symptoms and their interpretation. The first is gained by clinical observation, the second by a knowledge of all the diseases to which the human body is liable.

I have said that, with the exception of sudden attacks of inflammation in the chest arising from vicissitudes of climate, nearly all the morbid changes found in the body have been insidious and slow. These are the diseases going on within, due to causes ever operating upon us quietly, or inherited from our fathers. There is, however, an altogether different class of affections, arising from causes which attack us from without. To these we are all liable; they are the specific, contagious, and epidemic disorders. The difference between them appears to be marked, and their peculiarity arises rather from the nature of the external agent than from the patient or recipient. To many minds the phenomena attached to the development of each of these diseases are so uniform, that they see in every individual example the offspring of a common stock; and they are strengthened in their view by the fact that the virus taken from a particular victim will grow and spread like a seed from its parent plant. They believe, therefore, in the possibility of stamping out contagious diseases, just as they might exterminate a particular animal or tree. There are other persons, however, who, whilst believing in the specific nature of these diseases, yet hold that they can be spontaneously generated—as, for example, typhus, from the crowding together of many people; typhoid, from decomposing vegetable matters; scarlatina, from decomposing blood; and, according to Miss Nightingale, small-pox, under various conditions of foul air. There are, however, yet others, who, believing that specific causes are in operation, yet do not hold that they are necessarily propagated or generated in the animal body, but have an independent existence outside the human frame in the form of vegetable germs—for example, the element of cholera is, according to them, a rice fungus, that of measles a fungus of another species, and the virus of typhoid a third. If the analogy at all holds good between the phenomena of these diseases and those of animal or vegetable life, the conclusions would rather be in favour of each particular example of the disease having its origin in a parent source; and thus, as in the case of every weed in our garden, we assume that a seed has been planted in the soil, and leave it to others to prove its spontaneous growth, so, from analogy of reasoning, in the case of specific contagious diseases, we would leave the *onus probandi* to those who deny the more obvious explanation, and seek for another in the doctrine of spontaneous generation. Whatever may be the view we take, if we regard these diseases as in any way likely to have been produced by specific organic particles rapidly growing in a favourable soil, we cannot regard with any satisfaction the doctrine of elimination. According to the generally received views, the virus, as that of small-pox, being inserted into the system, begins to grow and propagate in the soil until the process of development is complete, it may be to the actual destruction of the soil in which it has flourished. I cannot see anything like elimination in this, but rather a rapid and active growth destructive in its progress. If the soil be not fitted for it, the germ may wither, but the abortion seems by no means due to any eliminative powers in correspondence to the youth or strength of the patient, but to an entirely different class of circumstances. I confess, if I knew the method of killing the virus at its source, or staying its growth, I should be inclined to do so rather than foster its development; and, if it be true that these specific diseases are due to the introduction of an organism into the blood, then all must agree that this treatment is rational. A ringworm grows and grows wherever the soil is propitious; the itch insect spreads over the body, and the hydatid often swells until its host is destroyed. Cancer cells divide and propagate until they have killed their victim which has supplied them with nourishment; and the germs of small-pox will do the same. In none of these cases do I see any special power possessed by the body which can be called eliminative. If the cause, then, of specific diseases be due to germs, and these should be shown, as in the supposed case of cholera, to be nothing but a vegetable fungus, the analogy between such diseases and the parasitic, as shown by the result, is complete. The specific diseases, then, afford another example of what is witnessed throughout all nature—that the life of one is dependent on the destruction of another. There is a constant struggle for existence amongst all living things in creation; they are all living on others whilst endeavouring to protect themselves, and man is not an exception.

In the case of parasites, it is clear that we have no inherent power to get rid of them, and all we can attempt to do is to destroy them by violence. If there be any truth, therefore, in the germ theory of contagious diseases, the treatment of them is clear—war to the knife. The analogy would not be so close if it were true that the weakly and the sick first became a prey to epidemic disease. This has often been stated by writers on social science, when conformable to their views; but facts are antagonistic to them. I have always taught the opposite, and can now speak with confidence since Dr. Walshe, in a lecture lately published, has expressed the same opinion. Many years ago, when reporting cases of fever, I said that I had never found any organic disease in those who had died of it, for it was not until typhus had broken out in the hospital, and after many years' experience, that I had an opportunity of seeing such a thing as a diseased heart in a person dead of fever. I think all members will bear me out in saying that it is amongst the youthful and vigorous that small-pox, scarlatina, etc., grow and prevail. From their own germ point of view these diseases delight in the young and healthy; and, in the case of artificial poisons or those introduced into the system by accident, I see no effort of nature to get rid of them. The kidney, like every other organ, has its own peculiar function, and takes cognisance of certain materials in the blood, and eliminates them; but it often seems to have no power to eradicate them from the system, for, in the case of lead-poisoning, the blood may throw them down in every tissue of the body, and there leave them.

Whilst on the subject of elimination, and the supposed efforts of nature to get rid of deleterious matters from the system, it might naturally be conjectured that, with the rejection of this doctrine, I should discard all such ideas as are conveyed in the terms, "conservative processes," and the "*vis medicatrix naturæ*." The supposition is right; and I would more fully have dwelt on the subject had not Dr. Bristowe so admirably treated it in the Croonian lectures lately delivered at the Royal College of Physicians. He has put it very clearly before us, how certain physiological laws exist which we can watch like other laws in nature, and see how they always act

in certain definite methods; further than this we have no right to go. We have no right to select a particular instance of a natural process, and declare that a conservative action is in operation, any more than choose another case and call the action destructive. The forces of nature go blindly on, heedless of results, and cannot be spoken of as if they were half-intelligent powers with benevolent or baneful objects in view. Such notions would show that we had not reached the true scientific method, but, according to Comte, were still in the metaphysical stage of thought, when external agencies were supposed to be ruling the world. If we once admit them into our nomenclature we are led into countless contradictions. If, instead of regarding the hypertrophy of the ventricle, in the case of obstruction of the bloodvessels, as a result of a simple physiological law, we speak of it as a conservative process, we are immediately reminded of the wrongfulness of the expression when we see this same conservative process causing the rupture of a vessel in the brain and killing the proprietor. Or, if we choose to call the blocking-up of the bloodvessels as they pass through a cavity in the lung, conservative, how are we to name the same process when it tends to the mortification of an organ, and perhaps the death of the patient? These laws are natural laws, and often not even strictly physiological; for where is the difference between the case of enlargement of the superficial veins when the vena cava is obstructed, and that of dirty water finding its way by the gutters when the main sewer is choked? If a conservative power presides in the one case, does it not in the other?

I might here remark that I believe it is only the suppression of theory, and keeping to facts, which has placed the Pathological Society of London in so eminent a position; and, to my mind, the more it has kept to dry morbid anatomy, the more successful has it been. Those who talk of grouping together facts, and speak of our dead pathology, can scarcely be aware of the material which is required before this can be done. How much do we know, I might ask, of the changes in the brain, spinal cord, and ganglionic system so as to associate them with living symptoms? The whole lies before us as an undiscovered country. A scientific treatment appears to me to require a thorough knowledge of disease to understand the meaning of the symptoms, and then to have a better acquaintance with the action of drugs. Why, look at the pulse; every one can feel a pulse and understand its indications, except some of those clear-sighted men with whom we sometimes meet, and who declare that it takes a lifetime to understand its significance. Think for a moment of the pulse and some of the more evident circumstances which must influence it, or, rather, regard it as the resultant of a number of forces variously combined; why, the machinery is far more complex than any you manufacture in this town. There is the ventricle itself, affecting the pulse by the force, number, and regularity of its beats; then there is the condition of the orifice; then of the blood-vessel, its size and elasticity; thirdly, the state of the channels into which the fluid flows; again, the receptacles beyond them, and their facility or not of receiving the current of blood; then there is the quality of the blood itself; and, lastly, the intensity of the controlling influence over all. That all these conditions, and even more, are at work, is seen by the varied tracings of the sphygmograph, the importance of which a distinguished physician of this town (Dr. Foster) was one of the first to recognise. Now, I apprehend a true knowledge of the pulse would be the facility of appreciating how any one of these conditions mentioned was at fault; and a scientific treatment would be the appropriate remedy for it. I consider the pulse as a case showing the difficulty in acting on scientific principles; for, supposing the sphygmograph should now enable us to administer appropriate treatment, it shows that my proposition was true before its discovery. My great objection to the idea of scientific therapeutics is, that it necessarily implies acquaintance with diseased action as well as the meaning and importance of symptoms. What, for example, is the scientific treatment of cholera? "To try and check the fatal discharge," says one; "To let it flow," says another. In the meantime, and whilst the scientific question is being solved, I consider it a disgrace to the Profession that we are not yet agreed as to the best hygienic methods under which the greatest number get well. What, again, is the scientific treatment of fever? This a few years ago would have been considered decided, if unanimity implied truth; for, amongst other rules, it would have been strictly laid down that, whilst the patient should have fresh air, he must by no means be chilled. This idea, however, seems to be a mere phantasm of the human brain, for we now hear that placing the patient in a cold bath is the most successful scientific treatment. So opposed to our notions does the advisability of placing a patient in a cold bath seem, that he who had attempted it years ago would have almost regarded himself as a murderer had the patient died; yet now the treatment is considered rational. As matters of minor consideration in this same disease, we daily ask ourselves whether it is better or not to encourage the sweating; whether it is better or not to remove the articular inflammation; and we make the same inquiries with regard to many other diseases. If what I have been saying be true, that changes in the body come about slowly and insidiously, our duty is rather to study how to check their progress, and not to devote ourselves to the treatment of the mere phenomena of the disorder. In so-called gouty persons, with malassimilation and tendency to articular inflammation and deposits of uric acid, much harm is often done by the continual use of alkalies, which often merely cover the presence of the gravel without in any way removing it; or, if the great toe be especially treated, the cause may still remain. When the body has relieved itself by these portals, it may show that the outward and visible signs, in the form of symptoms, are not to be meddled with. This, which has long been recognised in the case of gout, may be applicable to other diseases, and the relief expressed by a symptom be much greater than could be accomplished by medicine.

> "Tho' when small humours gather to a gout,
> The doctor fancies he has driven them out."

I think few would hesitate in saying that the medical man is doing much more for his gouty patient by prescribing a suitable regimen and medicine of that kind which operates on the assimilative organs, than by attempting to relieve particular symptoms. In like manner, in a case of early phthisis, he would render better service by advising a particular conduct of life than by giving his attention to petty ailments. In acute affections the same may be said; he who treats a typhoid fever, having regard to its natural course and phenomena, would be more likely to meet with success than he who, as was done in past times, meddled with the various organs of the body, and should order vinegar rags for the head, expectorants for the chest, and astringents for the bowels. Some of our methods, without appearing so, may be equally absurd, as, for example, what was once proposed to me in a case of strangulated hernia, to defer the operation until the sickness had ceased. Our object should be to get behind the symptoms, and thus obtain a fair view of the case. Some of the most lamentable spectacles I witness occur in cases of nervous people, who, being treated according to their special wants, have procured for themselves a permanent place on the doctor's sick-list. It is quite true that patients do not want to know anything about pathology: they have their aches, pains, and troubles, and for these they seek advice. It is of course the province of the medical man to heed these troubles, and endeavour to relieve them; but, nevertheless, I contend it is his duty to take, if he can, a just and comprehensive view of the whole case, and, whilst administering to the wants of the patient, yet not forget his high calling as a scientific man, and act for the general welfare of his patient and of society. He who simply pleases his patient by attending to local troubles, and does nothing but satisfy the prejudices and ignorances of the public, either has not learned the greater truths which his art and science contain, or is simply converting a noble profession into a trade. If the history of particular minds be identical with the history of the race, we shall find the mass of the public is in accord with the least scientific in our Profession. A layman recommends a remedy for a symptom, and offers his friends a medicine for the spasms or a pill for the liver complaint, and so on. All quacks knowingly and systematically pursue the same course; and the least educated in the Profession unwittingly follow a similar method. This is the explanation of such men doing large practices; their ignorance is a means towards success. In the history of the world we see savage nations attempting to exorcise particular pains, having of course no knowledge of their cause. At a later period, symptoms are treated; but in proportion to the advances of Medicine as a science, is the attempt at a wider generalisation being constantly made. If scientific treatment had been at the present day in any way perfected, how were it possible that, within a few years, bromide of potassium, carbolic acid, and chloral should become in turn universal medicines? If any fact were required to prove the absence of scientific system in the treatment of disease, it would be the universal administration of chloral; every patient has some bodily uneasiness, or is sleepless, and thus presents symptoms suggesting its use. It is a powerful benumber; but

benumbing the sensibilities and paralysing your patient is not curing his complaint. If a man be raving mad, and you knock him down and stun him, he will be quiet, and you may praise highly the dose which you have given him. The practice might thus be developed into a valuable therapeutic agent, and a trained boxer might give blows on the head of different degrees of force, according to the strength of the dose ordered by the prescriber. The method would hold rank with the universal administration of chloral, and, in the hands of an expert, might perhaps be more safe.

A very natural result of the instinctive feeling which all persons have, to gain relief for their individual troubles, without giving a thought to the deeper question of the cause of them, is seen in their endeavours to compel medical men to give their undivided attention to particular parts of the body—I cannot say particular complaints, for of these the public knows nothing, but to particular organs and symptoms. They thus insist on one medical man devoting his powers to the heart, another to the kidney, another to paralysis; and, if he do not choose to obey their behest, the public, if they seek advice from him, are pleased to ticket him with the name of kidney or liver doctor, according to the name of the organ they believe to be at fault. Is the public right in its demand, and the Profession in submitting to it? If what I have already said be true there can only be one answer. If the greater insight into the mechanism of man, and the morbid changes to which his body is liable, oblige us to take an increasingly comprehensive view of disease and its treatment, the idea of chopping up the body into separate parts must be strongly deprecated. Who would be most likely to possess the more correct view of the nature of cancer—he who saw it in some of its external forms only in a cancer hospital, or he who in a general hospital would meet with it in all parts of the body, and had an opportunity of comparing it with other morbid growths? It may be asked, Has not scientific advance encouraged specialism? I should say, Decidedly not. If history showed me that the more comprehensive method was adopted in ignorant times, and that a higher civilisation had brought with it the division of the art into sections, I would submit to the fallacy of my argument; but my reading of history proves the contrary. The division of our art into specialities, according to the manner of the Egyptians, is antiquated and unphilosophic. If so, the public suffer from their exactions, if they oblige a man to devote all his time to the skin; they reap the reward when they find a necrosed bone cannot be cured by arsenic. If they compel a man to give all his time to gout, they should not quarrel with him if he cannot reduce a dislocated thumb by potash-water; or, if they oblige a third to do nothing but look down their throats, it is their own fault when they discover that their best days are passed for taking good advice for their phthisis. I would not say for a moment that a physician or surgeon should not devote more attention to one subject than another. In fact, whether he choose it or not, his own turn of mind will incline him to do so; and, if this be the case, his advice will naturally be sought in the department in which he has most studied; but, having a knowledge of the whole range of disease, he is not likely to be misled or foolish enough to treat one symptom without considering its bearing upon others. The evil of so doing is less likely to occur now than formerly; for an ophthalmic surgeon may divine that blindness can arise from causes remote from the eye; and the obstetric physician knows that, with a highly nervous or hypochondriacal woman, his whole thoughts need not be given to the uterus; and thus, at the present time, every author of note detaches hysteria from any necessary disturbance of the womb. Should, however, an exclusive attention be given to this organ, absolute harm to the patient may result; and one feels often sorry to witness many cases of morbid irritability of body perpetuated by it.

In what, then, does our science consist? According to my idea, we study the peculiar tendencies and disposition of the human frame. We see in it the proneness to various changes and degenerations. We see acute rapid affections running their course in a few days, whose origin is legion. We see the body attacked by causes altogether from without. In all these cases we stand by and watch. We have found various substances in nature, the most valuable having their histories lost in tradition, which are useful in arresting morbid processes, or in assisting in the completion of necessary changes. Such medicines, when given as experience dictates, have saved the lives of numbers. This must be positively spoken of digitalis, opium, iodide of potassium, and some other remedies. I say we are still watching, for we do not yet know the value of symptoms, and, until we do, we have no right to interfere. Our sole duty is to act empirically. Nothing can be said against any system under which the greatest number have recovered.

In coming to a conclusion, you will see that I have pursued the course which I proposed to myself—viz., to offer you in the short period you allow me some of the thoughts which have occupied my mind in reference to the objects and aims of the medical man. Upon the whole the address may be considered disagreeable by some among you. Nearly every point is, I know, open to controversy, and will allow of something being said on the other side. This of necessity must be so. It would no doubt have been easy to come here and indulge in platitudes and conventional phrases about our glorious profession, but I have preferred rather to offer it to you for dissection. We might have met and congratulated ourselves and one another, and, in fact, have done as I lately read of a learned professor doing among his admirers—stroked each other's backs to make each other purr, until we had all purred together. I have given you a kind of idea of the objects which, in my opinion, a medical man should set before him; he should, in fact, aim at a very high standard—nothing less, indeed, than the improvement and welfare of the material nature of man. It is said that we are growing too materialistic, the word being used erroneously for too worldly, too conventional, too covetous, or too mean; but, in its strict sense, I think we cannot be too materialistic. We are constantly hearing and reading much of powers and influences apart from human organisation; but I think that, directly we allow of the existence of any such influences except those which proceed from man to man, we get into cloudland, and are all afloat as men of science. What Lawrence was denounced for declaring we all now openly proclaim; not only so, but insist upon it as necessary to the interpretation of phenomena. Most of us would endorse Lawrence's statement that we know nothing of mind except in connexion with matter, and that "the theological doctrine of the soul and its separate existence has nothing to do with the physiological question, but rests on a species of proof altogether different." That proof is not in my province, but most of us have the same conviction as the rest of mankind that some more subtle essence lies behind all that we see around us to explain "this material and unintelligible world." We feel that our minds, progressively developing, cannot suddenly cease to be, and we say with the poet—

> "For though my lips may breathe adieu,
> I cannot think the thing farewell."

When our work is done, when we sink into life's last sleep, our eyes will close

> "As sets the morning star,
> Which goes not down behind the darkened west,
> Nor hides obscured amid the tempests of the sky,
> But melts away into the light of heaven."

AN ADDRESS DELIVERED AT THE OPENING OF THE SECTION OF SURGERY.

By Sir WILLIAM FERGUSSON, Bart., F.R.S.,
Serjeant-Surgeon to the Queen; Surgeon to King's College Hospital; President of the Section.

After a graceful compliment to "one of the foremost of our surgical brethren of the day, Mr. Oliver Pemberton, whose name, as a pathologist and practical surgeon, is known wherever the history of modern Surgery extends," Sir W. Fergusson continues:—

The grandest feature in Surgery is precision. In our present knowledge, and I fear it ever must be, there are doubts, hesitations, and great imperfections; yet there are accumulated stores of facts which may justly make us proud of our profession. A history of Surgery would be as inappropriate from this chair as an interference with the yearly address; yet a brief glance at the results of the course of Surgery during somewhat more than a generation by one like myself, who for more than forty years has been devoted heart and soul to the subject, may possibly fill the measure of expectation on the present occasion. . . . .

In my younger days, the surgeon had few sources of alarm greater than that of inflammation of veins—phlebitis, as the term went. Abernethy had added greatly to his reputation by

his celebrated essay on the occasional evil consequences of the operation of venesection. Every good surgeon did his best, by suggestion and action, to prevent injury to veins during operations; above all, we were restricted from putting ligatures on veins, such a step being deemed well-nigh fatal, although there was ample proof that some thirty or forty years further back our predecessors were by no means nice in excluding veins from nooscs which were intended for arteries chiefly. It is doubtful if their operations were less successful than ours. At all events, we have so far changed in regard to the probabilities of phlebitis, that we, in the present day, think as little of applying ligatures to veins as to arteries, when there seems need, and we take all sorts of rough liberties with them when in a varicose state. True, we have a modern bugbear in the shape of pyæmia, for which the veins are greatly blamed; a disease about which there prevails more questionable physiology than common senso should admit. This subject is closely allied with what was called secondary deposit in former times, and this last-named condition was itself closely allied with Hunter's views and theories regarding inflammation. Anyone who is watching the spirit of the times must see that there are strange views afloat regarding Hunterian doctrines, which seem totally to ignore our great surgical philosopher—most notably in this respect, that what Hunter thought was developed by Nature from within, is now alleged to have origin in external influences and agencies which have no dependence on what has heretofore been considered life and life-like action within the frame. . . . .

Throughout my professional life I preserved any stone or bit of stone that I could secure as a trophy of Surgery, and now I have the honour of laying before the present meeting of this Association between 300 and 400 specimens of this disease which have been dealt with by my own hands. Every now and then patients or their friends have insisted on keeping what might be deemed as hereditary personal property, and occasionally specimens have fallen aside; but on the whole, I must admit that my patients or their friends have humoured my fancies, and given me free possession of the results of my surgical prowess. I exhibit the produce of between 330 and 350 cases of stone, personally treated by myself—about 200 by lithotomy, the rest by lithotrity. The aggregate of stones removed amounts to nearly 500 in number. There may be others of my own time who can speak of larger numbers; there may be those who can show larger numbers of actual proofs of what they have done in this field of Surgery, and it would please me much to see or hear of their evidence.

Most of these specimens were exhibited years ago at the Royal College of Surgeons in London, when I lectured on the subjects of lithotomy and lithotrity, but the time for their display was so evanescent that they attracted little attention, although at that date there was not a specimen of crushed stone by lithotrity in the museum. A feeling seems to prevail that there is no interest in a stone broken into fragments by the lithotrite; but if it has been cut into two by a saw, after its removal from the bladder, the cut surface is eagerly looked at. No doubt the interest here has reference to the chemical composition of stone, and possibly the nucleus, although the section does not invariably make that clear. In my estimation, the fragments in lithotrity possess an interest equal, if not greater, in every respect to the cut or entire specimens. The chemical composition of a stone can be as readily made out from fragments as from sections; so also, as regards the nucleus; and, indeed, from these fragment we can often acquire a knowledge of a patient's constitution, as regards the tendency to the formation of stone, which we cannot in any other way. We can see how in some the fragments will lie in the bladder without change of surface much longer than in others. In one case we can recognise for days, even weeks, the fragments of an uric acid stone with edges defined and surface the same as when first broken; in another we perceive how readily and rapidly new stone deposit occurs—generally phosphatic. Then, too, we can speedily appreciate the danger of neglect or carelessness after lithotrity is once begun; for in place of probably only one stone being present there may—indeed, there will—soon be many stones, for each fragment becomes a nucleus for fresh deposit, and this hastens on with greatly increased rapidity. Even the nucleus, always a centre of interest, may be as appreciable in the fragments from lithotrity as when displayed by the saw. It has happened to me in a case of crushing in a female to be struck with the appearance of redness in many of the fragments; and on investigation the mystery has been revealed on confession that the patient had been in the habit of tickling herself with a stick of red sealing-wax, a portion of which had broken off in the urethra and remained in the bladder. The fragments will be seen in the collection.

Again, I once was aware, in using a lithotrite in a male, that I had clutched something peculiar. On withdrawing the instrument there was a black substance about an inch long between the blades. A surgeon present, who had been in charge of the case for years, immediately exclaimed, "Egad! this is the end of my guttapercha catheter." A terrible revelation, for in the interim the patient had undergone prolonged treatment for chronic inflammation of the bladder, and had actually gone a voyage to Madeira in search of health. . . . .

I have referred, gentlemen, to the chemical treatment of stone in the bladder, chiefly for the purpose of ventilating a sort of heresy of my own—viz., that in our treatment of stone, and in our estimate of specimens of stone in our museums, the chemical composition has been improperly the feature most referred to. Stone in the bladder is essentially a surgical disease; it can be treated effectually only by the surgeon; and to him the size, or, I may call it, the circumference of the substance to be removed, possesses the most engrossing interest, whether he looks to his own mechanical work or the safety of his patient; for I hold it as a maxim, particularly in lithotomy, that the bigger the passage required for egress, the more difficult and the more dangerous is the operation. The accoucheur considers the size of the head, but does not trouble about its chemical qualities or composition. So should the surgeon the stone, both in regard to lithotomy and lithotrity.

But time will not permit me to say more on such subjects; and I shall conclude by a partial quotation from one of my lectures, delivered seven years ago at the College of Surgeons—some of my language holding as strong an impression on my mind as ever. In the collection which I have the honour to exhibit, "there are examples of comminution from lithotrity, enough to satisfy those not much acquainted with the operation, and entire stones, the result of lithotomy; exhibiting specimens from a few grains in weight to nine ounces—from one solitary stone in the bladder to forty-two. There is the first, taken out in 1832; and the last, removed in 1872; there is the most tiny—a thing not larger than a common pea; there are those which weigh from four to nine ounces. There is a single, solitary, grim, savage-looking mulberry calculus, which held possession of its vesical home for forty years; there are numbers, from two to forty-two, smooth and less formidable in aspect, yet equally painful and dangerous to the sufferers. A momentary glance can sweep over the range; but it is only those who, like myself, have been engaged in such work, that can estimate the days, the nights, the months, the years, of anxious thought and labour, associated with the results which I now put before you."

AN ADDRESS ON

MEDICAL PSYCHOLOGY,

DELIVERED AT THE OPENING OF THE PSYCHOLOGICAL SECTION.

By HENRY MAUDSLEY, M.D., F.R.C.P.,
Professor of Medical Jurisprudence in University College;
President of the Section.

. . . . The occasion seems fitting to take a short survey of the position of medical psychology. . . . . We are, in truth, only on the threshold of the history of medical psychology as a science. One of the saddest chapters in human history is that which describes the cruel manner in which the insane were treated in times past. Notwithstanding that it is happily a thing of the past, it will not be without profit to inquire from what causes the barbarous usage sprang; for it was not common to all nations and all times—on the contrary, it had its birth in the ignorance and superstition of the dark ages of Christian Europe. Whatever may have been thought of madness among the peoples who preceded the ancient Greeks—and there is evidence that the Egyptians adopted a singularly enlightened and humane treatment—it is certain that the Greeks had comparatively sound theories of the nature of insanity as a disease to be cured by medical and moral means, and adopted principles of treatment in conformity with those theories. Their dramatic poets, it is true, present terrible pictures of madmen pursued by the anger of the gods; but these were poetical representations, which must not be taken as a measure of the best knowledge of the time. Then, as now, and indeed as ever in the history of mankind, the true thinkers were emanci-

pated from the fables and superstitions of the vulgar; the just measure of Greek intellect must be sought in the psychology of Plato, in the science of Aristotle, and in the medical doctrines of Hippocrates. This eminent physician and philosopher expressly repudiates the notion that one disease is of more divine origin than another. After saying that the Scythians ascribe the cause of certain disorders to God, he goes on to give his opinion that these and all other disorders are neither more nor less of divine origin, and no one of them more divine or more human than another; that each has its own physical nature, and that none is produced without or apart from its nature. In what he says of the psychical symptoms of various diseases of the body, he evinces such enlarged views of the scope of medical observation and practice as are not often evinced at the present day; and the few observations in his works respecting the symptoms of delirium "evidence that clear and correct view of disease which has made this first observer a model to all succeeding times." He directs attention to such facts of observation as the physical insensibility of the insane, the appearance of mental diseases in the spring, the occurrence of disorder of the intellect after a continuance of fear and grief, the union of melancholy and epilepsy, the critical importance of hæmorrhoidal discharges in mania, the difficulty of curing madness which commences after the age of 40, and the like. And as there was no superstition in these doctrines, so there was no barbarism in his treatment, which was medical, and consisted principally in evacuation by the use of hellebore. But moral treatment was not unknown among the Greeks; for Asclepiades, who seems to have been the real founder of a psychical mode of cure, made use of love, wine, music, employment, and special means to attract the attention and exercise the memory. He recommended that bodily restraint should be avoided as much as possible, and that none but the most dangerous should be confined by bonds. Without going further into particulars, enough has been said to show that the Greeks had acquired accurate notions of madness as a disease, which was to be cured by appropriate medical and moral treatment.

How came it to pass that these enlightened views ever fell into oblivion? The question is really only a part of the larger question, how it came to pass that the high æsthetic culture and brilliant intellectual development of the Grecian era, which might have seemed possessions of mankind for ever, were lost in the darkness and barbarism of the middle ages. To trace the causes of this so sad decline would be far beyond my present purpose; suffice the fact that philosophy, which had mounted so high, was for a time sunk so low beneath the waves of superstition and ignorance, that it might well have never been in existence. And when at last a revival of learning took place, things were little better: empty scholastic subtleties and metaphysical mysticism engaged the whole attention of men, who rivalled one another in verbal disputations, without agreement in the meaning of the terms they used, and in blind worship of the authority of Aristotle, without real regard to the true method of his philosophy or to the facts with which it dealt. As if knowledge were nothing more than a process of ingenious excogitation, they made no attempt to observe the phenomena of nature, and to search out the laws governing them, but laboriously "invoked their own spirits to utter oracles to them"—wherefore philosophy was little more than a web of unmeaning terms and of empty metaphysical subtleties.

With this sort of intellectual activity was joined, as the result of the detestable spirit which inspired monastic teaching and monastic practice, a harsh religious asceticism, through which the body was looked down upon with contempt, as vile and despicable, the temple of Satan, the home of the fleshy lusts which war against the soul, and as needing to be vigilantly kept in subjection, to be crucified daily with its affections and lusts. It was the earthly prison-house of the spirit whose pure immortal longings were to get free from it. Such was the monstrous doctrine of the relation of mind and body. What place could a rational theory of insanity have in such an atmosphere of thought and feelings? The conception of it as a disease was impossible; it was ascribed to a supernatural operation, divine or diabolical, as the case might be—was a real possession of the individual by some extrinsic superior power. If the ravings of the person took a religious turn, and his life was a fanatical practice of some extraordinary penance—if, like St. Macarius, he slept for months together in a marsh, exposing his naked body to the stings of venomous flies; or, like St. Simeon Stylites, he spent the greater part of his life on a pillar sixty feet high; or, like St. Anthony, the patriarch of monachism, he had never, in extreme old age, been guilty of washing his feet—he was thought to have reached the ideal of human excellence, and was canonised as a saint; more often his state was deemed to be a possession by the devil or other evil spirit, or the degrading effect of a soul enslaved by sin; from some cause or other he was a just victim of divine displeasure, and had been cast down in consequence from his high human estate.

It was the natural result of such views of insanity that men should treat him whom they believed to have a devil in him as they would have treated the devil could they have had the good fortune to lay hold of him. The tortures which the insane person suffered from the devils that had entered into him were less than those inflicted by the devils who took charge of him. When he was not put to death as a heretic or a criminal, he was confined in a dungeon, where he lay chained on straw; his food was thrown in, and the straw raked out through the bars. Sightseers went to see him, as they went to see the wild beasts, for amusement; he was cowed by the whip or other instrument of punishment, and was more neglected and worse treated than if he had been a wild beast. Many insane persons, too, were without doubt executed as witches, or as persons who had, through witchcraft, entered into compact with Satan. It is a striking illustration, if we think of it, of the condition of thought at that time, and of the great change which has taken place since, that such expressions as the black art, witchcraft, diabolical possession, and the like, have fallen entirely out of use, and would be thought to convey no meaning if they were used now. They were fictitious causes invented to account for facts, many of which undoubtedly lay within the domain of madness.

Now it is a fact, abundantly exemplified in human history, that a practice frequently lasts for some time after the theory which inspired it has lost its hold on the belief of mankind. No wonder, then, that the cruel treatment of the insane survived the belief in diabolical possession, though it is justly a wonder that it should have lasted into this century. The explanation of the seeming anomaly is to be sought, I believe, in the purely metaphysical views of mind which prevailed long after inductive science had invaded and made conquests of other departments of nature. Theology and metaphysics, having common interests, were naturally drawn into close alliance, in order to keep entire possession of the domain of mind, and to withstand the progress of inductive inquiry. With the notions they cherished of the nature of mind, and of its relations to body, it was thought impossible, and would have been denounced as sacrilegious, to enter upon the study of it by the way of physical research. To have supposed that the innermost sanctuary of nature could be so entered through the humble portals of bodily functions, would have been regarded as an unwarrantable and unholy exaltation of the body, which was full of uncleanness, corruptible, of the earth earthy, and a gross degradation of the mind, which was incorruptible, of the heavenly, and joint partaker of divine immortality. Whosoever dared to propound such a doctrine would assuredly have been put to death as a blasphemer and a heretic; and yet he ought to have been hailed as a benefactor. It is impossible to say of any false belief which mankind have had, that it has been the most pernicious in its effects; but we may truly say of the theological notion of the relations of mind and body, that it has been surpassed by few false doctrines in the evil which it has worked.

The spirit of metaphysical speculation was scarcely less hostile to physical researches into mental function. For when inquirers had struggled successfully out of mere verbal disputation, and had applied themselves to the observation of mental phenomena, the method used was entirely one-sided; it was a system of mental introspection exclusively, each one looking into his own mind and propounding as philosophy what he thought he observed there; the external observation of mind in all its various manifestations, and of the bodily condition of all mental action, was ignored. When all knowledge of mental action was gained in this way by observation of self-consciousness, men naturally formed opinions from their own experience which they applied to the mental state of insane persons; feeling that they themselves had a consciousness of right and wrong, and a power of will to do the right and forbear the wrong, they never doubted that madmen had a like clearness of consciousness and a like power of will—that they could, if they would, control their disorderly thoughts and acts. The dungeon, the chains, the whip, and other instruments of punishment were accordingly in constant use as means of coercion; the result being that exhibitions of madness were witnessed which are no longer to be seen, "because they were not the simple product of malady, but of malady aggravated by mismanagement." What with the

theological notion of madness as a work of Satan in the individual, and what with the erroneous views of it subsequently begotten of the metaphysical spirit, it came to pass that the barbarous system of treatment was only abolished within the memory of men yet living. In sad truth may we say that so far as a knowledge of the nature of insanity and of the proper mode of treating it is concerned, mankind owe no thanks, but, on the contrary, much error and infinite human suffering, to theology and metaphysics.

It was when men recognised insanity as a disease which, like other diseases, might be alleviated or cured by medical and moral means—when they regained the standpoint which the ancient Grecians had held—that they began the struggle to free themselves in this matter from the bondage of false theology and mischievous metaphysics. So far as the phenomena of deranged mind reach, the battle has been won, and the victory is complete; no one whose opinion is of any value pretends now that they are anything more than the deranged functions of the supreme nervous centres of the body. But the victory is not yet complete along the whole line of mental function; there is the strongest desire evinced, and the most strenuous efforts are made in many quarters, to exempt from physical researches the highest functions of mind, and particularly the so-called moral sense and the will. The moral sense is, indeed, the stronghold of those who have made strategical movements of retreat from other defensive positions which they had taken up; and it is from this stronghold that what are deemed the most telling arguments against the Darwinian doctrine of physiological evolution have come. Are we then, as physiologists, to allow an exemption from physical research to any function of mind, however exalted, or shall we maintain, through good and through evil report, that all its functions, from the lowest to the highest, are equally functions of organisation?—a vital question for us as medical psychologists, which we must, sooner or later, face boldly and answer distinctly.

In Abercromby's well-known and valued work, "Inquiries concerning the Intellectual Powers," there is a passage relating to the moral sense which seems to me almost melancholy. After pointing out clearly the existence of a moral insanity in which every correct feeling is obliterated in regard to moral relations, while the judgment is sound in all other relations, and so demonstrating that the influence of the moral principle on the power of conscience may be weakened or lost, while reason remains unimpaired, he says—"That this power should so completely lose its sway, while reason remains unimpaired, is a point in the moral constitution of man which it does not belong to the physician to investigate. The fact is unquestionable; the solution is to be sought in the records of eternal truth." Is not this passage truly melancholy? Must science really accept this attitude of helplessness? Must the physician who has to deal practically with these instances of moral insanity forbear for ever to investigate its nature and causation? So far from assenting to such an exclusion, I hold that it distinctly belongs to the physician to seek for the solution of the problem in the discovery of those laws of nature which are to him the incontestable records of eternal truth.

Let us clearly apprehend the problem which we have to consider. Some popular capital has been made, and made in quarters where we might justly have looked for greater sincerity or sounder apprehension, out of the fact that physiology, however far it may advance, can never bridge over the gap between nerve elements and mind, can never leap from the movements of nerve molecules to consciousness. No one has ever said that it could. The problem before us as scientific observers is not to demonstrate the real nature of the force which we designate mental, nor to show how and why certain molecular movements in nerve become, if they do become, sensation or idea; but it is to trace here, as in other departments of nature, uniformities of sequence, to point out that certain sequences are, within our experience, the invariable consequences of certain antecedent conditions. The *how* or the *why* is a mystery which we do not pretend or attempt to explain; we do not even aspire to know it. We can only know the uniformities of sequence as we do the uniformity of sequence which we call gravitation. What is the actual power which makes one body attract another directly as the mass and inversely as the square of the distance, we have not the least knowledge; why and how certain molecular movements become heat, or electricity, or chemical action, we are just as ignorant; and in admitting that we cannot comprehend how certain states of matter occasion certain states of mind, we may rightly demand that no more should be asked of the physiologist, in explanation of the *why* of events, than is asked of the physicist. The mystery is neither more nor less in one case than in the other. To say that it is inconceivable that matter, in however complex a state of organisation, should generate consciousness, should feel and think, is simply an appeal to the self-sufficiency of human intellect at the present day, and a sort of argument which, if logically carried through, would bar any new conception of what, from ignorance, is yet inconceivable to us; it would make the present limit of conception the limit of conception for ever; and it is certainly unwarrantable in the face of the fact that the history of the progress of knowledge is, in great part, a history of the inconceivable becoming conceivable. Moreover, it is an assertion which is positively contradicted by the testimony of persons who have been presumably in their right minds, and who have not spoken in mere haste and ignorance. Let me instance that of one person, whose qualifications few will contest—I mean John Milton. Both in prose and poetry he makes known his opinion that matter is capable of intellectual functions, declaring, in "Paradise Lost," that the first matter rises through various degrees of substance and of life, until "body up to spirit works," just as from the root springs lighter the green stalk, from thence the leaves, and "last the bright consummate flower spirits odorous breathes." That he intended this passage not merely as poetry, but as sound philosophy, is proved by what he says in his "Treatise on Christian Doctrine," where he declares,—

"That man is a living being, intrinsically and properly one and individual, not compound or separable—not, according to the common opinion, made up and framed of two distinct and different natures, as of soul and body, but the whole man is soul, and the soul man; that is to say, a body, or substance, individual, animated, sensitive, and rational."

The notion of matter being capable of thinking was clearly, then, not inconceivable to Milton; and there can be no doubt that there always have been persons who have found it more conceivable than the notion of spirit entirely distinct from body, and yet acting upon it in every thought, feeling, and act of life.

With these general remarks by way of necessary caution, let me come to the particular problem which we have to face—namely, whether there is the same essential connexion between moral sense and brain which there is between thought and brain, or between any one of our special senses and its special ganglionic centre in the brain? Is conscience a function of organisation? I will ask you to look without prejudice at the facts of observation, and to consider if they admit of any other scientific interpretation they admit of. For the medical psychologist, whose duty brings him into constant intercourse with facts, cannot rest satisfied with vague speculations; he is bound to investigate the phenomena as they present themselves to observation, and to form conclusions from them, without regard to accepted theories of faith or knowledge; and if he arrives at sound conclusions from such observation of facts not before observed, these will not contradict old faiths unless in that wherein old faiths are wrong, and it is right they should be contradicted.

His generalisations, like the generalisations of astronomy, chemistry, or any other branch of science, must rest on their own merits; they cannot justly be tested by any preconceived standard of truth, however much hallowed by antiquity or sanctioned by authority. When we come to deal with examples of moral degeneracy, whether among the insane or among criminals, we perceive at once that it is not sufficient to ascribe immorality to the devil; that we must, if we would not leave the matter a mystery, go on to discover the cause of it in the individual. The effect defective comes by cause, we are constrained to believe; what is the cause and what are the laws of moral degeneracy? As society is constituted, certain forms of evil-doing are certainly not profitable in the long run: how comes it, then, that an individual, capable of looking before and after, remembering the retribution of past sin, and foreseeing the Nemesis that waits on future wrong-doing, is so forgetful of true self-interest as to yield to evil impulses? And whence do these impulses come? One thing is certain: that moral philosophy cannot penetrate the hidden springs of feeling and impulse; they lie deeper than it can reach, for they lie in the physical constitution of the individual, and, going still further back, perhaps in his organic antecedents. Because the fathers have eaten sour grapes, therefore it often is that the children's teeth are set on edge. Because the fathers had stoned the prophets, therefore it was that the children rejected Him who was sent unto them. Assuredly of some criminals, as of some insane persons, it may be truly

said that they are born, not made; they go criminal, as the insane go mad, because they cannot help it—a stronger power than they can counteract has given the bias of their being. Those who doubt this when it is put in this positive form, will hardly continue to do so when they consider that between the drivelling idiot, equally destitute of intellect and moral feeling, whom no labour of training can raise to a human level, and the highest example of intellect and moral feeling, there are beings marking every step of the long gradation; that we may mount from entire absence of moral sense through every grade of deficiency up to its highest state of development. I do not dispute that much may sometimes be done by education and training to counteract in this respect the ills of a bad inheritance, but it is still true that the foundations upon which the acquisition of education must rest are inherited, and that in many instances they are too weak to bear a good moral superstructure. Moral philosophy may make its hard and fast lines, and lay down abstract propositions concerning the power of the will in the conduct of life; but, when we have to do with concrete cases, it is plain that no such definite lines can be applied, and that the abstract propositions are only true of a certain proportion of mankind. Moreover, it appears also, that those of whom they are true have much less merit in the matter, and those of whom they are not true much less blame, than moral philosophers are apt to imagine and inculcate. The fate of inheritance which constitutes the misfortune of the latter constitutes also the virtue of the former. There is often *nulla imputatio* in one case, *nulla virtus* in the other.

The causes, course, and varieties of moral degeneracy are not, then, merely subjects for the moral philosopher or the preacher; but they are proper subjects for positive scientific inquiry. And if they be so investigated, it is not unlikely that the results may throw some light on the vexed question of the nature and origin of the moral sense.

[We are constrained by want of space to omit that part of Dr. Maudsley's discourse which illustrates defect of moral feeling—"whereby the individual is as insensible to the moral relations of life as a person colour-blind is to certain colours."]

I give no opinion here as to the legal policy of treating such a person as of sound and responsible nature; it is a subject beset with difficulties, and many considerations on which I cannot enter now would have to be taken into account; but I may justly ask you, as scientific men, whether you would pronounce a person with such hereditary antecedents and such personal ills accountable in the same sense or same degree as one of us? For my part, when one thinks of the terrible affliction which an unsound mental organisation is, and what a reason for devout thankfulness a man of sound descent and nature has, I would rather pray with the Arabian philosopher, "O God! be kind to the wicked; to the good Thou hast already been sufficiently kind in making them good." . . . .

My argument is, that the moral element is an essential part of a complete and sound character in the present state of human evolution; it was the last acquisition of development in the progress of *humanisation*, and it is commonly the first to suffer when degeneracy begins; and therefore its decay is the first sign of the commencement of such degeneracy. He who is destitute of moral sense is a defective being to that extent—he marks the beginning of race-degeneracy; and if better influences do not intervene to check or neutralise the morbid tendency, his children will exhibit a further degree of degeneracy, and be actual morbid varieties. What shall be the particular outcome of the morbid strain—whether vice, or crime, or madness—will of course depend much on the circumstances of life: the inborn fact counts for much, but not for everything, in the result. Certainly, however, it is a conviction in my mind, produced by observation of instances, that one way in which insanity seems to be generated *de novo* in a family, is through the deterioration of nature induced by destruction of moral sense. As insanity in one generation may produce an absence of moral sense in the next, so, conversely, absence or destruction of the moral sense in one generation may be followed by insanity in the next. . . . . For the facts which I have thus far mentioned seem to me to prove the essential connexion of the moral sense with organisation, and to admit of interpretation only on that supposition. It, or the potentiality of it, is inherited by most persons, though some appear to be born without it; it is developed by culture; decays from disuse; and is perverted or destroyed by disease. The last acquired faculty in the progress of human evolution, it is the first to suffer when disease invades the mental organisation. One of the first symptoms of insanity—one which declares itself before there is any intellectual derangement, before the person's friends suspect even that he is becoming insane—is a deadening or complete perversion of the moral sense. . . . .

Before such an audience it is not necessary for me to insist further on such facts as I have mentioned. As physicians, we cannot fail to recognise them; but it is necessary for us if we would be, like our great master Hippocrates, philosophers as well as physicians, to give them their proper place in a system of medical psychology, and to weigh their bearing on accepted philosophical theories. I had meant to point out how they go to prove the doctrine of evolution to be true of the highest mental faculties of man, including his moral sense; but I must refrain. Already I have trespassed too long on your patience. The medical psychologist must, I think, hold that the best of the argument concerning the origin of the moral sense is with those who uphold its acquired nature. That the sentiments of common interest in the primitive family and tribe, and the habitual reprobation of certain acts by individuals as injurious to the family or tribe, should finally generate a sentiment of right and wrong in regard to such acts, and that such sentiment should in the course of generations be transmitted by hereditary action as a more or less marked instinctive feeling, is in entire accordance with what we know of the results of education and of hereditary action. Time was, we know, when men wandered about the country in families or tribes. In order that they might rise from this nomadic state to a national existence, the acquisition and development of a moral sense must clearly have been essential conditions—not however, as preformed agents, but as concomitant efforts, of evolution. This development is still going slowly on; but the proof how little moral sense itself instigates progress, is seen in the absence of it between nations. Men have risen to a national existence, but they have not yet risen to an international existence. With moral principles that have not changed within historical times, nations still laud patriotism, which is actually a mark of moral incompleteness, as the highest virtue; and statesmen think it a fine thing to sneer at cosmopolitanism. But it cannot be doubted that the time will come, though it may be yet afar off, when nations will know and feel their interests to be one, when moral feeling shall be developed between them, and when they shall not learn war any more; it will come as a step in evolution and as a condition of universal brotherhood, not otherwise than as, coming between tribes, it bound them into nations, and made patriotism the high virtue which it is believed to be.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months* . .	£1 8 0
,, ,, ...	*Six* ,, . .	0 14 0
The Colonies and the United States	*Twelve* ,, . .	1 10 0
,, ,, ...	*Six* ,, . .	0 15 0
India	*Twelve* ,, . .	1 15 0
,, ...	*Six* ,, . .	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words) . . .	0 0 6
Half-column, or quarter-page . . .	1 5 0
Whole column, or half-page . . .	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

Medical Times and Gazette.

SATURDAY, AUGUST 10, 1872.

THE PUBLIC HEALTH BILL.

The Public Health Bill is now safe, and will undoubtedly become law. It is the most notable achievement of the Government, and goes far to redeem the session. The feeble attempt in the House of Commons to obstruct its progress on re-

committal deservedly failed, and seemed to have been made by Conservative members who were unacquainted with the provisions of the measure they were opposing. The minority, however, was so small—sixteen—as only to intimate more emphatically the approval of the House of Commons. Mr. Knight's assertion, based on reports made in 1833, that the English rural population is better housed, better clothed, and better fed than the peasantries of the Continent, would be worth more as an argument were it clear that the hygienic condition of the European peasant is in any degree a standard of comparison. Europe is a vast continent, and we suppose Englishmen would find but little comfort from the reflection that English labourers do not dress in sheepskins like Russian serfs, and that their wives are not quite as much animals of burden as the peasant women in some districts of civilised France and Germany. But this is really beside the question. The large amount of preventible disease and death in this country, the mortality in the first years of life, and the insufficient means in readiness to meet and stamp out epidemics, are things which, to put them on the lowest ground, increase the burdens of the people, interfere with the development of the national resources, cramp the national energies, and diminish the national wealth. It is, therefore, not a question whether our lower orders are as well off as those of France or Germany—an assertion which in many points we take leave to doubt—but whether we have not serious defects in our whole hygienic system, which, if remedied, will go far to improve the physical, mental, moral, and material condition of the population. We have already expressed, in emphatic terms, our approval of this measure, which we believe will confer great benefits upon the people, and will employ and utilise the resources of our profession, not merely in curing, but in preventing disease. The Bill attempts no gigantic scheme, and will be worked at a moderate expense. It takes existing machinery for the most part, and by recombining and co-ordinating it effects its purpose without the creation of any new authority. It divides England into two classes of sanitary districts—rural and urban—each district to be under the jurisdiction of a local sanitary board. In the urban district this authority will be the Town Council; in the rural the Board of Guardians. These authorities will exercise all the power hitherto vested in local boards, sewer and nuisance authorities, and authorities under previous sanitary Acts, such as the Common Lodging-House Act, the Diseases Prevention Act, the Bakehouse Act, etc. Within twenty-eight days after the passing of the Bill, the local sanitary authority is to meet for the election of a Medical Officer of Health, who must be a qualified practitioner, half of whose salary will be paid by the Government. The full board of guardians may delegate its power to a sanitary committee for the current year, and this body may appoint parochial committees for the various parishes of the district. These local sanitary authorities are liable to be visited and supervised by inspectors from the Local Government Board. Similar sanitary authorities are to be established at the ports, and the Local Government Board acquires the powers of the Board of Trade over the metropolitan water companies. The financial part of the Bill provides for a fair adjustment of the expenses, and gives facilities for borrowing at reasonable rates of interest. On the whole, we may fairly believe that we have now established in our midst for the first time a machinery which, if properly supervised, can scarcely fail to raise the hygienic condition both of town and country, to prevent as far as possible the invasion of epidemics, to check outbreaks of disease, and thereby to diminish the pauperism and poor-rates of the country. We congratulate Mr. Stansfeld upon the success he has achieved, and we believe that the general practitioners of medicine, and especially those hitherto engaged in poor-law practice, throughout the country, who will play the most important part in the working of this Act, will, through the opportunities it gives them, render services to the commonwealth which will constitute one of the greatest triumphs that Medicine in the present generation has achieved.

LUNACY IN ENGLAND AND WALES.

By the Twenty-sixth Report of the Commissioners in Lunacy it appears that the total number of lunatics, idiots, and persons of unsound mind in England and Wales registered on January 1 last were 58,640, being an increase of 1885 upon the cases recorded on January 1, 1871. These numbers are exclusive of 170 lunatics so found by inquisition. The total of 58,640 is made up of 6642 private patients and 51,998 paupers. The increase upon the year is 188 of the former, and 1697 of the latter. All the cases in the various State asylums, with the exception of 148 paupers in the Broadmoor Criminal Asylum, are placed in the private class. The private patients have increased in county and borough asylums by 18, in registered hospitals by 57, in licensed houses by 47, in naval and military and as "single patients" in private charge by 28, whilst there has been a decrease of 3 in this class at the Broadmoor Criminal Asylum. In county and borough asylums pauper patients have increased by 664, in registered hospitals by 31, in Broadmoor Criminal Asylum by 32, in workhouses by 1447, and as outdoor paupers by 105. In licensed houses there has been a decrease in this class of 562. There has been an increase, but less than in former years, in the number of pauper patients in county and borough asylums, whilst in workhouses the increase is so much above the average that it equals the total increase of the three previous years. These concurrent results are mainly due to the discharge of chronic patients from the county asylums of Middlesex and Surrey, and their admission into the Metropolitan District Asylums for Imbeciles at Leavesden and Caterham. The inmates of the two last-named institutions are, in accordance with the provisions of the Act by which they were established, classed as being in workhouses. The numbers resident at Leavesden and Caterham on January 1, 1871, were 1305; on January 1 last they were 3209. The vacancies in the county asylums near London, temporarily caused by the discharge of the chronic patients referred to, made room therein for the reception of a considerable number of pauper patients from licensed houses, thus accounting for the large reduction in the number of this class confined in the latter establishments as compared with January 1, 1871. There are at present in England and Wales 180 asylums, hospitals, and licensed houses for the reception of the insane which are subject to statutory and other visitations by the members of the Board—namely, county and borough asylums, 54; registered hospitals, 16; State asylums, 4; metropolitan licensed houses, 41; provincial licensed houses, 65. Besides the institutions above enumerated, the Commissioners' visitations now extend to about 300 private houses, each containing "a single patient." The total number of admissions, discharges, recoveries, and deaths during the year 1871 from the county and borough asylums, registered hospitals, metropolitan and provincial licensed houses, and the naval, military, India, and State criminal asylums were—admissions, 12,385; discharged, 8287; recovered, 4132; deaths, 3796.

In the main the report of the Commissioners on the state of the public and private asylums is satisfactory; with few exceptions the conditions and improvements of these establishments are commended by them. We regret, however, to notice one exception to this satisfactory state of things. Thus, the Commissioners state with respect to the Cambridge County Lunatic Asylum that "a grave responsibility is continually incurred here by the resistance to the suggestion for appointment of an assistant medical officer; the patients continue to be left at long intervals of time without medical aid. This suggestion we once more beg most strongly to repeat, and

urgently to press upon the governing authorities of the asylum." It is high time that the Commissioners had full power to enforce their very important and necessary suggestions being carried out by the authorities.

With reference to the boroughs without asylums, the Commissioners complain of the long delay which has ensued with respect to the erection of the Norwich Borough Asylum, and call upon the Secretary of State to enforce its speedy erection. Maidstone and other Kentish boroughs, as well as Southampton, Portsmouth, Plymouth, Exeter, and Bath, are still without asylums, but steps are being taken for their erection. The following gratifying statement is made with respect to the West Riding Asylum, Wakefield. Such facts go farther than all argument to prove the safety and value of the humane treatment of the insane. The Wakefield report states—"A striking feature in the asylum is that the wards appropriated to the refractory and most troublesome patients are as well and as comfortably furnished, and as well provided with objects of interest, as those of the best class, no distinction in this respect being made. We cannot but think that this arrangement, as a mode of treatment, contributes materially to the quiet and orderly condition in which we found the patients of the worst and most violent character." The Commissioners add—"We have great satisfaction in reporting that the Committee of Visitors have given permission to Dr. Browne to avail himself of the excellent opportunities afforded in this asylum for instructing students in the knowledge and treatment of mental disease by giving lectures to them in connexion with the Leeds School of Medicine, and taking them into the wards. This course of lectures last summer was attended by twenty-six students."

It is gratifying to observe the favourable testimony borne by the Commissioners, without an exception, to the continued zeal, careful attention, and efficiency of the medical superintendents of the lunatic asylums throughout England and Wales.

THE PENAL CLAUSE OF THE MEDICAL ACT, 1858.

There is perhaps no rule of law more imperative than that a penal statute must be construed strictly. Inuendoes and implications find no place in that which is supposed to have been deliberately enacted, and which ought therefore to express its own meaning unmistakably and unambiguously. The propriety of this rule is manifest, unless the object of a penal statute be to entrap the unwary and not merely to punish the wilful wrongdoer. In respect of clearly defining the offences against which the penal section of the Medical Act was intended to be directed, its phraseology has signally failed. But supposing it to be desirable or possible to suppress unqualified practice as such, there is a simple solution of the difficulty. By making it penal for any man to practise Medicine, Surgery, or Pharmacy unless registered, even though otherwise qualified, a check would at once be given to all unqualified practitioners. According to the common law there is nothing to prevent unqualified persons from practising; and they infringe no statute provided they do not "wilfully and falsely" assume certain titles implying that they are registered, or that they are medical practitioners recognised by law.

Non-registration is not at present sufficient in itself to prove this offence. Attorneys and solicitors, although qualified, cannot practise as such unless they are likewise certificated; neither can barristers, unless they have been sworn in in open court, and their names duly recorded. They are one and all thus virtually registered; but in the medical profession no registration is required except for the recovery of fees, with reasonable costs and charges, and as a proof of eligibility for public appointments; and unqualified—and, as a consequence, unregistered—persons are in no worse position in this respect than a qualified but unregistered practitioner.

So long as they take high ground and require a honorarium at the time of consultation, and do not "wilfully and falsely" assume any of the prohibited titles, they are at liberty, subject to the following interference, to practise in every branch of Medicine and Surgery, and nothing short of crass ignorance could even prevail against them in an action for malpraxis. In other words, they cannot be summarily dealt with under the Medical Act. So much, then, for its efficiency. The privileges of the Colleges of Physicians and Surgeons and of the Society of Apothecaries remain the only real, yet sadly inefficient, safeguards of the Profession; for an infringement of their privileges may be still visited with penalties, although the process by action for their recovery is tedious, costly, and cumbersome.

With respect to foreign medical degrees and diplomas, the *bonâ fide* possessor of such cannot surely be said to be "wilfully and falsely" taking the designation so conferred, especially if he be a foreigner, and has proceeded regularly in the curriculum required for its attainment.

Who would think of denying such a one the right to make use of the style and title thus conferred by some of the celebrated medical schools on the Continent of Europe? The gist of the offence consists—first, in the *wilful falsity* of the assumption; and secondly, in the implication that the party to the deception is registered, or a medical practitioner recognised by the law of England. The two ingredients must be combined to constitute the offence. In point of fact, he must be an impostor. He must be in possession of no diploma whatever, yet affecting to possess one. A spurious diploma from self-styled colleges, such as have obtained an unenviable notoriety in Philadelphia, is of course equivalent to none, and the holders of such valueless credentials may well be taken to be cognizant of the fraud. The whole difficulty of dealing with the subject seems to lie in a nutshell. Let the old common law, which in primitive times and from the necessity of the case permitted anyone to practise physic, simply holding him responsible for the possession of the requisite knowledge, however obtained, be superseded by statute law, forbidding anyone to practise unless registered. Eligibility for registration should be dependent upon certain qualifications, certified, as at present, by different licensing bodies, or by one general body—with a power reserved to the Medical Council of admitting to registration, at their discretion, the recipients of diplomas from eminent and acknowledged foreign medical schools and universities, especially in the case of foreigners, as it is not altogether undesirable that strangers residing in this country should be able to obtain the medical advice and attendance of those speaking their own language, and to whose mode of treatment they may have been accustomed when at home.

Some such plan, connected with a summary means of convicting unauthorised practitioners, would probably meet the present evil without totally excluding those whose *bonâ fide* foreign medical education might be above suspicion; and, indeed, might reflect honour on the Faculty wherever exercised.

THE WEEK.

TOPICS OF THE DAY.

Cholera this week appears to have arrived at a standstill all over the Continent; at least it has made no progress—it has not invaded new localities. No fresh cases seem to have occurred at Berlin—a very remarkable fact indeed, considering that the health of Berlin during the hot season, in consequence of hygienic neglect, is shockingly bad. The words ascribed to Rückert, that "the river Spree enters Berlin a swan, and leaves it a swine," are at present more true than ever before. The Sanitary Commission has just published a placard cautioning sailors against the drinking of the water from the river, cholera always having been very severe amongst sailors in Berlin, on account of their using the water as a beverage. Since our last report, a more

favourable aspect of affairs has been prevailing throughout Russia. This year's epidemic has not proved half so fatal as the one of 1866, nor did it invade an equally large part of the Czar's empire. Out of 1065 cases reported to have taken place in St. Petersburg during the fortnight from July 10 to 24, 286 cases of death occurred—not much more than one-fourth, whilst in 1866 nearly half of all the patients succumbed. During the whole of its reign until now the epidemic, even when at its zenith, did not continue on the same level, but was always seen oscillating, both as regards contagiosity and fatal consequences. Since July 29, however, the decrease looks much more like a steady decline, although there is yet no certainty whatever that it may not one day suddenly resume its former strength. Up to July 22 fresh cases were augmenting nearly every day, the death-rate varying from one-half to one-third of the number. From that date to the 29th the number of patients began to get less, but the average proportion of deaths was the same, and did not get more favourable until after the latter day. The districts most visited by the disease were those adjoining the Black Sea and the provinces near the mouth of the Danube. The disease preyed for the most part upon the lowest classes, leading a life of misery and privation, given to drunkenness and uncleanly habits. Recently an outbreak has taken place amongst that part of the army which was gathered for manœuvres round Wiendzybor, in Wolhynia. The decision of the Minister of War is not yet known, but it is important to observe that a dissolution of the camp might contribute a good deal towards propagating the evil over places hitherto not visited by it, and might revive it afresh where it was already losing its force.

With the high price of meat and the scarcity of stock threatening serious deprivation in the ensuing winter, the recent accounts given by Mr. Forster of the prevalence of foot and mouth disease in almost every county of England, and our narrow escape from—if, indeed, we have escaped—the introduction of rinderpest, are of no ordinary interest. The authorities had been led to believe that the cattle plague was only likely to be imported from Russia, the cattle of Germany, and especially of Schleswig-Holstein, being said to be free from the disease. Accordingly, on July 6 the Government agreed to allow the importation of Holstein cattle. During the next three weeks 5103 German bullocks were imported, and of these 3576 came from Holstein. Unfortunately, however, for the theory of the immunity of the German herds, of the five or six infected cargoes which have arrived in our ports three at least have come from Hamburg, and have consisted principally of German cattle. The Government have therefore been forced to reimpose the restrictions on importation. One of the infected cargoes which arrived at Leith was ordered to be sent to sea in a lighter and to be scuttled. Unluckily, however, some of the carcases were washed on shore on the Haddington coast, and others were seen floating about in the Firth. To what degree sea-water may disinfect is a question which it would be interesting to examine; but if in no degree, as is most probable, we may yet hear of an outbreak of the disease in Scotland.

At the recent graduation ceremony at the close of the summer session in the University of Edinburgh, a bust of the late Professor Syme was presented to the University.

The British Association meets next Wednesday at Brighton, and will continue its session until Thursday, August 22, when the members and associates will recruit themselves with the usual excursions. The meeting will have unusual attractions for our profession, as the president will be Dr. W. B. Carpenter, who will deliver his inaugural address on Wednesday evening. We would call attention to the fact that the directors of the London and Brighton Railway offer great facilities by the issue of fortnightly and monthly tickets with reduction of fares to the members of the Association, and that they extend these advantages to members of other scientific bodies in London on production of proof of membership.

MR. MUNTZ'S BILL FOR PREVENTING THE ADULTERATION OF ARTICLES OF FOOD OR DRINK, OR DRUGS.

Lord Eustace Cecil in the Lower House, and the Marquis of Salisbury in the Upper, have, we are glad to find, succeeded in carrying amendments to Mr. Muntz's Bill on the adulteration of food. The effect of such amended clauses is to make the Bill compulsory instead of merely permissive; to define adulteration; to empower the Local Government Board to compel the local authorities to appoint analysts; to require the food analyst to report to the local authority; to make it obligatory on inspectors of markets, nuisances, weights and measures, etc., to procure and submit for analysation suspected articles, and to prosecute; and to impose graduated penalties, with publication on a second conviction. The definition of adulteration contained in the Bill is as follows—"Any person who shall knowingly mix any substance with any article of food or drink, or drugs, with intent fraudulently to increase its weight or bulk, unless he declares the admixture before delivering the same, shall be liable to the provisions of the Act." We are glad to find that the Pharmacy Act, 1868, is incorporated in the Bill. The 24th section of the Pharmacy Act thus imported is to the effect that the provisions of this amended Bill, for the preventing the adulteration of articles of food and drink, shall extend to all articles usually taken or sold as medicines, and every adulteration of any such article shall be deemed an admixture injurious to health; and any person registered under the Pharmacy Act who sells any such article adulterated, shall, unless the contrary be proved, be deemed to have knowledge of such adulteration.

DOCTORS' AND BARBERS' MEDICAL FEES.

Payment for certificates of various kinds has long been a *quæstio vexata*. Formerly a certificate was often demanded as a right from a medical practitioner; the only *right* consisting in the custom—a very bad one—of the practitioner neglecting to charge for what in some cases was a very important and responsible service. Of late a different feeling has pervaded the Profession, and now certificates, as a rule, are expected to be, and are, paid for. The payment is often niggardly enough, but it is satisfactory, at least, as the acknowledgment of a principle. A discussion arose at the Lambeth Vestry last week respecting the fee to be allowed to the medical officer of the workhouse in the event of a certificate being required on the committal of boys at the instance of the School Board. Was 2s. 6d. exorbitant? Most of the Vestry thought not; but Mr. Hopekirk—we believe a hairdresser—considered that 1s. 6d. was sufficient, for the reason that only recently the Board had appeared to think 1s. a dozen too much for cutting the children's hair at Norwood Schools, and more particularly as in this case one of the medical officers was receiving £350 a year, and the other £100 a year and board and lodging. If, it was argued, 1s. 6d. was a sufficient fee for vaccination, the vaccination officer having no salary and no other remuneration beyond the fee, the same sum was surely sufficient for a certificate when the medical officer had a salary. Eventually it was decided that the fee should be 2s. 6d. for six months, as a trial.

PRECAUTIONS AGAINST CHOLERA.

Dr. Whitmore has applied to the Vestry of St. Marylebone for permission to make ready for the reception of any cases of cholera that might occur in the parish. The iron hospital situated in the Stone-yard is at once to be prepared for the possible emergency.

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Dr. Gariel, in last week's *Gazette Hebdomadaire*, makes a powerful appeal to the members of the medical profession in order to secure their active co-operation in assuring the success of the French Association for the Advancement of Science. This has been started, under favourable auspices, at a critical period, with the laudable view of testifying that the regeneration of the forces of the country should be sought for by more than a mere recovery of material prosperity. Although, as Dr. Gariel observes, as far as the subscriptions necessary to set the design afloat are concerned, all is flourishing enough, yet, for its establishment on a permanent and useful basis, good and persistent work will be required. He calls for the aid of the Profession, which has its own section appointed for it, besides having ample opportunity of co-operation offered to it in the various sections constituting the other portions of the group of natural sciences. Altogether there are to be fifteen sections, formed into four groups, as follows:—1. Mathematical Sciences, with sections for (1) Mathematics, (2) Mechanics, (3) Navigation, (4) Civil and Military Engineering. 2. Physical and Chemical Sciences, with sections for (5) Physics, (6) Chemistry, (7) Meteorology and Physics of the Globe. 3. Natural Sciences, with sections for (8) Geology and Mineralogy, (9) Botany, (10) Zoology and Zooteotomy, (11) Anthropology, (12) Medical Sciences. 4. Economic Sciences, with sections for (13) Agronomy, (14) Geography, and (15) Economy and Statistics.

The inaugural meeting, to commence at Bordeaux on September 5, will doubtless give a great success, as much energy is being displayed by the municipality and local committee of that important city. The railway companies also have not only subscribed towards the expenses, but will issue tickets at half fares to all members. A large concourse of French *savants* is expected, and many foreigners have announced their intention of being present. We hope that our own countrymen will muster strongly on so excellent an occasion, and the more so as the title and rules of our own Association have been adopted by this her younger sister. Applications may be made to Dr. C. M. Gariel, Secretary of the Council, 17, Place de l'Ecole de Médecine, Paris; or to Dr. Azam, Secretary of the Local Committee, 14, Rue Vital-Carle, Bordeaux.

THE WESLEYANS AND THE CONTAGIOUS DISEASES ACT.

At the meeting of the Wesleyan Conference held a few days since it was determined to memorialise the Government against the Contagious Diseases Act, and to appoint a standing committee to take measures in accordance therewith. The Premier, in answer to the memorialists, promised attention to their views, and when the Act was again before the Government he should be glad to communicate personally with members of the Conference.

UNIVERSITY OF EDINBURGH.

At the meeting of the University of Edinburgh held on August 1, the degree of Doctor of Laws was conferred on Mr. William Chambers and on Dr. Döllinger, and degrees in Medicine were conferred on a long array of gentlemen, whose names will be found in the appropriate column. Want of space compels us to defer our notice of Professor Maclagan's admirable concluding address.

PARLIAMENTARY.—PUBLIC HEALTH BILL.—ADULTERATION OF FOOD, DRUGS, ETC., BILL.

On Thursday, August 1, in the House of Commons, on the motion to consider the amendments made in the Public Health Bill,

Mr. Knight raised a short discussion on the general principle of the measure by moving that they be considered that day month. He objected vehemently to the centralising tendency of the Bill, maintaining that we were already the best cleaned and the best drained people in the world, and that we should go on improving without this social revolution, which he believed would cost us seventy millions in the first ten years. Mr. Gregory, Mr. Corrance, Mr. Hurst, and Mr. Newdegate also spoke against the Bill—Mr. Newdegate accusing the Radicals of deserting the principle of local self-government, and complaining of Mr. Disraeli for giving it a support, without which it could not have passed. Mr. Stansfeld briefly replied, denying that the Bill would increase the power of the central authority, or would add to the expenditure already sanctioned by existing legislation.

The amendment was negatived by 168 to 16, and the Bill as amended was considered. Various amendments and additions were made, chiefly at Mr. Stansfeld's instance, but they were all of a formal character, and the Bill was ordered to be read a third time.

On Friday,

On the motion of Mr. Bruce, the Public Health Bill was read a third time and passed amid cheers.

The House went into Committee on the Licensing Bill.

In the House of Lords, the Public Health Bill was read for the first time.

On Monday the Public Health Bill was read a second time in the House of Lords.

The House of Commons was employed with the Licensing Bill.

On Tuesday in the House of Lords the Commons' Amendments to the Adulteration of Food, Drugs, etc., Bill were considered and agreed to. The Public Health Bill passed through Committee.

On Wednesday the Public Health Bill was read a third time and passed in the House of Lords.

ARMY AND NAVY MEDICAL SERVICES.

The following is a list of candidates for the Army and Navy Medical Services who competed successfully at the examinations held at London in February, and at Netley in August, 1872:—

List of Candidates for the Army Medical Service who competed successfully at the Examinations held at London in February, and at Netley in August, 1872, *after having passed through a course at the Army Medical School, Netley.*

Order of Merit.	Names.	Studied at	Number of Marks.
1.	Magill, J.	Cork and London	5304
2.	O'Donnell, R. W.	Dublin	4411
3.	Donovan, W.	Dublin	4388
4.	Swayne, C. H.	Dublin	4201
5.	Browne, D. B.	Edinburgh	3907
6.	Quill, R. H.	Dublin	3885
7.	Tincler, B. M.	Dublin	3870
8.	Slaughter, W. B.	London	3711
9.	Browne, A. L.	Belfast	3700
10.	Keys, C. W. M.	Cork and Dublin	3537
11.	Bushe, C. J. L.	Dublin	3385
12.	Stokes, H. H.	Dublin	3122

List of Naval Medical Candidates who were successful at the Competitive Examinations held at London in February, and at Netley in August, 1872, *after having passed through a course at the Army Medical School, Netley, and who will receive Commissions in Her Majesty's Navy.*

Order of Merit.	Names.	Studied at	Number of Marks.
1.	Edwardes, L.	London and Aberdeen	5070
2.	Maclean, J. C. B.	Aberdeen	4212
3.	Volatti, W. J.	Dublin	3623
4.	Davis, J. W.	Galway and Cork	3601
5.	Bernal, R. A.	Dublin and Cork	3553
6.	Stiell, J.	Edinburgh	3476
7.	Cox, H. J.	Dublin	3300
8.	Drake, C.	London	3283
9.	Wood, J.	Dublin	3027
10.	Patterson, W. H.	Dublin	3002
11.	Corrie, A. T.	London	2993
12.	Wall, J. G.	Dublin	2916
13.	Mackie, J.	Edinburgh	2887
14.	Scanlan, H.	Glasgow	2788
15.	Freeman, D. J.	Dublin	2635
16.	Nash, H. M.	Dublin	2629
17.	Stone, J.	Dublin	2590

FORTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The meeting of the British Medical Association this year takes place at Birmingham, and to it already there have flocked from all quarters numbers of our professional brethren, such as to make the meeting one of the largest. Last year the meeting at Plymouth was one of the pleasantest—almost too pleasant, if report speaks truly; for presidents of sections, secretaries, and all are fabled to have gone off, leaving neither audience nor officers behind; nought but a box of papers, which could not be unlocked—all the rest had gone off to a pleasant excursion.

With a view to obviate such irregular proceedings, should there be any such tendency this year, many things have been altered. The various addresses are given in the morning, the sectional business is carried on in the afternoon, and all excursions are postponed till the end of the week.

The meeting began on Tuesday, there being a meeting of Council in the afternoon; and in the evening, in the large room of King Edward's Grammar School, the late President, Mr. Whipple (unfortunately unable to be present himself from illness), made way for his successor, Mr. Baker, Senior Surgeon to the General Hospital, Birmingham. The new President then delivered an address of a powerfully local flavour, dealing almost entirely with the physical geography of Birmingham. This seemed to a large proportion of the audience exceedingly agreeable; but to those not connected with Birmingham itself, the address which came next morning—being the address on Medicine—was much more welcome. This address was delivered by Dr. Wilks, and was received with the greatest approbation. From the sample of it given in another column, our readers will perceive that it was of the highest excellence, and well calculated to add to the lustre of a high reputation.

In the afternoon of Wednesday, the work of the sections began by addresses from the respective presidents—some of rare excellence—and the work of reading papers commenced. These, however, we must give next week, the large demands on our space for the doings of the Ophthalmological Congress and the earlier proceedings of the Association leaving no room for anything else.

The meeting promises to be a highly successful one in every way, the well-known hospitality of the Birmingham practitioners, and the powerful influence they have been able to exert in getting interesting manufactories opened to the public, rendering the visit a peculiarly pleasant one to many. Excursions have been planned for Friday and Saturday to the Black Country at Dudley, to Stoke, to Leamington, Kenilworth, and Warwick, and to Stratford-on-Avon, which, coupled with the hospitable reception provided by the local profession, promise to be exceedingly pleasant. Dinners and gaieties seem the rule in the evening.

On Wednesday the President gave a *soirée* in the Town Hall, which was attended largely both by visitors and inhabitants of Birmingham. In the course of the evening a fine selection of music was played.

The place of meeting of the Association next year has not yet been fixed; Glasgow was spoken of as most likely, but arrangements could not be made, and now there is a talk of Gloucester being selected.

A considerable number of London practitioners are visitors, but most of them have come in the capacity of idlers rather than workers, for there are not very many papers promised by London men. Next week it will be possible to enter into fuller details as to the work of the Association, which promises to be of interest. Meantime we must content ourselves with a mere outline of what is intended to be done.

Mr. Husband, of York, has resigned the important post of President of the Council, and Mr. Southam, of Manchester, has been elected in his stead. Mr. Husband has been made a vice-president for life. The report and financial statement presented by the Council were adopted, the latter showing that financially the position of the Society might be better, it being in debt to the extent of some £300. Dr. Fox and Mr. Washbourne, of Gloucester, were reappointed auditors; but, there being some grumbling at the financial condition, it was proposed to appoint a professional auditor. This, however, was not in the meantime resolved upon.

The general secretary, Mr. Fowke, was re-elected; and a motion by Dr. Steele, of Liverpool, to pay the travelling expenses of members of Council, when on the business of the Association, was negatived.

The Association also awarded a sum of twenty-five guineas as a gratuity to the editor of the journal for work done by him in connexion with the business of the Association previous to the appointment of a permanent general secretary.

The Address on Surgery was delivered by Mr. Pemberton, of the General Hospital, on Thursday morning. We propose to give it in full next week.

THE INTERNATIONAL OPHTHALMOLOGICAL CONGRESS.

Royal College of Physicians.

Thursday, August 1: Morning Sitting (*continued*).

Sympathetic Ophthalmia—Extirpation.

Dr. Henson, of Copenhagen, was of opinion that a diagnosis should be first clearly made out, whether the symptoms resulted from a foreign body in the eyeball or from a cataract, because the removal of these would remove the symptoms without the necessity of extirpating the eye.

Mr. Critchett thought it very difficult to decide on the cases in which the eye should be spared for a time, and some period might elapse before sympathetic symptoms arose. In young subjects he preferred abscision to extirpation.

Dr. Noyes in suppurating globes opens the sclerotic, eviscerates the contents of the eyeball, and brings the edges of the wound together. The cavity becomes filled with granulations, and thus a better stump is formed for an artificial eye.

Dr. Serveri did not think it was safe to lay down an inflexible rule for immediate removal of the damaged organ. In the Spanish army soldiers were in the habit of voluntarily destroying one eye for the purpose of getting discharged, and he had seen several cases of this kind which were not followed by sympathetic irritation of the other eye.

Thursday: Afternoon Sitting (3 to 6).

Bader on Granular Lids; Conical Cornea—Taylor, Warlomont, Bibosia, and Critchett on Extraction—Brettauer on Ophthalmometry—Carreras on Cysticercus—Galezowski on Aneurism.

Dr. Bader exhibited a patient who had been the subject of apparently hopeless pannus from granular lids, in which the left eye had been treated for nine months with quinine applied locally. The immediate effects of this were suppuration occurring within five minutes of its use; the other eye was not thus treated, and though formerly it was a much better eye than the other, the latter was now the better of the two. He also exhibited two other cases—one of tattooing corneal opacity, the other of conical cornea, in which the projecting portion was shaved off, the lids closed over the wound, and slight compression used. No synechia followed, and the contraction of the wound so altered the form of the corneal surface that vision became greatly improved. He formerly brought the edges of the wound together by sutures, but had abandoned that practice for the simpler plan just described.

An interesting discussion followed, in which different plans of treatment which had been tried for conical cornea were described—such as shaving off the more superficial layers without opening the anterior chamber, scraping the prominence, touching it with caustic, etc.—and in which Messrs. Galezowski, Critchett, Hulke, and Soelberg Wells took part.

Dr. Taylor, of Nottingham, next read a paper "On Extraction of Cataract," the chief novelty of which was the extracting the lens through a small and modified iridectomy, which did not involve the pupillary margin of the iris. Calabar

bean was first used, by which the iris was, as it were, put on the stretch, and the wound made to gape. On the effects passing off, the opening in the iris was lessened, and quite concealed by the upper lid.

Mr. Jabez Hogg considered the operation complicated and difficult of performance, and preferred the old flap operation.

Dr. Wolfe, of Glasgow, thought it better to extract through the natural dilatable pupil than through a small artificial one, which the lens might tear in its passage and so enlarge, thus afflicting the patient with two pupils. He disapproved of the operation.

Dr. Bibosia, of Namur, next read a paper describing another method of extracting cataract, or rather of performing an iridectomy in extraction. The lens capsule was first opened by a crucial scratch. A narrow-bladed knife was next made to transfix the sclerotic at the corneal margin, pushed across to the opposite point of the sclerotic, and made to emerge. A rotatory movement being now given to the knife, the aqueous humour escaped, and brought the iris over the knife. The section was then completed, in making which the portion of iris in front of the knife was shaved off at the same moment.

Mr. Jabez Hogg expressed disapproval of the operation; after which

M. Warlomont, of Brussels, described Lebrun's method of extraction of cataract, called "extraction by a small median flap." He frequently performed this operation at Brussels, and with good results.

Mr. Critchett observed that Graefe's mode of linear extraction and Warlomont's method were done on completely opposite principles, each of which he considered had its advantages, but neither should be exclusively done. In cases of double cataract he was in the habit of doing one operation on one eye and the other on the other eye. If one eye went wrong after a Graefian operation he did Warlomont's on the second eye.

Dr. Hansen, of Copenhagen, then gave the results of thirty cases of extraction done after the method of Liebreich.

Mr. Soelberg Wells was understood to express himself unfavourably of this operation.

Mr. Jabez Hogg objected also, and considered there was a greater danger of losing vitreous than in the upper section.

Dr. Brettauer, of Trieste, read a paper "On the Ophthalmometric Examination of the Eyes in three children." He found that the principal difference between the eyes of adults and those of children is in the depth of the anterior chamber; while the various radii and the refractive idex are about the same in the two ages. He also observed that in the eye of the child the posterior surface of the lens during accommodation changes shape as well as the anterior.

Dr. Carreras d'Arago, of Barcelona, related a case of Cysticercus Cellularis of the Retina. With the ophthalmoscope he detected at first an exudation, but no parasite. The patient improved under mercury, but returned with various photopsies, when the cysticercus was found with the ophthalmoscope. The patient was fond of pork. He was seen for eight months, and during that time suffered from no pain. Dr. Carreras d'Arago believed that enucleation would be the best treatment to adopt.

Dr. Galezowski, of Paris, described a case of Aneurism of the Arteria Centralis Retinæ. The patient was generally healthy, had no heart disease, and complained only of amblyopia; the acuteness, but not the extent of vision, was impaired. Ophthalmoscopically there was found on the disc a small red spot beside one of the arteries. This was at first considered a hæmorrhage, but it did not alter with time, and on more careful examination it was found to pulsate when the globe was compressed. He spoke also of a case of Aneurism of the Ophthalmic Artery, remarking that, in some cases where this diagnosis was made, dissection revealed no aneurism, but inflammation of the cavernous sinus, and enlargement of the ophthalmic vein. In a case which occurred to him, with all the symptoms of ophthalmic aneurism, he obtained a successful result after compressing the common carotid in the neck four times.

Dr. De Wecker, of Paris, replied that, in regard to the aneurismal appearance on the disc, it was probably a loop, and not a dilatation of the vessel; and secondly that, in regard to ophthalmic aneurism, he had never been able to come to a diagnosis.

Friday, August 2: Morning Sitting (11 to 1).

Vose Solomon on Intra-Ocular Myotomy—Brudenell Carter's Ophthalmoscope—Pagenstecher's Atlas—Wolfe on Traumatic Cataract.

The first paper read was by Mr. Vose Solomon, of Birmingham, "On Intra-Ocular Myotomy as a Remedy for Myopia." After describing his operation, which is well known, and pointing out the cases which were unsuitable for it, he illustrated by a table the results as obtained in two cases which certainly showed a most remarkable improvement. He admitted, however, that in some cases the operation was without result.

Dr. Roosa, of New York, would like to know whether Mr. Solomon recommended the operation in all cases of myopia; he was afraid that the dangers of the disease, as detachment of retina, etc., would be increased. For his part he preferred treating it palliatively by appropriate glasses, and as astigmatism was sometimes present cylindrical lenses were required.

Mr. Brudenell Carter observed that the defect of vision resulted partly from muscular spasm, which could be relieved by atropine without risk of injuring the eye, and with improvement of vision.

The President was not satisfied with the cases adduced by Mr. Solomon; we wanted a larger number of cases, and a more accurate determination of the refractive condition of the eye. The improvement might be due to change of the pupil, or to the removal of the spasm by division of the ciliary muscle; but the refractive condition of the eye was not changed, as proved by the near point remaining the same.

Mr. Solomon, in reply, did not depreciate the value of spectacles, but considered the improvement in vision produced by his operation decided and permanent, the patients being in a much better position afterwards than before the operation.

Mr. Brudenell Carter then exhibited and explained his well-known Demonstrating Ophthalmoscope and a new Perimeter, the construction of which it would be impossible to explain without diagrams. It was objected to the former instrument by Mr. Jabez Hogg that the image, although large, was blurred by the enlargement, and less clear and sharp than that of the ordinary hand-ophthalmoscope. To remedy this over-magnifying defect, he had used the instrument with a plano-convex lens, instead of a double convex lens, and found the defect rectified.

It was proposed by Mr. Soelberg Wells, and assented to, that the instruments should be worked side by side for the satisfaction of the members at St. George's Hospital on the following day.

Mr. Carter then exhibited his Perimeter, for which he claimed the advantages of cheapness, portability, etc.

Dr. Voixow objected to the instrument having only a single arm, and to the want of a mirror; but

Mr. Carter had found that where there were two arms one was always in the way, and he had purposely constructed his with a single arm; but he admitted that his instrument was susceptible of improvement.

Dr. Brettauer, of Trieste, criticised the construction of the latter. He did not consider that in this arrangement the head of the patient was kept sufficiently steady, and so at a sufficiently fixed distance for exact measurements; for the same reason the arc was too flexible. He showed diagrams made after measurements of the field of vision, taken with Förster's perimeter, in various pathological conditions.

Dr. Wainow, of Moscow, offered several objections to Carter's instrument, and suggested several improvements.

Dr. De Wecker, of Paris, remarked that so complicated an instrument as Förster's cannot be used in a large clinique. He recommended the use of a constant gas-flame instead of the sun-light in measuring the field of vision.

The President believed there were cases where, both for the patient's and surgeon's sake, great accuracy of measurement was required, especially in watching the progress of a disease. The President mentioned a case where minute foreign particles impacted in the lens had set up no symptoms around after twelve years. He also reminded his hearers of an important fact, that effusions into the anterior chamber coagulate from contact with the lens in cases of dislocation of that body.

Dr. Pagenstecher, of Wiesbaden, submitted to the Congress an Atlas of highly artistic Drawings of Pathologico-Anatomical Conditions of the Eye. He proposed to lay the atlas on the table for inspection by the members, with a view to its publication by subscription. His offer was accepted, and the work numerously subscribed for.

Dr. Wolfe, of Glasgow, then read a paper on eighty-two cases of Traumatic Cataract, and described his methods of operating as three in number—first, linear extraction with the lance, without or with iridectomy; second, the small corneal or corneo-conjunctival flap; third, curo-linear corneal incision with Graefe's knife. According to the nature of the injury, so was the operation selected. These injuries consisted of—(*A*) *Recent Injuries:* Without penetrating wound, 1;

simple punctures, 18; laceration of cornea and iris, 22; with hypopion, 3; foreign bodies impacted in lens or ciliary processes, 7; dislocation of lens into anterior chamber (partial), 11; dislocation of lens into anterior chamber (entire), 4; dislocation into the vitreous humour, 1; contusion of eyeball, 1. (*B*) *Old Injuries:* Simple, 3; with anterior adhesions, 2; with posterior adhesions, 8; dislocation and adherent lens to decemet membrane, 1. The results were—65 were cured with good sight, and 10 with medium sight; 7 were dismissed with no sight; 16 required subsequent pupil formation, 6 laceration of capsule, and 4 pupil formation and laceration of capsule.

Mr. Power asked how Dr. Wolfe treated cases of a foreign body within the lens which did not produce immediate results or sympathetic irritation of the other eye, but merely a limited opacity with some iritis. Was it right to wait or to remove the eyeball at once?

Dr. Wolfe enucleated in these cases.

Mr. Vose Solomon preferred immediate extraction.

Mr. Hulke asked whether he was correct in understanding that Mr. Power and Dr. Wolfe enucleated in simple cataract with iritis.

Dr. Wolfe, in reply, said there was a peculiar physiognomy about eyes which required removal, by which he judged the expediency or otherwise of doing the operation.

Mr. Hulke spoke favourably of Mr. Teale's suction syringe in cases of swollen lens, and disapproved of large sections, especially in young subjects.

Mr. Power asked how to act in partial cataract where there was vision, but ophthalmitis commencing.

Mr. Hogg replied by narrating a case in which, under similar circumstances, an iridectomy was done and the lens extracted, and the foreign body with it; all further mischief was arrested, and fair vision preserved.

The President made some observations with reference to the plastic effusions interfering with the removal of the lens by suction.

Mr. Teale, in reply, stated that his method was not applicable where inflammatory effusions existed. In these cases he did an iridectomy and removed the lens.

Friday: Afternoon Sitting (3 to 5).

Papers by Argyle Robertson, Galezowski, Williams, and Couper—Noyes on Muscular Asthenopia—Samuelson on Diphtheria.

Dr. De Wecker distributed copies of his work "De la Greffe Dermique en Chirurgie Oculaire."

Dr. Argyle Robertson, of Edinburgh, described a case of "Unilateral Irideremia" due in all probability to an escape of the iris following an injury. He related experiments with the Calabar bean and atropine on the accommodation, and considered that they confirmed Helmholtz's views that the change in the refraction of the eye during accommodation is due to an alteration in the form of the crystalline lens, which becomes more convex.

Dr. Galezowski related two cases, and Mr. Samuelson, of Manchester, "A case of Absence of Lens and Iris."

Dr. Williams, of Cincinnati, read a paper—"Practical Observations on Various Subjects." In ulcers of the cornea he uses pure carbolic acid as an escharotic, and atropine and warm applications to relieve pain. In iritis and irido-choroiditis he recommends warm poultices for two or three weeks.

Mr. Couper then read a valuable paper "On the use of the Ophthalmoscope as a means of determining the amount of Astigmatism." His experience was confirmed by M. Javal, of Paris, who preferred Giraud Teulon's binocular ophthalmoscope for that purpose.

Dr. Oldham gave a description of an improved ophthalmoscope for the same purpose.

Dr. Noyes, of New York, read a valuable paper "On Muscular Asthenopia," of which it is impossible to give the details without the paper. He gave some of the details of eighty cases in private practice, his primary object in commencing treatment being to correct the abnormal refraction of the eye by suitable glasses, and afterwards giving tonics, of which he preferred phosphoric acid and strychnine. He had tried galvanism, which relieved pain, but did not increase muscular power.

Dr. Taylor introduced a patient demonstrating the results of his method of operating for cataract.

Professor Von Zehender, of Rostock, exhibited preparations and photograph of a case of Congenital Anchyloblepharon in an infant. There was a slight indication of a palpebral opening on one side only. The child was otherwise malformed, and died. On examination it was found that there was an anterior corneal portion separated by a constriction from a posterior vitreous; that the lens and fluids were imperfectly developed, but the muscles well represented, including an orbicularis. On the whole, the elements were unusually well represented for such cases.

Dr. Doyer, of Leyden, had met with a similar case, also traumatic. In his opinion the iris remained in the eye.

Dr. Joy Jeffries then gave an account of experiments upon his own person on the Variation of Acuteness of Vision at different times.

Dr. Von Schroeder, of Leipzig, described an Ophthalmoscope by Professor Coccius, of the same town.

Thereafter Dr. Samuelson read a paper "On Diphtheritic Conjunctivitis," which abounds in the neighbourhood of Manchester. The substance of the paper was criticised by Mr. Soelberg Wells.

Dr. Gama Lobo, of Rio Janeiro, described a method of ascertaining the degree of Convexity of the Posterior Surface of the Lens.

The Congress then discussed for a short time the question of their next meeting—when and where it should be held. It was resolved to come to an arrangement next day.

Saturday, August 3: Morning Sitting (11 to 1).

Spencer Watson on Cold—Teale on Symblepharon—Schmidt on Optic Neurosis—Green on Test-Letters.

Mr. Spencer Watson exhibited some Indiarubber Balls which served the purpose either of applying cold to the eye by iced water within, or as compresses when partly inflated with air. He related some cases of Intra-orbital Dermoid Cysts, which he considered peculiar, and if not removed or opened caused absorption of the walls of the orbit.

Mr. Streatfeild described his method of performing cataract with Sichel's knife, with its advantages.

Mr. Teale, of Leeds, read a paper "On the Treatment of Symblepharon by Transplantation," and exhibited two patients on whom he had performed the operation. In one who had been operated on two years before, the result was excellent. The details of the operation cannot be given without the paper. Mr. Teale was loudly applauded.

Mr. Meyer, of Paris, especially characterised this operation as a real advance in ocular surgery.

M. Javal, of Paris, next proposed that an international series of tables of focal distances, etc., should be made, in which the decimal system was adopted. The proposal was supported by several of the members; after which

Mr. Soelberg Wells read a form of declaration ready for signature—that the decimal system be adopted by the subscribers after July, 1873. Numerous signatures were afterwards attached to the declaration.

Dr. Schmidt, of Marburg, then discussed the subject of the Affection of the Optic Nerve in certain Central Nervous Diseases; he supported the theory of an effusion between the proper and outer sheaths of the nerve, leading to venous compression and optic neuritis, and adduced both physiological and pathological facts in favour of this view. Thus, besides the passage of injection from the arachnoidal cavity into the vaginal space, he had seen pus in the same position in a case of meningitis; he has found the nerve sheath most distinctly swelled up to the lamina cribrosa in cases of cerebral tumour, but not in Bright's disease; and the same had been observed in disease of the cord. Dr. Schmidt further expressed his opinion that perfectly rational treatment might be founded on this explanation.

Dr. De Wecker agreed with Dr. Schmidt; Dr. Galezowski did not.

Dr. John Green (of U.S.) described an Improvement which he believed he had made on Snellen's Test-Letters. He would inscribe all the letters in a square of twenty-five smaller squares; would adopt a series of letters progressing geometrically in height, and would arrange letters of gradually reduced size in a single row.

The time and place of the next meeting of the Congress were then discussed, several Spanish and American members supporting the claims of Madrid and New York respectively, and giving the Congress a warm invitation to accept their offers of hospitality. On the vote being taken, the majority were in favour of New York, where it was resolved to hold the next meeting in September, 1876.

Saturday: Afternoon Sitting (3 to 6).

Power on Transplantation of the Cornea—Bowman on several subjects.

The sitting commenced with an account given by Mr. Power

of Transplantation of the Cornea. After briefly recording previous attempts to transplant the cornea—some as early as 1823—the speaker described the first suggestion of the idea to his mind, his preliminary experiments on animals at the Brown Institution, and the method which he has adopted in several cases in the human subject. He removes a portion of tho opaque cornea of the patient with a special sharp punch, obtains a portion of a healthy rabbit's cornea exactly corresponding by the same means, and transfers it to the space in the human eye, which it of course accurately fits. The lids are fixed together, and in a week union is complete. Whether the portion transplanted will become perfectly clear he cannot yet, from want of experience, say. Mr. Power exhibited a patient on whom he had lately operated with promising results. He submitted the operation to the members for trial and improvement.

Dr. Williams, of Boston, then described his method of Suture of the Cornea after Incision for Cataract, etc.

Mr. Bowman spoke on several subjects which he preferred bringing thus before the Congress rather than publishing each in a separate paper. First, he described a new operation for artificial pupil, in which a V-shaped portion is removed from the iris, the base being towards the pupil; this he would recommend in cases of nuclear cataract. Secondly, he described a method of removing the central pupillary structures by means of a scissors. Thirdly, he exhibited a "stop-knife," which is so made as to permit the operator using both his hands to incise the cornea at two points at the same moment. Mr. Bowman then described his operation for conical cornea at the apex, and suggested several instruments by which an accurately shaped portion might be removed.

M. Meyer and Dr. De Wecker replied.

Dr. Quaglino, of Milan, then read a paper "On Sclerotomy in Glaucoma."

Dr. Noyes supplemented his paper of the previous day—"On Muscular Asthenopia"—by certain remarks. He also exhibited forms for taking notes, cylindrical glasses made without cementing, blue spectacles with central spherical glass cemented on, for use in sensitive retinæ after extraction of cataract, and a new eye-speculum.

The President concluded with some remarks on Traumatic Keratitis.

This finished the professional work of the meeting.

Objects of interest at Mr. Bowman's Conversazione, August 1.

Microscopes.—Sections of anterior half of the eye; injections of various tissues of eye (Dr. Beale)—with his hand microscopes. Specimens of the organ of Corti, and of various ocular tissues (Drs. Rutherford and Pritchard). Injected choroid and ciliary body (Mr. Nettleship). Section of ciliary region (Mr. Bader). Also various specimens of the retina, membrana Ruyschiana, exudation from choroid and retina, etc.

Ophthalmoscopic drawings exhibited by Dr. Hughlings-Jackson, Mr. Bader, and Mr. Power. Drawings of stages of development of human lens and of the scala media of the cochlea (Dr. Thomas Reid).

Instruments.—Self-illuminating ophthalmoscope (Hawksley). Demonstrating ophthalmoscope and artificial eye of Perrin. Demonstrating ophthalmoscope (Mr. Brudenell Carter). Optometer and calculating rule (Ackland). Model showing the action of the muscles which move the eye.

PROVINCIAL CORRESPONDENCE.

IRELAND.

Dublin.

Exhibition of Arts, Industries, and Manufactures.

Before passing to the more strictly practical departments of the Exhibition, the modern picture gallery should claim the attention of your readers, many of whom will, I hope, shortly summon up courage to cross the "silver streak of sea," and visit the island of saints, shillelaghs, and faction-fights. A more beautiful or interesting collection of paintings than that which is now located in the smaller concert-room of the Exhibition Palace has seldom been exhibited. Among so many choice works it would perhaps be invidious to particularise, but a charming winter scene, by Hasenpflug, entitled "Ruins of the Cloisters of Walkemind"; a picture of Othello and Desdemona, by T. F. Dicksee; and "Little Nell," by T. H. Maguire, are sure to strike even the most impassive visitor. In this same collection there is an admirable likeness of Dr. Richard H. Butcher, ex-President of the Royal College of Surgeons, Ireland. The artist was Catterson Smith, R.H.A., whose death, a few weeks since, deprived us of one of the most talented portrait painters of the Irish school. To his graphic pencil we also owe the likeness of the late Dr. Mayne, in the National Portrait Gallery, which was erroneously attributed in my last letter to Mr. T. A. Jones, himself an artist of much eminence, and now President of the Royal Hibernian Academy.

In the "Leinster Hall" Messrs. McAdams and Corcoran, of 44, Lower Ormond Quay, Dublin, exhibit a case of medical and surgical appliances. Among these are an artificial leg for amputation above the knee, also one for amputation below the knee; Dr. Morgan's splint for fracture of the thigh and for affections of the knee- and hip-joints; Dr. Wm. Colles's modification of Dr. Sayers' splint for fractured neck of the femur; Dr. Hayes' splint for fracture of the lower end of the radius; an improved spring crutch; an appliance for club-foot, with a double ratchet joint; steel support for contracted leg; a pair of steel leg-supports for cases of weakness, knock-knees, and bow-legs, besides a good collection of stethoscopes, trusses, slings, and an improved lever stomach-pump.

Messrs. O'Neill and Thompson, of Henry-street and Nassau-street, Dublin, are also exhibitors on an extensive scale in this department. In their case may be seen Stokes's eye compress—a very ingenious clamp for compressing the eyelids in granular affections. The instrument has been used with very good results in Australia and other hot climates. Cruise's guillotine is well worth inspection, being of very simple construction, easily sharpened, and most successfully applied. A group of deformity instruments, for club-foot and spinal diseases, are next met with. An artificial arm, with a leather socket to fit on the portion of stump remaining either above or below the elbow-joint, is cleverly designed; the hand especially is a fine piece of mechanism, as it admits of the fingers being brought into any required position, so that they can hold a knife or fork if necessary. Messrs. O'Neill and Thompson's artificial leg is also made on the most approved principle, with spring action, so as to correspond as closely as possible with the natural movements of the good limb. An artificial nose is a clever imitation, and is readily adapted to the face. Among the many trusses exhibited by the same firm I would particularly mention the light skeleton trusses, which are strongly recommended for ease and comfort to the wearers. A patent air-funnel vapour bath appears to afford ready means for fulfilling the requisite conditions of a combined hot-air and vapour bath. It is an ingenious contrivance, although one of extreme simplicity.

Scientific inventions and philosophical instruments are well represented in cases furnished by J. Spencer and Sons, Yeates and Son, L. Braham and Co., and others. The first-mentioned firm show Jellett's saccharometer for purposes of analysis with polarised light. A full account of this instrument appeared in the *Medical Times and Gazette* for July 22, 1865. A heliostat, of elegant workmanship, made during the present year, is to be seen in the same case. Messrs. Yeates exhibit an improved electric photostat, arranged for the projection of all optical phenomena on the screen; also a hollow lens and prism, with thermopile for showing the heat rays of the spectrum. This is a very beautiful apparatus. Here, too, we find prisms of bisulphide of carbon, for projecting various spectra on the screen; prisms and lens of quartz, for experiments with the ultra violet rays; organ-pipes, with elastic diaphragms and gas-jets, for acoustic purposes; a large tuning-fork, with electro-magnet, for experiments with vibrating strings; and a new double-action air-pump.

Close beside these cases is a model of the great Melbourne telescope, scale $\frac{3}{4}$-inch to the foot, by Mr. Howard Grubb, C.E. On the other side of the "Leinster Hall" stands a monster pyramid of scented soap!—a veritable curiosity in its way. It is about 7 feet high, nearly 2 feet square, weighs 784 lbs., and is value for some £40 sterling. It took one day to melt and cast, and four days to cool. The exhibitor is Mr. F. Lewis, of Fleet-street, Dublin.

In the chemical and pharmaceutical departments of the Exhibition some of the leading houses of our city are represented, but I must reserve a detailed account of their exhibits for another letter.

The Exhibition is now quite completed, and appears to be extremely popular, especially since the rate of admission was reduced on ordinary days to one shilling. Even this low charge is still further reduced, through the liberality of Sir Arthur and Mr. Cecil Guinness, in the case of artizans,

schools, and so forth. Musical entertainments of a high order of merit are frequently given in the handsome concert-hall of the building; and a most successful rose show took place in the grounds last week.

A spell of very fine weather has proved a further attraction, and at the present time Dublin is thronged with visitors to the Exhibition, the quickly lessening severity of the small-pox epidemic having inspired the timid with confidence.

GENERAL CORRESPONDENCE.

THE LORD ORDINARY AND THE LADIES MEDICAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your lucid leader of the 3rd inst. on the Scotch Lord Ordinary and the female medical students very imperfectly indicates in what a false position that gentleman has placed himself and the administration of justice in Edinburgh. To understand this it is necessary to know what was his position in regard to the plantiffs in the case.

I have before me a pamphlet, entitled "Medical Education of Women: List of Executive, Edinburgh, and General Committees." On the next page is the heading "Committee for Securing a Complete Medical Education for Women." This is followed by a statement beginning thus:—"In view of the determined opposition *from certain quarters* (the University) which has met every effort made by ladies to obtain a medical education in Edinburgh, it was resolved in January, 1871, that a committee should be formed, comprising all those who felt the *injustice of the present arbitrary exclusion of women from the medical profession*, and who *desired to co-operate* for the following objects." The italics are mine. The fifth of these objects runs thus:—

"5. To co-operate from time to time with the lady medical students, whenever necessary, and *especially to aid them in obtaining such legal assistance as may be required to ascertain and assert their rights as matriculated students of the University*, and as registered students of Medicine." (Italics mine.) On the list of the "Edinburgh Committee" for "co-operating with [the plaintiffs] the lady medical students" is the name of "Lord Gifford, Granton House,"—the judge in the case. I make no comment on these facts. It is of no material consequence whether Lord Gifford actually co-operated in committee or not, nor whether he had intimated his withdrawal from the Committee or not previously to sitting in judgment on the case; neither is it material to the questions involved that, when giving judgment, he acknowledged his strongly-formed convictions; except that, knowing he was thus liable to be swayed, his course was the clearer to decline sitting in judgment at all.

As Lord Gifford attributed unworthy motives to those of the Senatus who thought it their duty to defend the action brought by his *protégées*, and to praise those who did not, I subjoin the names of those professors who did *not* join the six who would have elected judgment to go by default, but whose names are associated with theirs and Lord Gifford's on the "Edinburgh Committee." These are—Professors Balfour (Botany), Blackie (Greek), Fraser (Logic), Giekie (Geology), Jenkin (Engineering), Kelland (Mathematics), Stevenson (Ecclesiastical History), Tait (Natural Philosophy), Wilson (Agriculture). It is to the credit of these gentlemen that, unlike Lord Gifford and their six colleagues, they did not allow their personal convictions to interfere with their public duties; and it is to be hoped that they will maintain this position, as honest as it is dignified.

In conclusion, I call the attention of the Lord Justice-General for Scotland to these facts.

I am, &c.,
A MEMBER OF EDINBURGH UNIVERSITY COUNCIL.

THE Board of Guardians of the Roscrea Union have raised the salary of Dr. John A. Powell, as Medical Officer of the Roscrea Dispensary District, from £100 to £125 per annum.

THE new cottage hospital at Tewkesbury was formerly opened last week. Seven years ago a cottage hospital was established in Tewkesbury, two cottages having been taken for the purpose. The new building is near the temporary hospital and railway station.

OBITUARY.

PETER PINCOFFS, M.D. LEYD., M.R.C.P.

THOUGH by birth a foreigner, and probably unknown, even by name, to most of his junior professional brethren, the subject of this notice had been for long years the valued friend of many of his contemporaries in this country, and perhaps a few of his seniors still survive who will recollect him as an intelligent, accomplished pupil when he walked our hospitals as far back as 1838-39. After some years of declining health, which, engaged in the arduous exercise of an extensive practice in Naples, he could not be persuaded to consider, he was seized early in April this year with repeated and severe attacks of angina pectoris. He never made a proper recovery; dropsy set in about a month before his death, and from that time his sufferings became so constant and acute that he earnestly prayed for release. He expired on the 17th inst., at Munich.

Dr. Pincoffs took his degree of M.D. at Leyden at the early age of 21. He completed his professional studies by frequenting the clinical and other lectures in Paris, Berlin, and London, and, having passed the examination required by law in Brussels, settled there in 1840. In less than two years he decided upon changing his residence, feeling or fancying that the political animosities which at that period divided Belgium and Holland might interfere with his career. In that short space, with the energy that through life characterised him, he had succeeded in founding a dispensary, which, with the co-operation of two other young men, he served with untiring zeal, and which the writer believes still flourishes as the Dispensaire de la Rue du Nord. In June, 1842, he went to Dresden, where he immediately had himself inscribed for the Staats-Examen, which he passed with *éclat*. He practised in Dresden till 1847, when family reasons induced him to remove to Manchester, and he again went through the ordeal of an examination to become an Extra Licentiate of the College of Physicians. In Manchester he served the Chorlton-upon-Medlock Dispensary, winning the hearts of the inhabitants of the district known as "Little Ireland" (where he was whimsically called the "French Doctor"), during the famous epidemic of cholera in 1848. He subsequently became Physician to the Greenheys Female Penitentiary, and was an unsuccessful candidate for the then much-coveted post of Physician to the Manchester Infirmary. On his retiring, agreeably to the advice of his valued friend, the late Dr. Wilson, of Manchester, who judged our English mode of life and climate ill-suited to his state of health (he was from early youth the subject of heart disease), he received the most flattering testimonials from the governors of the charities he had served.

He returned to Dresden, and when the Crimean war broke out again played truant. He obtained an appointment as Civil Physician to the Scutari Hospitals, on the direct recommendation of the late Lord Herbert of Lea (then Mr. Sidney Herbert), whose personal acquaintance he had made during an illness Mr. Herbert had contracted in Dresden on his return from Carlsbad the preceding autumn. Introduced to Florence Nightingale by Mr. Herbert and Sir James Clarke, aided by her unprejudiced and influential assistance, he was able to extend his sphere of usefulness beyond the wards of the Barrack Hospital. He was active everywhere on behalf of the soldier, was one of the lecturers in the "School-room," the zealous promoter of the "Inkerman Café," etc.

While neglecting no duty on the Asiatic side of the Bosphorus, he managed to collect the scattered representatives of different nationalties and conflicting schools of medicine in Pera, and by dint of untiring perseverance succeeded in establishing there a Medical Society—the first scientific society in Constantinople which can boast of more than an ephemeral existence, now still publishing its monthly journal, holding a respectable position in European periodical medical literature.

On the dismissal of the "Civilians" in the spring of 1856, Dr. Pincoff's services were volunteered and gratefully accepted by his *confrères* of the French military hospitals, whose ranks had been decimated by typhus fever.

In the autumn of 1856 he advocated, in "A Letter to the Duke of Cambridge," the establishment of a sanitarium at Bath; and in 1857 published "The Experiences of a Civilian in Eastern Military Hospitals."

He returned to Constantinople in 1858, was a member of the Council of the Medical School at Comberhaneh till he joined Lord Dufferin's mission at Beyrout in November, 1860. He there won the regard and esteem of his lordship and of all the members of that mission by his activity and devotedness in all

emergencies. A handsome letter of thanks and a £50 note were sent him from the Admiralty in recognition of his services in establishing hut hospitals to clear the ships carrying small-pox patients (thus saving many lives) in an incredibly short space of time for those who know the inertness of Orientals in general, and Oriental officials in particular. He opened a "Bureau de Vaccination gratuite" in a populous quarter of the town, where he vaccinated numbers of children, thus helping to stop the ravages small-pox was then making amongst the refugees from Damascus and the Lebanon.

On quitting Syria he finally settled down at Naples, where he had resided since December, 1861. There his professional skill and talents were appreciated, his disinterested benevolence admired, and his many social qualities endeared him to a circle of loving friends, amongst whom his loss will be long and deeply deplored. He leaves a widow, but no issue.

Dr. Pincoffs received the Insignia of Officer of the Order of Medjidie from the Turkish Government in 1856, in recognition of the service rendered the country in establishing the Medical Society of Constantinople. He was promoted to be a Commander of the same Order in 1861, for services to the Damascus refugees in Beyrout. The Sardinian Government conferred on him the Knighthood of St. Maurizio and Lazaro in 1856, for his active mediation in procuring stores and medical comforts for their troops when, by the burning of their ship *Crœsus*, their hospitals were left dependent on the mercy of their neighbours. He was also made a Knight of the Eichen Krone, for services rendered to Dutch sailors in Constantinople in 1859. The Duke of Saxe-Meiningen bestowed on him the Commandership of the Ernestimscher Haus Orden in 1867; and very lately the Italian Government made him an Officer of the Corona d'Italia in acknowledgment of his exertions to promote the success of the Maritime Exhibition in Naples.

MEDICAL NEWS.

Apothecaries' Hall. — The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 1, 1872:—

Eminson, Luther, Scotter, Lincolnshire.
Kessen, Andrew Emerson, Geneva-road, Brixton.
Tattersall, Lord, Bacup, near Manchester.
Williams, Leonard, Scarborough.

As an Assistant in Compounding and Dispensing Medicines:

Pearse, William Francis, Lowestoft.

The following gentleman also on the same day passed his Primary Professional Examination:—

Hudson, John, Leeds.

The Apothecaries' Hall, Dublin.—At the Professional Examinations held in July, 1872, the following gentlemen obtained the Licence to practise Medicine:—

Butler, Francis Joseph.
Evans, William Robertson.
McQuaid, Peter John.
Murphy, Edward.
Macnamara, George Unthank.
Macaulay, Roger.
Murtagh, James Walsh.
Purefoy, Richard Dancer.

The following passed the Preliminary Examination in Arts:

Carmody, Patrick Joseph.
O'Connell, Albert Edward.
Reynolds, Thomas Taylor.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Betts, N. P., M.R.C.S., L.S.A.—Medical Officer to the Southern District of the Boston Union.

Bull, William, L.S.A.—House-Surgeon to the Devonshire Hospital, Buxton.

Butlin, H. T., F.R.C.S.—Junior Surgeon to the West London Hospital, *vice* Mr. Alfred Cooper, promoted.

Cooper, Alfred, F.R.C.S.—Surgeon to the West London Hospital, *vice* Mr. William Bird, F.R.C.S., appointed Consulting-Surgeon.

Lane, E., M.R.C.S., L.S.A.—Medical Officer to the Kirton District of the Boston Union.

MacGill, A., M.D.—Medical Officer for the Roydon District of the Epping Union, subject to confirmation by the Local Government Board.

Maclean, Allan, L.S.A.—Assistant House-Surgeon to the Rotherham Hospital.

Sobey, Arthur L., M.R.C.S.E.—House-Surgeon to the West London Hospital, Hammersmith, W.

Trust, John.—Dispenser at the Royal Dundee Infirmary.

Wade, Arthur Law, M.B., L.R.C.S.I.—House-Surgeon to the Royal Isle of Wight Infirmary, Ryde.

MILITARY APPOINTMENTS.

Fox, Surgeon Thomas William, M.B., having completed twenty years' full-pay service, to be Surgeon-Major.

18th Foot.—Staff-Surgeon Robert Watson to be Surgeon, *vice* Richard Uniacke Cashman, M.D., placed upon half-pay.

Medical Department.—Surgeon William Younge Jeeves, from half-pay, late Royal Artillery, to be Staff Surgeon, *vice* Robert Watson, appointed to the 18th Foot.

BIRTHS.

Daly.—On August 2, at Kingston, Abingdon, the wife of J. H. Daly, L.R.C.P.L., of a son.

Hawkins.—On August 7, at Bow, Middlesex, the wife of James Stilwell Hawkins, M.R.C.S., of a son.

Hewan.—On July 31, at Minera-street, Eaton-square, the wife of Archibald Hewan, M.D., of a son.

Ireland.—On August 6, at The Limes, Linton, Cambridgeshire, the wife of Edward Ireland, M.R.C.S.E., of a son.

Jackson.—On July 29, at Smethwick, Staffordshire, the wife of W. F. Marsh Jackson, M.R.C.S., of a son.

Redfern.—On August 2, at Templepatrick House, Donaghadee, the wife of Professor Redfern, M.D. Lond., of a daughter.

MARRIAGES.

Bawtree—Watson.—On August 1, at Orton Longueville, near Peterborough, Edward W. Bawtree, M.D., Deputy Inspector-General of Hospitals, to Emily Cooke, daughter of the late Rev. John Watson, D.D., Vicar of Kingstead-cum-Denford, Northamptonshire, and widow of the late Leonard Cooke, Esq., of Richmond, Yorkshire.

Danford—Dyce.—On July 31, at Emmanuel Church, Mannamead, Plymouth, Charles G. Danford, Esq., barrister-at-law, only son of William Danford, Esq., to Antoinette Emily, youngest daughter of Robert Dyce, M.D., F.R.S.E., Professor, Aberdeen University.

Dunlop—Strickland.—On July 26, at St. Saviour's, Jersey, Andrew Dunlop, M.D., to Alice, eldest daughter of the late J. J. Strickland, Esq., Kensington.

Finch—Gazeley.—On July 31, at Wayford, Somerset, Henry Finch, M.D., of Colchester, to Ellen Georgina, younger daughter of the Rev. R. Court Gazeley.

King—Case.—On July 31, at Christ Church, Lancaster-gate, Robert King, B.A., M.B. Cantab., M.R.C.P. Lond., of 48, Harley-street, W., to Esther, eldest daughter of Robert Case, Esq., 70, Inverness-terrace, Kensington-gardens, W.

Lane—Medley.—On August 6, at St. Michael's-in-the-Hamlet, Liverpool, William R. Lane, Surgeon Grenadier Guards, to Rosa Mary, eldest daughter of Francis W. Medley, Esq., of St. Michael's Hamlet.

Nursey—Thompson.—On July 23, at St. Thomas's Church, Bishopwearmouth, Charles Fairfax Nursey, L.R.C.P. Edin., and L.F.P.S. Glasg., to Frederica Isabel, only child of the late Francis Decimus Thompson, Surgeon.

Panton—Henderson.—On August 6, at St. George's, Tuffnell-park, Edward Henry, eldest son of the late Honourable John Edward Wilson Panton, Vice-Chancellor of Jamaica, to Christian Edith, youngest daughter of the late William Forsyth Henderson, M.D., of Stoakes Hall, St. Thomas, Jamaica.

Rayner—Hyde.—On August 3, at St. Mary's, Westbury-on-Trym, Bristol, John Rayner, M.D., of Swaledale House, Highbury-quadrant, London, to Emma Katharine, second daughter of the late Rev. W. Hyde, M.A., Rector of St. Mary's, Dowyatt, Somerset.

Slocombe—Vines.—On August 6, at St. Lawrance, Reading, William Slocombe, of The Abbott's-walk, Reading, to Rosa Annie, younger daughter of Charles Vines, Surgeon, Reading.

Weld—Holland.—On August 1, at the parish church, Sevenoaks, Kent, William Walter Weld, Surgeon-Major, half-pay, to Emma, youngest daughter of Lieutenant-Colonel John Holland, of Sutton Lodge, Haverfordwest.

Wells—Kaines.—On July 31, at Gillingham, Dorset, James Wells, son of J. H. Wells, M.R.C.S. Eng., L.S.A., to Blanche Elizabeth, youngest daughter of Henry Kaines, Esq., solicitor, of Gillingham.

DEATHS.

Barnes, Frederick, Captain Royal Elthorne Militia, fourth son of Dr. Barnes, late of Belle Vue House, Notting-hill, on July 17, at 27, Thurloe-place, South Kensington, aged 35.

Bennett, Henry, F.R.C.S., L.S.A., of St. John's Cottage, Shaftesbury, Dorset, at 3, Mayow-road, Forest-hill, on July 31, aged 68.

Coleman, Ida, infant daughter of Alfred Coleman, F.R.C.S., of Holly Lodge, Streatham, aged 9 months.

Dick, Frederick James, youngest son of the late Robert Dick, M.D., R.N., formerly of Jersey, on August 2, at Highbury Villa, Selhurst-park-road, South Norwood.

Gabb, Emma, the wife of Alfred William Gabb, M.R.C.S., at Cheltenham, on August 5, aged 53.

Heygate, James, M.D., at Eaton-hill, Derby, on August 4, aged 71.

Hocken, Jessie, wife of Charles E. Hocken, M.D., Wood-green, Middlesex.

Jowers, Gertrude Amelia, the beloved wife of Frederick Williams Jowers, M.R.C.S., etc., at 27, Old Steyne, Brighton, on August 5, aged 39.

Rice, Fanner Turner, younger daughter of W. M. Rice, M.D., of 8, Sloane-terrace, S.W., at 4, Clarendon-crescent, Edinburgh, on August 6, aged 6 months.

Schweitzer, Dr. W. J., at the residence of his son, 226, City-road, London, on August 4, suddenly, aged 70.

Wardell, Jane, the beloved wife of Dr. Wardell, Fellow of the Royal College of Physicians, at Calverley-park, Tunbridge Wells, on August 5, aged 52.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ABERFOYLE, PERTHSHIRE.—Medical Practitioner. Full particulars of Mr. H. R. B. Peile, Catter House, Drymen-by-Glasgow.

DOVER HOSPITAL AND DISPENSARY.—House-Surgeon. Candidates must possess both medical and surgical qualifications, and be registered. Applications, with testimonials, to Mr. Edward Elwin, jun., 13, Castle-street, Dover, on or before August 13.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD.—House-Surgeon and Junior Resident Medical Officer. Both must be qualified to practise. Applications to the Secretary, Mr. George Reid, 46, Great Coram-street, W.C., on or before August 26.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Testimonials to be sent to Francis Baily, Secretary.

KILDALTON, ISLAY.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen.

LAMBETH PARISH.—Resident Medical Officer and Dispenser for the Workhouse. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to W. B. Wilmot, Clerk to the Guardians, on or before August 12.

LISKEARD UNION.—Medical Officer for the Callington District. Candidates must be duly qualified. Applications, with testimonials, to Albert C. L. Glubb, Clerk to the Guardians, on or before August 24.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Lecturer on Comparative Anatomy and Zoology; also, Demonstrator of Physiology. Applications, with testimonials, to R. Harrison, Registrar (from whom further particulars may be obtained), on or before August 10.

NEWTOWN AND LLANIDLOES UNION.—Candidates must possess the qualifications set forth in Art. 168 of the Consolidated Orders of the Local Government Board. Applications, with testimonials, to David Smith, Clerk to the Guardians, on or before August 13.

NORTHAMPTON GENERAL INFIRMARY.—Dispenser. Applications, with testimonials, to S. P. Bennett, Secretary, on or before August 30.

SURREY DISPENSARY.—Physician. Applications, with testimonials, to R. G. Minshull Jones, Secretary, before August 20.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

UTTOXETER UNION.—Medical Officer for the Rocester District. The qualifications required are those prescribed by the Local Government Board. Applications to Mr. C. Wood, Clerk to the Guardians, on or before August 13. Election the following day.

WARNEFORD LUNATIC ASYLUM.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

WESTMINSTER GENERAL DISPENSARY.—Honorary Physician. Must be a Doctor or Bachelor of Medicine, and be registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

WESTMINSTER GENERAL DISPENSARY.—Resident Medical Officer. Must be duly qualified and registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

WESTMINSTER HOSPITAL.—House-Surgeon. Candidates must be qualified to practise under the Medical Registration Act of 1858, and must produce certificates of having served the office of surgeon's dresser to the in-patients for a period of not less than six months in some recognised hospital. Candidates will be subjected to a competitive examination, and must send in their names to the Secretary on or before August 10.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Ampthill Union.—Dr. Lee has resigned the Silsoe District; area 6021; population 2397; salary £50 per annum.

Beverley Union.—Mr. W. H. Stretton has resigned the Workhouse; salary £30 per annum.

North Bierley Union.—Mr. James Field has resigned the Fourth District; area 3670; population 7309; salary £20 per annum.

APPOINTMENTS.

Bury Union.—Mr. James H. Worsley, M.R.C.S.E., L.R.C.P., L.S.A., to the Heap District.

Bury St. Edmunds Incorporation.—Francis W. Clarke, M.R.C.S., L.S.A., to the Fourth and Fifth Districts. Also, Robert Walton, M.R.C.S., L.S.A., to the Workhouse.

Leeds Union.—Edward Groves, L.R.C.P., M.R.C.S.E., to the Workhouse and Schools.

Madeley Union.—James Procter, M.R.C.S.E., L.S.A., to the First Madeley District and the Workhouse.

Prestwich Union.—Samuel Buckley, M.B. Lond., M.R.C.S.E., L.S.A., to the Crumpsall Workhouse and District.

Southwell Union.—George Stokoe Elliott, M.D. St. Andrews, L.F.P. & S. Glasg., L.S.A., to the Southwell District and the Workhouse.

Ticehurst Union.—David John Sherrard, A.B., M.B., C.M. Dub., to the Hurstgreen District.

DR. PRATT has been appointed a Certifying Factory Surgeon for the Newtown District, in the room of the late Dr. Jones.

A FEMALE physician of Boston (says the *Aberdeen Daily Free Press*), "is under arrest, charged with malpractice."

A COTTAGE HOSPITAL is being erected at Moreton-in-Marsh. It will be provided with six beds and an accident ward.

THE RATING OF ST. THOMAS'S HOSPITAL.—The Governors have been reluctantly compelled to make a large reduction in the number of in-patients in consequence of the decision of the parochial authorities to rate the Hospital. The building has been assessed at upwards of £9000.

THE APOTHECARIES' HALL, DUBLIN.—At the meeting of the General Council, held in pursuance of the Statute of Incorporation, on August 1, 1872, the following gentlemen were duly elected as office-bearers for the ensuing year:—*Governor:* Thomas Collins. *Deputy Governor:* Edward J. O'Neill. *Court of Directors and Examiners:* Edward Howard Bolland, Charles Holmes, Arthur Harvey, Charles H. Leet, Robert Montgomery, Charles F. Moore, Henry P. Nolan, Jerome O'Flaherty, George B. Owens, John Ryan, James Shaw, John Shea, George Wyse, Esqs. *Examiners in Arts:* John Wm. Moore, M.D., Ex. Sch., Trin. Coll., Dub.; Edward W. Collins, M.D. Univ. Dub. *Representative on the General Medical Council:* Charles Henry Leet, M.D.

HEALTH OF ENGLISH WATERING PLACES.—The average death-rate during the three months, in more than a million of persons estimated to be living at forty of the seaside and inland watering places to which thousands of the dwellers in towns resort at this season of the year in search of mental relaxation, did not exceed 18·2 per 1000; the lowest rates were—11·7 in Ramsgate, 11·9 in Leamington, 12·8 in Eastbourne, 12·9 in Folkestone, and 13·9 in Lowestoft. In the early part of the quarter there was a slight outbreak of small-pox in the latter town, but the four other places showed an exceptionally low death-rate from zymotic diseases. The highest death-rates among these watering places last quarter were—23·7 in Southport, 24·3 each in Whitby and Matlock, 27·5 in Anglesey, and 35·6 in Dover; the death-rate from the seven zymotic diseases was equal to 3·4 per 1000 in Whitby, 5·0 in Anglesey, 6·7 in Matlock, and 17·1 in Dover; small-pox was slightly prevalent in Whitby and Matlock, and severely epidemic in Dover; scarlet fever and diphtheria also caused ten deaths in Matlock; and the high zymotic rate in Anglesey was caused by the severe prevalence of scarlet fever in Holyhead. There is good reason for believing that English watering places are healthier in summer than their foreign competitors.—*Registrar-General's Quarterly Return.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The space we devote to the Addresses delivered this week before the British Medical Association leaves us little room for comment, and obliges us to defer many matters of news.

Obituary notices of Mr. Taylor and Mr. Charles Johnstone next week.

Mr. Gulliver's obliging communication unavoidably delayed.

Mr. J. Henry, Charleston, N. Y.—Thanks for your letter and contents.

Dr. John Drysdale, Port Chalmers.—Your letter and contents to hand, for which please accept thanks. The supply of copies was not discontinued after July 1, 1872.

W. C. C., Clifton.—No. The subject is beyond our province. We cannot advise in such a matter.

Magnetism.—The Royal Society of Medicine in Paris appointed a commission in 1776 to investigate its effects, and published a favourable report of them.

T. O., Runcorn.—1. Yes. 2. Dr. Carmichael Smyth, of London, was voted by Parliament £5000 as a reward for the discovery of the efficacy of fumigation with mineral acids.

A Subscriber.—Dr. Ryan published in 1793 a valuable work on asthma, in which he adduces many instances of successful treatment by cold water.

Corrigendum.—In our report of the International Ophthalmological Congress the reporter was in error in describing Dr. O'Leary, of Dublin, as Professor of Therapeutics in the King and Queen's College of Physicians.

A Vaccination Officer.—According to a decision given by the Barnsley magistrates the other day, it would appear that our correspondent is in error. A man had been several times brought before the bench for refusing to have his children vaccinated. Mr. P. Baker, a barrister from London, appeared for the defendant on the last occasion, and took the objection that before every fresh summons was issued the defendant ought to have a notice sent to him requiring the children to be vaccinated, which had not been done in this case. The objection was considered good, and the summons was accordingly dismissed.

A Student, Lincoln.—Twins are very common in the Highlands of Scotland, and in Ireland. In the Lying-in Hospital in London twins occur once in every 85 births, and 3 children at a birth once in every 14,393; while in Dublin the proportions are 1 to 49 for the former, and 1 to 1462 for the latter.

Mr. Charles Sedgwicke, Hollingbourne, is thanked for his communication. "Remedies for hydrophobia" have been as plenty as blackberries; but, unfortunately, hitherto not one of them has been found effectual.

Uttoxeter.—The Lemuel Lodge, No. 58, of the Independent Order of Good Templars, of this town, had better mind their own business than address impertinent "memorials" to the medical gentlemen of their town. Surely the doctors do not require to be told when and how to prescribe "stimulants" for their patients. At all events, they do not require the "Templars" to teach them their duty. "*Ne sutor ultra crepidam*" is a motto that the Lemuel Lodge may wisely adopt and act upon it. It would be well, also, if the writers of "memorials" would in future attempts pay some attention to the rules laid down by Lindley Murray.

Emigration to New Zealand.—Complaints are constantly reaching us of the treatment to which surgeons to emigrant ships for New Zealand are subjected. From what we can learn, it appears that some of the ships sent out are most imperfectly overhauled by the authorities, that the vessels are badly ventilated, and the comfort of the sick all but ignored. Moreover, the medical officers are subjected to neglect and ill-treatment on the part of the captains, and even their medical duties are interfered with. It appears that there are no rules laid down with respect to the position and authority of the captain over the doctor. From what we have been made acquainted with, we should advise our brethren to be extremely careful in accepting an appointment as surgeon to an emigrant ship bound for New Zealand. If he should do so, we advise him strongly to see before he leaves the port of London that everything connected with his own cabin and his medical appliances is complete. Moreover, let him have a written contract with the owners specifying his duties, and let him keep the captain—often an ignorant and ill-bred fellow—at his proper distance. Word-promises go for nothing at sea; but even the "ruffians" of the mercantile marine know that they are bound by written agreement.

THE FAMILY OF THE LATE DR. ALDIS.

Mr. Aldis would thank the Editor of the *Medical Times and Gazette* to correct a misstatement which has appeared in some daily papers in the kind notice of his late father, Dr. Aldis, to the effect that he (Mr. Aldis) has accepted an appointment in India of £1500 per annum.

45B, Chester-square, S.W., August 6.

COMMUNICATIONS have been received from—

Rev. J. BECK; Dr. A. WALLACE; Dr. J. LIDDLE; Mr. PEMBERTON; Mr. WINDUS; Dr. NURSEY; Professor GULLIVER; Mrs. BAINES; Dr. LETHEBY; Dr. TRIPE; Dr. OGLE; Dr. BULMER; Mr. J. T. LEIGH; Mr. IRELAND; Mr. C. E. COTTERELL; Dr. STEENKISTE; Mr. C. SEDGWICK; Mr. HAWTHORN; Dr. C. KIDD; Mrs. JACKSON; Mr. F. A. MAHOMED; Mr. J. CHATTO; Professor FLOWER; Mr. A. L. WADE; Dr. BRUCE.

BOOKS RECEIVED—

On Diet and Regimen, by H. Dobell, M.D., M.R.C.P., fifth edition.

PERIODICALS AND NEWSPAPERS RECEIVED—

Edinburgh Medical Journal—Practitioner—Philadelphia Medical Times—Nature—Tewkesbury Weekly Record.

APPOINTMENTS FOR THE WEEK.

August 10. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

12. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

13. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

14. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

15. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

16. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 3, 1872.

BIRTHS.

Births of Boys, 1163; Girls, 1086; Total, 2252.
Average of 10 corresponding weeks, 1862-71, 2011·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	895	800	1695
Average of the ten years 1862-71	818·9	771·7	1590·6
Average corrected to increased population	...	...	1750
Deaths of people aged 80 and upwards	...	...	40

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	1	2	...	1	5	...	3	1	76
North ...	751668	9	...	...	3	19	1	7	...	113
Central ...	333887	...	5	...	...	3	1	1	1	45
East	638928	4	5	2	...	11	...	4	2	111
South	966132	14	8	4	1	11	2	2	3	139
Total	3251804	28	20	6	5	49	4	17	7	484

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·641 in.
Mean temperature	61·7°
Highest point of thermometer	80·3°
Lowest point of thermometer	47·4°
Mean dew-point temperature	56·0°
General direction of wind	S.W. & N.N.E.
Whole amount of rain in the week	1·01 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 3, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Aug. 3.	Deaths Registered during the week ending Aug. 3.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2252	1695	80·3	47·4	61·7	16·50	1·01	2·57
Portsmouth ...	115455	12·1	67	71	76·4	45·4	60·0	15·56	1·08	2·74
Norwich	81105	10·9	45	43	81·5	45·0	59·7	15·39	1·54	3·91
Bristol	186428	39·5	114	74	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	52	19	76·1	41·3	58·4	14·66	0·39	0·99
Birmingham ...	350164	44·7	260	161	76·3	44·7	58·8	14·89	1·26	3·20
Leicester	99143	31·0	79	55	...	...	...	...	...	...
Nottingham ...	88225	44·2	61	41	81·2	44·2	60·9	16·06	0·51	1·30
Liverpool	499897	97·9	390	292	76·1	50·8	58·7	14·83	0·72	1·83
Manchester ...	352759	78·6	253	191	82·8	43·0	59·4	15·22	0·94	2·39
Salford	127923	24·7	93	60	78·8	42·2	58·4	14·66	0·51	1·30
Oldham	84004	20·2	63	48	...	...	...	...	...	...
Bradford	151720	23·0	103	91	82·2	48·4	59·9	15·50	0·14	0·36
Leeds	266564	12·2	168	158	80·6	49·0	60·6	15·89	0·39	0·99
Sheffield	247847	10·9	189	161	78·4	46·0	58·7	14·83	0·90	2·29
Hull	124976	35·1	101	99	80·0	46·0	57·1	13·94	0·25	0·63
Sunderland ...	100665	30·4	89	61	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	115	86	73·0	48·0	53·8	12·11	0·35	0·89
Edinburgh	205146	46·3	122	100	67·0	45·7	56·3	13·50	0·65	1·65
Glasgow	489136	94·8	362	244	77·8	44·0	58·0	14·44	0·13	0·33
Dublin	310565	31·9	123	112	74·4	45·0	58·1	14·50	0·32	0·81
Total of 21 Towns in United Kingd'm	7393052	34·0	5101	3862	82·8	41·3	58·7	14·83	0·65	1·65

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·64 in. The highest was 29·86 in. on Sunday morning, the 28th ult., and the lowest 29·45 in. at noon on Friday.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL COMMUNICATIONS.

ON AUDITORY VERTIGO (MÉNIÈRE'S DISEASE).

By J. HUGHLINGS-JACKSON, M.D., F.R.C.P.,
Physician to the London Hospital and to the Hospital for the Epileptic and Paralysed.

THERE is a class of cases in which the symptoms, superficially regarded, appear to point to disease of the central nervous system, but which are really owing to affections of the ear. It is very important to bear in mind that severe paroxysmal vertigo may be entirely independent of primary changes in the nervous centres, and yet dependent on a peripheral nervous lesion.(a) Every physician will have seen cases of deafness and tinnitus attended by vertigo and occasionally by that grouping of more severe symptoms called Ménière's disease. But I do not think we are sufficiently alert to the frequency of this association of symptoms. I must confess that I did not properly realise the extreme importance of carefully considering the state of the ear in cases of vertigo until I had read Knapp's paper.(b) Knapp not only speaks of what I may call the "ear part" of these cases, but enters into a consideration of the whole of the symptoms in a manner which makes his observations of quite as much interest to physicians as they are to aural surgeons. He draws attention to the desirability of studying aural diseases in connexion with eye diseases. This I would strongly urge.

It is not difficult for a careless observer to pass over the associated deafness in cases of vertigo. For, strangely, patients often do not know that they are considerably deaf of *one* ear; and, stranger still, will sometimes persist that they are not, until a special examination convinces them that they are.

I will now give a sketch of the grouping of symptoms which constitutes what is called Ménière's disease.

Tröltsch ("Treatise on Diseases of the Ear, translated by St. John Roosa") says of Ménière's disease (c)—"Ménière, in the year 1861, drew attention to a series of most remarkable cases which appeared in the form of an apoplectic congestion of the brain, with sudden vertigo, vomiting, great singing in the ears, and a fainting condition, and which frequently left behind a certain impediment in motion, a continuing unsteadiness in standing and walking, and thus gave the surgeon from the beginning an impression of a congestive affection of the brain; but the constant recurrence of all these disturbances, and the fact that there generally was a very remarkable difficulty in hearing, for which no assignable change in the ear could be found, decidedly proved that there was an affection of the internal part of the organ"—(*op. cit.*, p. 503). Ménière believed it to be most probable "that the material change which lies at the foundation of these disturbances has its seat in the semicircular canals"—(Tröltsch, *op. cit.*). He arrived at this conclusion, in some measure, by reasoning from the well-known physiological experiments of Flourens. I shall avoid the temptation of speaking of these experiments, partly because they can be read in text-books of physiology (see especially Vulpian, who, in his "Physiology of the Nervous System," devotes a lecture to "Mouvements de Rotation"), and partly because their bearing on Ménière's disease has already been many times discussed (see, for instance, the writings of Tröltsch, Knapp, Brunner, Duplay, referred to in footnote).(d)

I will, however, mention the interesting speculation of Goltz in reference to the functions of the semicircular canal, again borrowing from Knapp (*op. cit.*, p. 224):—"Czermak found that pigeons, after injury of the semicircular canals, frequently have vomiting. Goltz confirmed that the animals thus injured have vertigo, and dwells on a rational explanation of these remarkable phenomena. If the auditory nerve and its expansion in the labyrinth, he argued, were merely subservient to the sense of hearing, this could not satisfactorily account for the surprising disturbances of motility. He arrives at the conclusion that the two fascicles of the auditory nerve have different functions: the cochlear fascicle is the nerve of the special sense of hearing, but it is questionable whether the semicircular canals are also organs of audition. Being subservient to the maintenance of poise, *they are*, as it were, *the organ of the sense of equilibrium of the head, and thereby of the whole body*. Goltz gives a highly interesting analysis of this theory, explaining how he imagines the maintenance of equilibrium to be affected by the semicircular canals. The terminations of the nerves in the ampullæ and canals are excited by pressure or tension, like the tactile nerves of the skin. The liquid in the semicircular canals—endolymph—according to physical laws, distends most those portions of the wall which lie deepest. The pressure from the fluid varies with the movements of the head, so that a determined nervous excitement corresponds to every position of the head. The perception and consciousness of this special nervous excitement by the brain constitute the sense of equilibrium, which serves as a regulator of the movements. If a portion of the semicircular canals is injured, the brain receives inaccurate information of the position of the head, and is unable to calculate and direct its movements correctly. This is the cause of the vertigo and the disturbance of motility." Goltz thought that if the lesion of the semicircular canals is of but one side the troubles will be only temporary, but if of both sides they will be permanent—(Duplay, *op. cit.*).

Even if it be granted that the semicircular canals are the parts in fault in Ménière's disease, they may be only *secondarily* so; they may be, indeed, only *suffering* from some fault in the more external parts of the aural apparatus. Increased pressure (resulting from stoppage of the meatus by wax, by catarrh, acute or sub-acute, and purulent processes in the cavity of the tympanum), "transferred from the stapes to the vestibulum, must necessarily place the semicircular canals in an abnormal state of pathological irritation"—(Tröltsch, *op. cit.*). In other words, the *primary* changes may be in the non-nervous part of the ear. It is only in suddenly occurring cases that we can suppose symptoms of Ménière's disease to depend on primary changes in the labyrinth itself. Politzer (quoted and indorsed by Tröltsch, *op. cit.*) says—"If a person who has formerly heard well *becomes suddenly* deaf, or hard of hearing, with the symptoms of an apoplectic attack, and there is at the same time an uncertain and staggering gait, but there are no symptoms of paralysis in other nerve-tracts, and if the examination shows a normal membrana tympani and perfectly permeable Eustachian tube, we may believe, *with great probability*, that there is an affection of the labyrinth"—(Tröltsch, *op. cit.*, p. 507). (No italics in the original.)

Further, Knapp (*op. cit.*, p. 236), who has reconsidered the whole subject in a most able and original manner, believes that the pathological changes in Ménière's disease are *not confined to the semicircular canals*. The accompanying deafness, he thinks, shows that the cochlea is also involved. There is sometimes, he has pointed out, deafness for certain groups of tones. "It is a *contraction of the range or field of audition*, as we have

(a) There is something analogous in the eye, as is well known to ophthalmologists. Graefe remarks that vertigo has often been erroneously interpreted, having been put down to a cerebral lesion when it was really owing to local palsy of a muscle, or of muscles of an eyeball. Soelberg Wells ("Diseases of the Eye," p. 601, second edition) writes of paralysis of the third nerve, "If the healthy eye be closed, and the patient directed to walk straight up to a certain object, he becomes giddy and faint, and reels in his gait." As to the symptom vertigo itself, Hasse (quoted by Gustav Brunner) says, "The connexion between the sensory and motory excitation of the brain seems to be deranged in such a manner as to lead to the conception of apparent movements, either of the body or of external objects, and to produce involuntary movements in accordance with this delusion—falling, and loss of consciousness."

(b) Knapp's paper, "A Clinical Analysis of the Inflammatory Affections of the Inner Ear," and a paper by Gustav Brunner, of Zurich, "On Vertigo occurring in Affections of the Ear (Auditory Vertigo)," are to be found in the "Archives of Ophthalmology and Otology," vol. ii., No. 1. In the *Archives Générales de Médecine*, June 1, 1872, appears a review of these papers by Dr. Simon Duplay, who gives a very clear and succinct account of Ménière's disease.

(c) A brief account of Ménière's disease is given by Dr. Ramskill in his article "Vertigo" in "Reynolds's System of Medicine," vol. ii. It is described by Trousseau in his lecture "Vertigo a Stomacho læso" (Sydenham Society's *Transactions*, vol iii., p. 549). I may give one quotation therefrom—"There is another kind of vertigo which greatly resembles stomachic vertigo—viz., that usually consequent upon lesion of the internal ear, and which may be termed *vertigo ab aure læso*."

(d) I would, however, mention that Dr. Brown-Séquard has said, "I have ascertained that the phenomena observed in these experiments do not depend on the section of these canals, as this operation may not cause these phenomena, but that they are the results of irritation of the auditory nerve, from the drawing upon it by the membranous semicircular canals at the time we divide them"—("Lectures on the Physiology of the Nervous System," p. 195). And in this connexion I will quote from Trousseau's lecture already referred to—"But for the present, let it suffice to remark that Brown-Séquard in his lectures on the nervous system has announced as his conclusion that irritation of the auditory nerve, of the optic nerve, and of every sensory nerve, may, by reflex actions, produce convulsions, vertigo, and other symptoms of encephalic disturbance. And, as reflex action may produce its results upon the vaso-motory system, as well as on the nerves of motion and sensation, it is a legitimate supposition that in lesion of the semicircular canals reflex action influences the *nervous system of the brain* in such a way as to produce cerebral anæmia, and consequently many of the symptoms of that form of anæmia, such as giddiness, nausea, and a tendency to syncope."

contractions of the field of vision. The latter is observed in different eye diseases, but the kind found in *glaucoma* most resembles the contraction of the range of audition." He says, also—"*Deafness for certain groups of musical sounds is proof positive that the disease is neither limited to the acoustic nerve outside the Labyrinth nor to the semicircular canals and vestibule, but that it extends to the Cochlea*" (capitals in original). It is admitted by most physiologists that the perception of musical sounds depends on the cochlea, and probably on the fibres in Corti. "Helmholtz believes that the acoustic expansion of the vestibule and in the ampullæ serves for the perception of the non-periodical or irregular vibrations—that is, for ordinary sounds—but that Corti's fibres in the cochlea are designed for the perception of the periodical movements of the air—that is, for the musical tones. According to Helmholtz, the tuning (*Stimmung*) of the latter is different, and corresponds to the regular gradation of the musical scale. The perception of different heights of tone is therefore a perception or sensation in different nerve-filaments. In this view, the different quality of the auditory sensations or perceptions as to height of tone and sound-colour (*Klangfarbe*) must be referred to the variety of the nerve-fibres which is excited"—(Tröltsch, *op. cit.*, p. 509).

In a future article I shall narrate cases in illustration of the above. I will now conclude these remarks—or rather, I ought to say, this compilation—by the following extract from Tröltsch:—"One of the most valuable contributions to the science of nervous deafness we owe to late French investigators, especially to the late Dr. P. Ménière, of the Paris Deaf and Dumb Institute, who was altogether one of the most meritorious workers in the province of aural surgery."

FORTIETH MEETING
OF THE
BRITISH MEDICAL ASSOCIATION,

HELD AT BIRMINGHAM ON AUGUST 6, 7, AND 8, 1872.

ADDRESS IN SURGERY.

By OLIVER PEMBERTON,
Surgeon to the General Hospital, and Professor of Surgery in Queen's College, Birmingham; Foreign Corresponding Member of the Society of Surgery of Paris.

IT has been customary to leave to individual selection the subject of this annual address. In the exercise of this unfettered discretion, some of my predecessors have devoted themselves to the consideration of a particular subject on which they were entitled—either from the circumstance of original research or the advantage of practical knowledge—to speak with authority; whilst others have directed their attention to reviewing the progress of Surgery with all its bearing on the science and art of their time. It may be that those who followed the latter course placed themselves more in harmony with the original plan of this undertaking; but it must not be forgotten that during the number of years that have elapsed since this Association was founded the entire scope and character of medical literature has been changed.

In these days the scientific discoveries of Europe, Asia, and America are, as it were, on our very tables, and within speedy reach of us all: surely it would seem, then, but a repetition of an old story to arrange them in order before you. One of the happiest events, however, connected with these meetings provides an escape from any difficulty in the selection, from any sameness in the character of the discourse. They are held, in turn, in England, Scotland, and Ireland. The great cities of these kingdoms are so many centres of surgical study, having features marked and distinctive, created no less by local than by personal circumstances. For I take it that it will be conceded that whilst the great principles are well-nigh everywhere the same, no art differs by its exercise so widely, whether in force, completeness, or success, as ours does, in varying hands, or when practised in places removed by distances from each other. Hence whoever happens to be designated to fulfil this most honourable task, may be expected to possess some special experiences which his opportunities have afforded him in the place of assemblage—some illustrations of vexed questions in surgical treatment that may arouse interest in an audience even as critical and accomplished as that I have before me at this moment. In this hope, and with a full knowledge of how illustrious are the names that have preceded me in accomplishing this task, I ask your indulgent consideration whilst I endeavour to justify the confidence reposed in me by the Council of this Association, and by my professional brethren, as I submit to your judgment the fruits of personal observation connected with one or more of the chief maladies that demand the skill of the surgeon.

To solicit your attention to some moot points connected with the treatment of aneurism, is sufficiently appropriate in itself, if we only consider the increasing interest that at present surrounds it, and the impetus that must be given to its study by the exhaustive nature of the lectures now in course of delivery before the College by Professor Holmes; but I cannot forget that we are assembled in Birmingham, where Freer and Hodgson lived and wrote—illustrious pair!—well fitted to be teacher and pupil. I cannot forget that George Freer(a) was the first to tie successfully the external iliac artery, and that Joseph Hodgson(b) paved the way to a clearer perception of the pathology of arteries and veins than had existed since the days of Hunter. So it is an appropriate tribute to their labours, that here, in this place, I should have the subject of aneurism foremost in my mind.

Professor Lister's improvement in the Hunterian operation, by which the permanent closure of the artery at the spot tied can be insured, without dividing the coats of the vessel, at once effects a complete change in some of the most important conclusions that for long years have guided us in our treatment of aneurism. One of the greatest dangers attending the Hunterian operation has hitherto been considered to be the application of the ligature immediately beyond any considerable branch of an artery. This impression has deterred surgeons from applying a ligature to that portion of the artery which otherwise would have seemed to them best adapted for the purpose. That an abiding coagulum will form under certain circumstances in the vicinity of almost any number of branches on the proximal side of a ligature, I am perfectly satisfied; but the attainment of this success in many cases depends on a fact which it is almost impossible for the surgeon to estimate beforehand—that is, the facility with which the blood will coagulate or deposit its fibrin in any particular instance. In the case I am about to relate, the existence of this tendency in a much greater degree than usual was the main cause of the success of the operation.

In June, 1870, I saw F., aged 60. Strumous from childhood, and highly intellectual. There was an aneurism, three months old, of the left superficial femoral, about five inches below Poupart's ligament. There were marked indications of general arterial disease, and, during the past twelve months, of semi-paralytic seizures, evidently due to temporary hindrance to the cerebral circulation. Pressure failed, and was abandoned at the end of three months. I then advised ligature, the aneurism rapidly increasing. On October 12, the aneurism having "leaked" the previous day, in the presence and with the sanction of Sir James Paget, I tied the common femoral with a hempen ligature. Fearing, from the diseased state of his arteries, the worst results, as the ligature might be thrown off, the wound was left completely open, being simply covered for protection. In forty days the ligature came away, and the patient died a week afterwards from causes wholly removed from the aneurism. There was no hæmorrhage but gangrene may be said to have commenced in one toe. When I came to dissect the arteries, I found the circumflex ilii, epigastric, and the profunda femoris given off together—that is, at opposite points of a line drawn round the main trunk, a little above Poupart's ligament, the point of ligature being five-eighths of an inch below these vessels, the part of artery intervening being firmly plugged. The profunda was pervious for some distance, and then plugged. There were plugs of former date in the right and left carotids and in the left axillary arteries. The aneurismal sac was filled by broken down clot and fluid blood, and would have suppurated.

Now, I cannot consider this case as any contribution to the surgery of the common femoral, though I hoped and expected it would be so; for I think hardly any doubt can be entertained but that the patient would have died from secondary hæmorrhage on the separation of the ligature, had it not been for the unusual tendency of the blood to coagulate, for nothing could well be closer than those three vessels were to its site. At the same time I think, with Porter and Macnamara,(c) that the exclusion of the common femoral, on account of the

(a) October 4, 1806.
(b) "A Treatise on the Diseases of Arteries and Veins." London, 1815.
(c) "On Ligature of Common Femoral" (*British Medical Journal*, ii., 1867, p. 285).

assumed liability to secondary hæmorrhage and gangrene that follows its litigation, is not founded on any solid basis. It was selected in this instance in preference to the external iliac, and I should so select it again; of course, on the presumption that I was going to place my ligature in the vicinity only of such branches as the epigastric and circumflex ilii: in the presence of which I feel satisfied that an adequate coagulum may under ordinarily favourable circumstances be reasonably expected to form. It is rather here, then, I draw your particular attention to this feature of coagulation; for I ask myself this question: If I had tied the artery—complicated as its irregularity was in this instance—with a hempen ligature, and there had not existed this tendency, would it have held? Assuredly not. This same tendency to coagulation, as manifested in the collateral vessels, whilst it preserved the patient's life, would, I may observe, have subsequently caused his death by gangrene. Further, it appears to me that in proportion as the coats of the arteries deviate from their natural state, and as the general vital conditions are lowered, so is this tendency increased.

Surgically speaking, then, this very circumstance of diseased arteries and tendency to blood coagulation, in some cases, establishes a reason why the surgeon should not refrain from operating where the diseased condition of the coats of the arteries alone would lead him to abstain from interference. And it is clearly of the utmost importance to increase this tendency to the coagulation of the blood as much as possible, after all operations for aneurism, by good diet, and by the absence of all depressing remedial agents. Apart from this question of coagulation, I feel warranted in expressing my conviction that too much stress has been laid on the disturbing influence of a large branch or branches taking origin close to the part of the vessel tied.

If, however, we are to believe the teaching of Professor Lister,(d) it will be of little moment in the future whether a plug form on either the proximal or distal side of the ligature at all, so long as the "prepared catgut" insures permanent closure of the vessel at the spot tied, without severance of the coats, and, consequently, without liability to secondary hæmorrhage. From what I have seen since this case came under my notice, I am glad, before such a meeting, to be able to express my unbounded admiration of and confidence in the use of the animal ligature, as placed before us by Professor Lister. If the so-called "antiseptic system" has effected no more for Surgery than to give us the means of effectually closing an artery without cutting it through, and without suppuration, it has in doing this placed the crowning glory on the treatment of aneurism, for which it has waited since the time of Hunter. For forty days I watched patiently for the detachment of this ligature with an open wound to escape deep-seated suppuration. I watched twenty-one days in a case last May, in which I tied the external iliac for aneurism at Poupart's ligament; and though the case did perfectly well, the suppuration about the track of the hempen cord gave me the greatest anxiety. Last August, Mr. Lund,(e) at Manchester, tied the same artery with a catgut ligature. No pus was secreted—the wound healed on the eighth day! Professor Lister remarks that ligature of the innominate must yet prove, with these means at command, "a very safe procedure." Yes; but always, I presume, provided that the coats of the artery are healthy where the ligature is applied; and on this we await further evidence: given this, and I feel inclined to echo the assurance. I shall now endeavour to show that the principles of treatment in the methods of flexion, compression of the sac, and manipulation, are one and the same. The method of flexion can only be applicable to certain arteries. All that is needful to do is to keep the limb flexed, not continuously, but to such an extent as to alter the relations between the orifices of ingress and egress, and the fibrinous laminæ of the sac. Some of these laminæ become, as it were, dislocated, and protrude more or less into the stream when a fresh deposit of fibrin occurs, and so the cure is gradually effected. The exercise of pressure on the artery above the angle of flexion appears to me useless. What we want is a stream of blood flowing into the aneurism; that it should be more or less retarded there, and that there should be present something in the nature of a foreign body; for example, the fibrinous laminæ, on which blood would coagulate and deposit its fibrin. This retardation of the blood in the sac can be effected by a gentle compression of the artery on the distal side of the aneurism; as I strongly hold that what we want in these cases is a deposition of fibrin rather than a coagulation of blood. For, surely, the slow deposition, layer after layer, of solid fibrin in the sac, until the filling-in is complete, is a surer guarantee against subsequent mishaps than if it were closed by a mass of suddenly coagulated blood.

I place before you the case of K., a Lascar, 22, who came under my care May 10, 1859, having an aneurism of the left popliteal artery of four months' duration. Flexion was maintained for seventy-two hours, with the result of the aneurism ceasing to pulsate, and becoming solid in eleven. Compression, during the first forty-eight hours, of moderate character, was also made by Weiss's instrument on the artery in Scarpa's space. I believe that this was the first instance on record in which the combination of compression and flexion was made use of; and the case was published very fully at the time in the *Lancet*.(f) But I feel satisfied now, in reviewing it, that pressure below the sac would have proved more advantageous than above. If one wanted convincing of the very slight means whereby important curative changes may be brought about in aneurismal sacs, I have but to ask a consideration of the facts connected with the following cure, in thirty-nine hours, of a popliteal aneurism:—

M., 28, a porter, came under my care on January 17, 1871, with an aneurism of the right popliteal artery five months old. On the 22nd I had shown the patient how I proposed to treat him—by flexion—at the same time bending his leg, and arresting the circulation through the sac. It is very likely that the patient, in the afternoon subsequent to my visit, imitated my proceeding, as he seemed very much struck by what I had done. Be this, however, as it may, I only bent the limb once, and fingered the sac lightly, and told him to keep quiet. At 2 a.m. on the 23rd he was seized with sudden aching, shooting, gnawing pain in the neighbourhood of the aneurism, extending down the calf of the leg as far as the ankle, and upwards as far as the crest of the ilium. The pain continued very intense for some hours, during which he had no sleep. He had severe nausea, but no vomiting, and was chilly. The pulsation in the aneurism seemed unchanged, but he remained poorly all the day. 24th: Slept until three a.m., when he awoke and found pulsation had ceased in the aneurism. The limb was cold below the knee, and œdematous, and though the pain of yesterday was better it was not gone. On examining the aneurism it felt hard, and was free from pulsation. He was subsequently discharged cured. I am inclined to think that coagulation commenced here after the first flexion—that the deposit of coagulum, after a few hours, increased rapidly, as indicated by pain which culminated in intensity as the sac was solidified. There may have been a clot detached which plugged up either the proximal or the distal orifice—if so, it took place at the final exacerbation of pain, when pulsation ceased—for I certainly judged the contents, when I bent the limb, to be fluid. The verification of the intense pain that occurs when the blood-current is forced suddenly into narrow collaterals, or at the supreme moment when the contents of the sac are solidified, was here very conspicuous.(g) To ask, for a few minutes, the judgment of a skilled assembly, such as this, on the probability of applying pressure with success to the actual sac of an aneurism, would appear to be returning to the pre-Hunterian period; and yet, had the theory by which aneurisms are cured now been fully comprehended then, I can have little doubt but that the necessary deposition of fibrin would have been brought about in many instances that otherwise so signally failed. I entertain the opinion that compression of the sac ought to be used more frequently than it is now. The principle of this proceeding is exactly the same as flexion; we want simply to alter the relations of the laminated fibrin to the cavity of the aneurism, so as to bring about a further deposition of fibrin on the projecting surfaces of any of the displaced laminæ. The pressure need not be continuous. It should be very gentle. It need not, even, be distributed uniformly. But it must ever be borne in mind, that if it be carried to such an extent as to empty the sac, and to press one wall against the other, then a cure cannot occur. The very conditions under which a cure is possible are here ignored. Blood must pass through the sac. It must not pass through too rapidly; and I now think that this would be facilitated by gentle pressure being made on the artery below the aneurism.

In March, 1857, I visited D., aged 67, an active sportsman and farmer. He had an aneurism, a month old, of the right external iliac artery, just above Poupart's ligament. It was somewhat fusiform in shape, measuring three inches in length, by one and

(d) "Observations on Ligature of Arteries." Edinburgh, 1869.

(e) *Lancet*. August 5, 1871.

(f) Vol. vii., 1859, p. 232.

(g) *Lancet*, vol. i., 1872, p. 272: Discussion on Aneurism, Clinical Society of London.

a half in breadth. There was no bruit. I failed to arrest the circulation through the aneurism by making pressure on the artery above, but I found I could greatly limit the current, by making pressures on the sac itself. The question being raised of an operation, I advised—that as a ligature could hardly be applied to a sound artery, other than in the course of the common iliac, and bearing in mind the vicinity of the bifurcation, no operation should now be performed; but that Dr. Carte's compressor, under careful management, should be applied to the sac itself. Accordingly, under my directions two senior students(h) remained with the patient. The treatment extended over a period of six weeks. During the first fortnight little good was effected. Then, for eight consecutive days pressure was applied, on an average of seven and a half hours per day. The pressure effectually retarded the circulation—nothing more—and was never applied for more than three or four hours at a time. Consequently, the patient was not wearied, and had undisturbed nights. There was now a complete interval of nine days, during which no pressure was applied, the aneurism being firmer and with less pulsation, and he was allowed to move about in his room. Then followed nine days of treatment, averaging six hours and a half per day. From this time the aneurism ceased to pulsate, and the patient gradually resumed his ordinary avocations. He is yet living, in his 83rd year, active and well. In December last(i) the remains of the aneurism were represented by an indurated enlargement, about the size of a chestnut. I venture to think that even Dr. Macnamara will give me credit for having studied O'Bryen Bellingham(k) to some purpose, who, happily for my patient, published his observations in the January of this very year. Reduce the force and volume of the blood-current by any carefully considered measures, and we follow out the reasoning of Brasdor and Wardrop in the distal ligature—a reasoning which is rendering amenable to treatment internal aneurisms, hitherto beyond Surgery; a reasoning that has the authority of nature's own proceedings to recommend it, from the fact that it is more or less identical with the mode in which the so-called spontaneous cures are brought about. I own this case—unique as it is in this situation—has always been in my mind, on the discovery of any fresh instance of aneurism. It serves to confirm the soundness of the remark, that in proportion as the true method of curing aneurisms has been fully understood—that is, the gradual lessening of the blood-current to final and complete coagulation in the sac—so have the means whereby this has been brought about become simpler and more safe.

The occurrence of these cases led me to the attentive consideration of the facts, as they are at present before us, connected with the purposed displacement of the contents of the sac of an aneurism, in the hope of plugging up either outlet; and the case of M. happened when a subclavian aneurism(l) was under my notice in another ward, about the treatment of which I was, to say the least of it, previously undecided. It seemed to me so impossible to limit the degree of force, short of extreme hazard, in the method originated by our distinguished *confrère*, Sir William Fergusson;(m) and I was not reassured by perusing the cases he has recorded or those of Mr. Pollock.(n)

I cannot but regard the treatment by manipulation to be based on exactly similar principles to those on which the methods I have just alluded to are founded. No forcible pressure to detach fibrinous laminæ, in my judgment, ought to be used, as the result would be the almost certain separation of small portions of the clots, which would be carried into the circulation, and would eventually plug the smaller vessels, causing symptoms according to the functions of the parts which the plugged vessels supply; for I must own I have not been able to see how these clots could be located at either outlet to be fixed by arrangement, as it were, at a spot where it is simply impossible to be assured that they could effect a lodgment. All that is necessary is, that the aneurism should be gently manipulated, so that the laminæ of fibrin in its interior should occupy a different position to that which they had previously held with reference to the two orifices of the sac; and in order that the blood should not be allowed to pass out of the sac too freely, if I have an opportunity I shall endeavour to compress the distal artery in accordance with the principles I have been advocating.

B., aged 32, admitted in hospital October 20, 1870, a former Lifeguardsman, with aneurism of three months' duration, in second and third parts of right subclavian. It was as large as a hen's egg, and accompanied by bruit, and by dilatation of axillary. He stayed a month, during which time iodide of potassium was freely given; and then, frightened at the idea of an operation, suddenly left. On January 20, 1871, admitted again. The aneurism seemed firmer, giving me the impression that fibrin had been deposited. From February 10 to 14 the sac was manipulated night and morning for a few minutes. The proceeding was one of the utmost gentleness and regularity, and consisted in making pressure with the thumb and finger, so as to slightly approximate its fibrinous walls, and, whilst thus limiting the circulation, probably rendering the clot surface somewhat irregular, and promoting the tendency to deposit already commenced. On the 11th pulsation much weaker. On the 14th it ceased altogether. There was no brachial or radial pulse below the aneurism; and he complained of pain, extending downwards from the aneurism to the iliac region. This was constant, severe, and of a numbing character. There was no constitutional disturbance. During the following days the collateral circulation about the clavicle and shoulder developed itself; and especially noticeable was a large transversalis colli crossing over the aneurismal sac. April 17: Left for the Sanatorium, the sac being small and hard. Since this time he has pursued his business as a hawker, travelling all over England. I examined him, and so did my colleagues, as recently as June 19, sixteen months after the cure of the aneurism, and I noted the following facts: A little induration marks the site of the aneurism; the axillary artery and upper part of brachial can be felt, cord-like, as far as insertion of coraco-brachialis—here pulsation begins, and can be felt, feebly, in the radial at the wrist. He is himself excessively thin, but well and hearty.

The absence in this case of any symptoms of paralysis during the four days in which the sac was manipulated justifies the inference that no clot, at least, passed into the cerebral circulation; and I entertain myself the convictionthat the cure was brought about by a steady process of lamination, rather than by the detachment of a clot happy enough to fit into either orifice of the aneurism.

I have now to call your attention to what I believe to be a not uncommon result of the cure of aneurism after it has been effected for some time—I mean the formation of varicose aneurism or aneurismal varix. I shall first relate two cases.

In 1844 my late colleague, Mr. Amphlett, tied the superficial femoral for an aneurism of the artery as it enters Hunter's canal. The patient was 41, and a soldier. There was nothing unusual at the operation, and the ligature was thrown off on the nineteenth day. Ten days subsequently there was arterial hæmorrhage from the seat of ligature. This recurred again in ten days, and a third time in fourteen. Pressure on the arch was used, and the patient recovered. He remained well for upwards of three years, when a tumour formed at the seat of operation, which was evidently an arterio-venous aneurism. With this coming under the care of my colleague, Mr. Baker (our President), he died from a drunken pleurisy just five years from the date of the operation. I was fortunate in being able to dissect his vessels. The femoral artery had formed an aneurism at the seat of the operation as large as a hen's egg, and the femoral vein communicated with the artery by a large opening. The former aneurism was cured, and the artery between it and the seat of ligature was impervious.

M., 50, a soldier, syphilitic and intemperate, became the subject of an aneurism of the upper part of the right posterior tibial artery. Pressure was made over the artery on the pubic arch for three weeks; on it, below, for nine months. The aneurism was cured. Ten months afterwards an arterio-venous communication formed at the chief seat of pressure, and the patient died in about a year and eight months subsequently. I had the opportunity of minutely examining his body, and I came to the conclusion that pressure on the pubes induced varix in the femoral vein, at the situation of the saphenous opening: that this, subsequently sustaining pressure, enlarged and became adherent to the artery, and finally, by a succession of changes, readily comprehended between a diseased artery and a diseased vein, adherent to each other, ended in establishing an aneurismal varix.

At the time when I published this case, which was done at considerable length in the *Transactions of the Medico-Chirurgical Society* for the year 1861, I attributed the results merely to the injurious effects of long-continued instrumental pressure, pro-

(h) The late Mr. Dennis Moore, of Walsall, and Dr. Neal, of Birmingham

(i) Letter from Mr. Earlam, of Abbotts Bromley.

(k) "Observations on Aneurisms." London, 1817.

(l) Pollock records three cases of direct compression successful to subclavian aneurisms (Grey's Reports, vol. xvi., p. 63).

(m) *Medico-Chirurgical Transactions*, vol. xl., 1857.

(n) *Op. cit.*, p. 45.

ducing morbid changes around and between the contiguous vein and artery; and I was inclined to quarrel with Bellingham's(o) remark, "That no morbid change of any kind takes place in the artery or vein at the site of instrumental compression." Subsequent reflection, however, and an attentive study of the preparations, have led me to seek a different explanation. Thus, in consequence of the diseased conditions and diminished elasticity of the arterial walls, which almost constantly exist in all arteries above the seat of an aneurism, the velocity of the blood-movement is considerably retarded. It is evident that this retardation must be materially increased by the obstruction at the seat of ligature, or the seat of long-continued instrumental compression. The immediate consequence of this retarded velocity is an increase in lateral pressure. This dilates the diseased coats of the artery into an aneurism, which, by the usual processes of pressure, absorption and disintegration, opens into an adjoining vein. Sometimes, as in the second case I have adduced, the opening is effected directly into the vein without the previous formation of an aneurism—and the vein subsequently becomes varicose by the passage of arterial blood into it.

It is now with regret that I must leave this subject and pass on to another. Up to the early part of the year 1868 I had invariably performed the lateral operation of lithotomy in all cases and at all ages, and had encountered that good and ill luck that always, sooner or later, disturbs the statistics of the most successful or the most unfortunate of operators who take all that come before them. I had reached my sixtieth case. Of this number, thirty-five were under 20 years, and but one had died from the operation—a child of 4, a complicated case, with stone both in bladder and urethra. Of the remaining twenty-five, four had died at 79, 59, 56, and 53. Surgically, there was nothing to be regretted concerning these, save their deaths; for about them all were conditions favouring a bad rather than a good ending—conditions that happen with stone at all times, and to all people, and will happen again: so I need not touch on them further. In all this I had used the single knife and the laterally grooved staff, and I did not think then I should use any other instruments as long as I continued to operate. But what happened? I cut a boy of eleven, and extracted an ordinary-sized stone, without, apparently, complication of any kind. Hæmorrhage followed, of such severity that it was with difficulty controlled, and death from its immediate effects took place within twenty-four hours of the operation. I could find nothing in the post-mortem to account for the bleeding. It is true he had but one kidney, but that had nothing to do with his death. It was clear the cutting did it somewhere, and I naturally thought I should like in the future to extract such a stone as the one I then removed, with less of the cutting in the dark, if possible. Accordingly I turned to median lithotomy. Allarton, who practised near here, had delivered a lecture on the subject of lithotomy simplified, in the Sydenham College in 1854, and I was much struck by his arguments as to the capability of dilating the neck of the bladder without incision. I felt satisfied that for bladders within reach of the finger, and for small stones, if not for all, here should be escape from the fear of uncontrollable hæmorrhage, though I had never tested his proceeding in the living subject. Since, I have had an experience of twenty-five cases. Of these twenty have been of ages from 2 to 20 years, with not a single death. Of the five, of ages from 46 to 60, one died of peritonitis. I perform it in the following way: I open the urethra just behind the bulb, on a centrally grooved staff. Along this I pass into the bladder a tapering probe-headed gorget, withdraw the staff, and, taking hold of the handle of the gorget, pass the finger gently along its groove into the bladder, letting it dilate as it goes, and so take the place of the receding guide.

Now, I know that many believe that this dilatation means laceration. It has, indeed, not very long since been described as "complete rupture and laceration,"(p) and as "unsurgical and dangerous." I answer this statement, which I venture to characterise as eminently reckless, by a positive contradiction as to facts. I have cut enough cases by the ordinary lateral method, and am still cutting them, to know the difference between laceration and dilatation. I am quite satisfied that my finger passes into the bladder without laceration in the operation I have described. I feel the entrance gradually narrow itself into a mere ring, which encircles and equally grasps my finger on all sides. Through this ring pass the forceps; through this ring passes the stone, and any number of stones, or any fragments of stones; and there is no laceration, except the stone is too large for the proceeding, or violence has been used. I hold that it cannot be necessary to make incisions to the same extent to remove a body the size of a pea as we should make for one the size of twenty; and, further, my conviction is, that whilst in all ordinary dangers, as compared with the lateral it is simply equal, in two it is immeasurably less. These are the dangers from hæmorrhage and from prolonged recovery. The danger from hæmorrhage in the median can only arise from a central wound of the bulb. It is not unlikely to take place, and did occur to me once in the twenty cases, and was readily arrested; for it must be borne in mind the source cannot be far away, and so happily cannot require the use of that most hateful of all appliances—a plug for the wound. As to recovery, the exception is to find any constitutional disturbance at all. The water is retained, and passed naturally. I would like to ask if anyone ever knew a patient pass his water naturally with a "lacerated" neck of bladder? and the wound is healed mostly within a fortnight.

I shall be prepared for it to be said of my advocacy of median lithotomy—"The statistics of your own cases are against you." My answer is, "Statistics are not everything." A case may end just as successfully one way as another, though the troubles on the journey differ widely; and no one will question but that lateral lithotomy in children is eminently successful. But every operator who has sufficiently tried any given two methods of procedure has a right to say which of the two he prefers; and therefore it is that I say, when I reflect on the anxiety that I endured in watching the threatenings of mischief in children cut by the lateral operation, I rejoice that I have cause for it no longer, notwithstanding the general good fortune that attended my practice with that method.

And now as to the cases where the median operation should not be selected. In any instance where the finger is not likely to reach the bladder, so that instrumental dilatation would be required, the lateral operation should be preferred. The reason I use my finger is because I have more control over it than over an instrument. I can regulate the one, not the other. I would sooner cut than lacerate at any time, and I consider the use of instrumental dilatation in this operation means laceration. You may use it, on and off, with impunity, but it is a most destructive instrument—reviving all the dangers of the discarded Marian. I attribute the peritonitis, which carried off my single fatal case, solely to the laceration of the neck of the bladder that of necessity followed its use. I repeat, the only dilator must be the finger, and so long as the neck of the bladder can be widened by this sufficiently to allow of the removal of a stone without laceration, I shall deem it a part of my duty to advocate the adoption of this form of median lithotomy.

I hope, however, my observations will not be misunderstood. I am second to none in admiring what Cheselden practised, and what Liston and Fergusson have brought to perfection—the lateral operation for stone. I have been surrounded during the whole of my professional life by teachers and colleagues who have had unusual opportunities for practice, and who have realised brilliant successes in this very operation; but, in my opinion, it is not the most desirable operation to perform for all stones, at any age and under any circumstances, as some would have us believe.

I now desire to say something about stricture of the urethra. It is to me remarkable, but it is true, that the views entertained by the highest surgical authorities of the day differ on no subject so widely as on the particular system they adopt and recommend in the treatment of stricture. Simple dilatation and rest, I am thankful to say, have had a great following, and, if I mistake not, will yet rise into higher position. The main quarrel is between the advocates of internal as opposed to external division. The late Professor Syme(q) thought he had effectually put an end to the use of those "dreadful engines," as he termed M. Reybard's instruments; but he was mistaken, for strictures of this day are both cut, split, and torn; and new engines for the purpose multiply, as if the great surgeon had never lived to speak of plunges in the dark with caustic, or of ripping open the urethra by internal section.

Stricture may fairly be defined to be a diminution of the normal diameter of any portion of the urethral canal; and as it must be admitted that the existence of any stricture, however slight, from whatever cause proceeding, and of whatever nature, may sooner or later give rise to serious consequences in the condition of either the bladder or kidneys, it is needful for the surgeon to discover it and cure it as soon as possible.

(o) *Medico-Chirurgical Transactions*, p. 12.

(p) Mr. Teevan, *Lancet*, vol. ii., 1870, p. 237.

(q) "On Stricture of Urethra," p. 21. 1855.

But the real question is in reference to this word "cure." Have we to deal with a simple stricture that has resulted from inflammation of the lining membrane of the urethral canal, or with a stricture, originally of this kind, which has been aggravated and increased in extent by ill-considered surgical proceedings? For the first there is a cure by simple dilatation. For the second there properly is no cure. Once organic stricture always organic stricture, is my belief. Whenever the lining membrane of the urethra has been injured, whether by accident, disease, or by bad surgery, the spot will contract and establish permanent stricture, and I do not believe that the materials constituting such cicatricial narrowings are ever absorbed. If you endeavour to restore the normal calibre of the urethra under these conditions by ever so well considered a system of dilatation, my opinion is that the contraction will return sooner or later with increased vigour, the natural elasticity of the canal being gone; in other words, dilatation will not effect a cure, and never does effect a cure. But dilatation, if it be well and properly carried out, will protect the patient against the occurrence of those diseases, which, dependent on individual health and mode of life, arise either rapidly or slowly in all cases of stricture. The degree to which it is necessary to carry this may fairly allow of discussion, for I have ever before my mind the conviction that the very means made use of to effect the so-called cure, may become the certain cause of the continuance, and, in many cases, of the increase, of the malady. I think it will be admitted that the tendency to narrow in cases of stricture differs very markedly in individuals—some may show few signs of change during many years; others, especially those arising from the effects of laceration by direct violence, certainly, surely, and often rapidly increase. In all cases treatment by dilatation is necessary; but I doubt myself whether it is needful always to endeavour to restore the standard of the canal to the utmost of its original extent. I believe that there are many cases which admit of being maintained at a standard short of this, depending, however, on the facility with which the contraction yields, and its rate of increase subsequently. And it must never be forgotten that when once this treatment by dilatation has been commenced—no matter how carefully or how thoroughly it may have been done—it will have to be continued, whether at the hands of the surgeon or of the patient, more or less during life. For my own part, given time, and I don't believe that there is any stricture through which an instrument cannot be passed by a skilful surgeon. This being so, treatment by gradual dilatation follows; and in my judgment this should be by the silver catheter, as the safest, simplest, and most certain instrument in the greatest number of hands yet given to us—*bougie à boule* and *bougie olivaire* notwithstanding. If the induration be cartilaginous non-dilatable, or if there be fistula, the treatment by external division on a grooved staff should be adopted as speedily as possible.

Entertaining this view of the permanence of the changes established in the urethra by injury or disease, I am not very likely to favour any internal severance of the lining of the canal, whether by Mr. Holt's method of so-called "splitting," or by any form of internal cutting. I believe a wound is produced just as much in the one case as in the other. I regard those methods as artificially inducing the very conditions which I lament should result from almost unavoidable causes; and I further believe that a shut-up wound on the internal face of the lining of the urethra is attended by dangers from which an open wound on the outside face is comparatively free.(r)

I have had occasion to divide the urethra after Professor Syme's method in upwards of thirty cases. In one case only was there a fatal ending, and this from pyæmia. In no case was there relapse, provided that an instrument was passed from time to time, the frequency of this being determined by individual tendency to recontraction, once a month to once in three months being about the average, and by this means the calibre of the urethra was without difficulty maintained at its original standard. All the cases that I have seen, save one, have required this continued resort to dilatation, and will require it, in my judgment, more or less, during life. For there is no more a cure by this, than by dilatation or splitting. In the case that did not require it a fistula remained permanently in the perineum, letting through a little water, the general stream flowing by the urethra, which at the end of twelve years shows no disposition to contract. If the induration of the urethra, and narrowing, be of such an extent as to preclude the idea of dealing with it by external division, I prefer to tap the bladder by the rectum. I don't feel inclined, at present, to divide from the bulb to the meatus; and this literally must be the length of an incision in many of these long-standing cases, if the entire disease is to be dealt with. There are numbers of these inveterate cases wholly unsuited to external division; but they are eminently calculated to be dealt with by a method which deviates the course of the water to another channel, in order that rest may heal the fistulæ and absorb much of that adventitious material blocking up the natural urethra, which can then readily be found, and have a standard established almost without resort to dilatation. I frankly say that I do not believe that either internal or external division of any urethra will cause the healing of fistulæ in the groin, buttock, and perineum, where a man makes his urine, as it has been graphically described, like a watering-pot.(s)

Surely relief by the rectum will stand comparison with all the manœuvres that have been suggested from the days of Hunter to Grainger, and from Grainger (who, by-the-bye, belonged to us here) to Gouley and Wheelhouse. I cannot conceive why a patient is to sustain—sometimes for hours together—the distress belonging to hopeless attempts made to trace, in that stage of the disease, an impracticable canal, when the chief cause of the malady—the flow of urine—can be reached and diverted in a moment. Since Mr. Cock published his views,(t) now just twenty years ago, I have had many opportunities of seeing the results of this proceeding. I am able confidently to state that it is wholly free from danger. Indeed, I can scarcely conceive death following as a direct result of the operation. So little fear of the proceeding had one of my patients that he has been tapped at least six times for the relief of fleeting attacks of retention, dependent on a rapidly distended bladder, unable to empty itself in the presence of long-standing organic stricture. I have seen him almost within a day or two afterwards as if nothing had occurred. Further, no fistula remains, for the opening in the rectum invariably closes after a few weeks. I have left in the silver canula for three weeks, and have not found inconvenience from its presence; indeed, it appears to me that one of the greatest arguments in favour of its adoption exists in the fact of the position of the canula, which, whilst certainly securing the emptying of the bladder, is wholly removed from the urethra. I am strongly myself of opinion that many urinary cases terminate fatally from urethral irritation, set going and kept up by an instrument retained in the canal in its length. Some persons are very tolerant of tied-in catheters, whilst others, dependent on a certain idiosyncrasy, cannot sustain with impunity the simple introduction of an instrument. I saw a case in a young man which all but ended fatally from epileptic convulsions, induced by a first catheter, whilst the single introduction of a lithotrite in a man of 77 to measure a large smooth stone that had been carried with impunity for years, set up such an attack of cystitis that death ensued. I was very much impressed by a case in which a man, suffering from complete paralysis from the bladder downwards, owing to concussion of the spine, had a silver catheter tied in his bladder. He appeared sinking fast, and the most profound irritation of the bladder was established. I directed the water to be drawn every eight hours, and he began from that moment to amend, and ultimately recovered. Here, doubtless, the true explanation lay not in idiosyncrasy, but in the fact of the existence of disease from the injury. You may leave an instrument in the bladder for years from the perineum, but you cannot do this with impunity and traverse the length of the urethra. Morbid sympathies become excited in connexion with the urethra which are not produced by the introduction of instruments into other mucous channels.

In what I have said I have urged the adoption of tapping by the rectum, as affording assured relief to the most inveterate forms of stricture. And in considering the treatment of this disease, I have hitherto limited my observations to cases of stricture of the urethra *per se*, not to those complicated by retention of urine. I must equally urge it, however, as the remedy most reasonable for almost every form of retention. It is the absolute cure of spasmodic stricture! and if, in any given case arising from this cause, after one good effort has been made to obtain relief by ordinary means, there is no success, it should be carried into effect. If retention be present with an impermeable urethra from organic stricture, a double necessity supports its selection, whilst I have yet to learn that

(r) I will, with Sir H. Thompson, admit its use in narrowings at external meatus. ("Pathology and Treatment of Stricture." 3rd edition.)

(s) See discussion, Medical Society of London (*British Medical Journal*, November, 1870, p. 590).

(t) *Medico-Chirurgical Transactions*, vol. xxxv., p. 153.

it is inadmissible in the retention of old people from enlarged prostate. I know that it can be accomplished in these cases, but of course, not so readily as if the rectum had only its ordinary contents; and I am quite satisfied that far less irritation would be produced in the majority of these diseases, where death so often directly results from the effects of instrumental measures, by the presence, at the most depending part of the bladder, of a harmless tube, calculated to secure the removal of all urine secreted, and thus master that inevitable decomposition which is not overcome by any other method in use, for the simple reason that one and all fail to empty the bladder. If the membranous urethra bulge behind a stricture, or if an abscess opened in the perineum suggest a ready path to the bladder, by all means let a female catheter effect, through the perineum, what otherwise, I maintain, can be accomplished by the rectum.

Some years ago I asked the question, "Can the urethral canal be permanently restored whenever any complete and considerable portion of its length has been entirely destroyed?"(u). I believe the answer must be "No." I had then a boy of 16, with at least two inches completely destroyed by burning; and, believing this, I established him with a silver perineal tube, through which he now (aged 27) passes his water without trouble; but there is nothing in the growth of the parts that tempts me to interfere, for I know the whole circle of the canal must be gone. I think, however, that if only a streak of mucous membrane lingers about the part, an efficient connexion can be re-established even after the lapse of many years.

I saw in the early part of this year a patient, aged 30, who had sustained, eighteen years previously, such a laceration, that two inches below the meatus was a fistulous opening into the urethra, three-quarters of an inch long. The canal was pervious from the meatus to about one inch above the bulb, where was a second small fistula; then the canal was obliterated for an inch, and a third fistula, placed just at the commencement of the membranous division, gave exit to all his water. For eighteen years, then, the urethra from this spot had been unused. I first closed the penal fistula, paring the edges, which looked beautifully in apposition for some days, and then came apart as usual. But by clipping the penis with a self-acting spring, on the principle of the seraphine, the edges were admirably united. Then I laid the lower fistulæ into one, dividing all the hard textures between them, and passed a No. 8 catheter, and for forty-eight hours tied it in the bladder. After this I passed No. 9 daily. The patient learned to pass it in a week himself; and at this time the canal is in excellent order, with the introduction once a week. Now, I don't think the roof of the urethra was destroyed here, and hence the reason of a success which I did not expect.

In reference to the repair of penal and scrotal fistulæ, I would remark that they can alone be treated satisfactorily by the water being drained through the rectum, or, as here, through the perineum. Even then, union by first intention is a myth; but union can be obtained by keeping the granulating edges together by some artificial means, at the same time that vivacity is maintained in them by the use of the acetum lyttæ.

And now, permit me to indulge the hope that the illustrations I have been enabled to place before you of modes of practice have not been devoid of interest. The chances are that I shall never again address an audience characterised by qualities that belong to a representative meeting like this. I ask, therefore, your kindly reading of the motives which have induced me in what I have said to refer mainly to my own experiences. If I have any regret in having adopted this plan of proceeding, it arises—let me assure you—from the fact that I have been deprived by so doing of the pleasure of referring to the opinions, to the investigations, and to the successes of my colleagues and associates.

The British Medical Association has diffused an experience by these meetings that does away with the idea that the light of Surgery is permitted only to one man, in one place, or to any set of men in any place. Handed down to us by imperishable traditions—by names that will live as long as the world lasts: greater in its power to save life or limb than at any period of its history: so simple in its teaching—so open in its counsel—that a tyro may learn and act: Surgery stands proudly with its fellow-sciences in laying claim to having blessed mankind. And if this be true, can it not claim also to having been the means of diffusing a blessing of a different kind—I mean the engrafting in the hearts of the men who follow its teachings such a spirit of honour and love of truth, that meanness and jealousy cannot live by its side? I entertain the sentiment—as dear to me as life—that Surgery will cease to be what it is when the dread anxieties that beset its practice are not softened down by the certainty of the knowledge that good fellowship prevails amongst those who may happen for the moment to be judges of what is being done.

(u) *Lancet*, March 16, 1861, p. 258.

ABSTRACT OF ADDRESS IN THE SECTION OF MEDICINE.

By Dr. BELL FLETCHER.

Thanking the Association for the honour done him in selecting him for the president of this important section, Dr. Bell Fletcher alluded to the distinguished physicians associated with him in office, and to the value of the papers to come before the section. He next alluded to the great importance of the sciences of anatomy, physiology, and pathology, as bases for scientific practice and true advance in Medicine. The true starting-point for all true knowledge of the diseases of an organ must be a knowledge of its healthy structure; and this he thought had been well exemplified by the knowledge which we have attained with regard to the liver and kidney. Corvisart showed us the pathological changes of the heart, and Laennec taught us how to apply that knowledge to the living, thereby doing much to remove the fatal motto of Corvisart—"*Haeret lethalis arundæ*"—by early treatment. The *Journal of Anatomy and Physiology* he considered highly useful in this respect, as aiding us in acquiring a more extensive and more exact knowledge of the structures and functions of healthy parts—the basis of all true advance in Medicine. Improvements in apparatus were doubtless of value, but these were the most important things in securing improvements in medical science and practice.

AN ADDRESS DELIVERED AT THE OPENING OF THE SECTION OF PUBLIC MEDICINE.

By the Rev. SAMUEL HAUGHTON, M.D., D.C.L., F.R.S.,
Medical Registrar, Trinity College, Dublin; President of the Section.

It is my intention to occupy your time as briefly as possible; and it will be in the consideration of two important subjects—the duty of the medical profession and the public in regard to epidemics, and the equally important question as to the mode of taking medical evidence in courts of law in civil and criminal cases. I am relieved of a considerable portion of what I might have considered I should say regarding the town of Birmingham by the admirable address of the President last night. I think I threw out the suggestion last year at Plymouth that the friends in Birmingham should tell us how it was that Birmingham possessed the enviable qualification of being almost entirely free from epidemics; and I think our President has thrown out two suggestions which appear to me to hit off the causes of this remarkable immunity from dangerous scourges. The President threw out that this immunity arose from Birmingham being situated in the centre of the great watershed which separates the hydraulic systems of England, being also at a great altitude, ranging from 200 to 600 feet above the sea, and resting upon a sandstone—a porous soil; and I agree with him that these were the qualities which medical science looked for as necessary to constitute a healthy town. And the truth of these estimates will be seen in the fact that, from the earliest time, Birmingham has been free from serious epidemics; and this is shown by reference to the earliest records. During the fearful visitation of the cholera in England in 1832 there was hardly any of it felt here; and during the visitations of 1856 and 1866 it was also singularly free. Then, too, there were eminent physicians in this town—and they were not few—who have not seen a single case of spotted typhus in their lives. Through the courtesy of Mr. Woolley, the sanitary inspector of the town, I am allowed to state that the small-pox, which came here while raging over the other parts of the country, never rose to a greater height of mortality than eleven deaths in a week. Why, in the city of Dublin, which is a city of about the same size, and with a population of about the same number as Birmingham, the mortality from small-pox rose to seventy-eight in a week. Well, now, Ireland affords us remarkable facilities for the study of epidemics. A "melancholy ocean" surrounds us, and separates us from the

rest of the world; and we are so afflicted with epidemics that I believe we should long ago have been destroyed but for the natural vivacity, wit, and love of fun of the Irish. I shall now have to bring before you some remarkable and serious facts regarding the epidemic of small-pox; and the Government of this country cannot wash their hands of serious responsibility in this matter. If the Irish, with their natural vivacity and cheerfulness under misfortunes, which they are ready to call dispensations of God, have borne these troubles uncomplainingly, that is no reason why the means in the hands of our rulers of preventing the spread of disease should not be taken. In 1866 it was proved beyond the possibility of doubt that the cholera was imported into Ireland; and we could trace the cases through the ports of Dublin, Belfast, Drogheda, Wexborough; and we could lay our hands on cases, and say that these came through the canals and other ways from Sheffield, Liverpool, or Bristol. Our isolated position gives us peculiar advantages for the study of epidemics, and for the determining whether they are, or are not, the result of contagion. With regard to small-pox, there is less difference of opinion than with regard to other diseases; but no one has undertaken the study of the subjects connected with epidemics who has not become, like myself, an ardent contagionist. One of the advantages of our isolated condition is, that we in Dublin can make Liverpool our medical barometer. We know when there is an epidemic at Liverpool that we shall have it as well. In all cases of an epidemic which affects Dublin and Liverpool, Liverpool has it first. I went to Liverpool when the cholera of 1866 was raging, and made the most minute inquiries; and Dr. Trench, with the greatest kindness and courtesy, placed his tables and all other information in his possession at my disposal. By the means of these tables and the information which Dr. Trench gave me, I was enabled to mark out for Dublin the course the disease would take in Dublin, and this before it came to the city. In the mortality of Liverpool, a curve of a remarkable mathematical shape appeared; and, by enlarging the curve, I could predict, in a general way, what would be the mortality of the disease which was coming to Dublin. And this prediction was verified in a remarkable degree; for, afterwards, we found the total mortality in Dublin was what we said it would be after looking at the mortality in Liverpool, and we were enabled to say when it was at its maximum. So you see that Dublin is as well off, or as badly off, just as you like, as Liverpool in regard to hygienic condition; and neither town is what it should be in regard to sanitary regulations—in fact, they are upon a par. Now, when I come to small-pox, we have another element to deal with which we have not in other epidemics; for in this disease we have a means of protection in vaccination, and we can see how well or how ill a town has been protected by the vaccination laws being carried out. We see the small-pox sweeping its way over this island, and its greater or less virulence is a test of our diligence, or of the diligence of those who have gone before us, in protecting the population against this terrible scourge.

Allow me here to say a few words upon vaccination. When I come to England I am astonished to find intelligent persons in numbers, who, for some reason, come forward publicly to oppose the process of vaccination. Some of these people express a strong doubt—an honest doubt—whether the mortality from small-pox is really as fearful as the doctors say. To get a proper basis of calculations as to the mortality from small-pox among unvaccinated persons, we must go back to the records of past generations in this and other countries; and we find this astonishing result, that from sixty to seventy in every 100 persons attacked by small-pox must die, if not vaccinated. Some people have the idea that this is a bugaboo of the doctors, and that they need not necessarily die if not vaccinated. Of course it is impossible now to get the experience of an immense number of persons who have not been vaccinated, to give them the small-pox, and see how many would die. This experiment could not be easily carried out. Therefore I adopted another method. I took it for granted that the writers and records of the close of the last century were correct. The average which they gave was that 66 per cent. of every class—men, women, and children—must die if they had got the small-pox and were not vaccinated: whereas, of those who were attacked after being well vaccinated, the number of deaths was only 6·6 per cent. This reduction of the mortality from 66 to between 6 and 7 per cent. represents what vaccination has done. The value of vaccination is, therefore, established beyond the possibility of a doubt, and I think that this is a subject on which the medical profession should speak out. Should not Birmingham, with her literary men and newspapers, lead the public on this great question? I wrote to my friend Dr. Hayden, of the Mater Misericordiæ Hospital, Dublin, to send me the total number of small-pox cases treated there, and of the deaths; and I undertook, from these figures, to calculate the number of those who were vaccinated, and those who were not. This forms a very simple problem in mathematics, of which I will not trouble you with more than the results attained. From the figures sent me, I calculated, though I had never seen a patient, that 120 of the cases treated at the Hospital had not been vaccinated. I wrote to tell Dr. Hayden this; and he wrote back to say that the number recorded as known to be unvaccinated was 119. Since I have come to Birmingham, Mr. Woolley has kindly placed at my disposal all the information he possessed, and I hereby beg to tender him my warmest thanks for his courtesy. Although Birmingham has suffered what I cannot but regard as a most contemptible epidemic, the facts are strikingly illustrative of what, to my mind, is the truth of the principle which I am placing before you. Since November 18, 1871, there have been 1911 cases of small-pox, of which 262 have died. I leave out the cases remaining under treatment. I calculated from those figures that 230 persons in Birmingham who had been attacked with the disease had never been vaccinated. I found in Mr. Woolley's returns that the certainly non-vaccinated were 209, while doubtful cases numbered forty-four. Well, it was fair in such a case to split the difference and call it twenty-two, and as that suited my theory very well, he adopted it; and when I added them to the 209 it made 231, which was only one above my calculation. It is like the trick of a conjuror, walking into the town, asking the number of small-pox cases and deaths, never having seen the patients, and yet telling the people of the town how many were vaccinated and how many were not. Dr. Trench tells me that 1616 cases were treated in the Liverpool hospitals; the deaths were 375; from that I calculated that the non-vaccinated cases numbered 451. The number actually recorded as non-vaccinated was 432, being nineteen less; but I am perfectly certain that to those should be added several of those properly set down in the reports as doubtful. This opens up a problem highly interesting to the profession of medicine. As the mathematician in his closet can point to the astronomer in what part of the heavens and when to look for certain planets, so the progress of science and medicine can tell with certainty when and where certain districts will be attacked with epidemics. The records of the fearful epidemics and the plagues of the middle ages have perished; the poor have perished with no man to regard them. Even the writings of Defoe may be searched in vain for any statistics of the Great Plague which would satisfy the demands of modern medical science. But, by examining into the records of our own times, we shall be able to read back the history of the epidemics of the past, the number and percentages of the mortality of those who suffered, who lie forgotten in their graves, and whose history no one has recorded.

I come now to what is the most difficult and painful part of my subject, from which I would gladly have shrunk if I had not been impelled by an imperative sense of duty. I am able to show them, I believe conclusively, that unfortunate Ireland is now suffering, has suffered, and probably will suffer, more than her fair share of the epidemic of small-pox. In the case of cholera, I have shown that Liverpool, Dublin, and other towns have suffered exactly in proportion to their different populations; and therefore, with regard to this disease, Ireland has no reason to complain, as compared with her neighbours. The number of deaths in Liverpool from small-pox, where the plague has now ceased, was 2093. The calculation of the number of persons who ought to die from the epidemic was 1256, on the supposition that it was equally protected by previous vaccination with Liverpool. The result is, however, far otherwise; for—according to the statistics of Dr. Burke—up to Friday last 1581 persons had died in Dublin, showing an excess of 325 preventible deaths. I believe firmly that the number will be increased to 500 or 600. I stand here to ask for the sympathy of my brother medical men in an appeal against the injustice with which the Irish people have been treated.

Now let us look to the case of Cork. While much of the pestilence has passed away from other cities, it has hovered like a black cloud over the city of Cork, and the poor people are dying in numbers, the mere enumeration of the figures of which will convey but a poor idea. You may gather an idea by supposing that, while the pestilence was raging in London, the number of deaths amounted to 1500 a week. The poor people of Cork have perished in the ratio of 23 per 1000 a week

from small-pox for thirteen weeks. I wish I could think no one was to blame for this. The poor sufferers themselves blame no one. They are attended by their priests, and with their last words express their kindly feeling and gratitude to their doctors and nurses, proclaiming their deaths to be "the will of God." That is a natural and becoming feeling in the poor sufferers; but we know better, and we know that most of those deaths might have been prevented. I have a right to present this as a solemn grievance. In the estimates for the present year, £10,050 was voted for the National Vaccination Institution of England, in addition to which nearly as much more has been paid out of the public funds in payment for the services rendered by medical men in vaccination. Thus nearly £20,000 has been properly spent in providing the people of England with gratuitous vaccination. In Ireland only £400 per year is expended on the same object. It is a mystery to me how much good has been done with this amount, and it is a miracle to me how it has been made to go so far, for with that amount we have had to send lymph to the Poor-law Guardians. Now, is this justice to Ireland? Then lymph is given in England, but it is sold in Ireland; and, when we apply for good lymph, we are told we can have it by paying for it, which is like giving a hungry dog a joint off his own tail for dinner. I appeal to all fair-minded educated Englishmen to help us to get this grievance removed, for we may talk in Ireland until the Day of Judgment without getting the aid we seek. I appeal also to the public press to help us to get this justice, for which we have been asking in vain for years. In 1852 we made the most humble application which could be conceived—such an one as only negroes and Irishmen could make—to get £600 more, raising the grant to £1000, which, it was calculated, by great economy and labour on the part of the officers of the Cow-pox Institution, would furnish lymph to vaccinate the whole population of Ireland; but it was refused by the Poor-law Commissioners, who were themselves a paid Board. They sent the people to live in fool's paradise some years ago; and the officials of the Board published a statement couched in the language of the stable, to the effect that the small-pox was "stamped out" like the cattle-plague—language which, in the lips of paid officials, was adding blasphemy to insult.

I now come to a more pleasant part of my subject, in which I shall have the hearty co-operation of all my audience in procuring redress, and that is, as to the evidence of professional witnesses in the civil and criminal courts of law. Dr. Davey, at the end of an admirable address, delivered at Bristol a few years ago, made a suggestion which met with the approval of the medical and local newspapers and circles, but no steps have since been taken. I allude, of course, to the shameful and degrading manner in which medical and scientific evidence of every kind is taken in courts of justice, and before parliamentary committees. Medical men are peculiarly sensitive on this point. Because of some peculiarities in their organisations, the doctor and the lawyer look at one another as from opposite poles. There is no greater contrast than that between the legal and the medical mind. The medical man is accustomed to see the best features and the best side of society; he stands by the bedsides where the best affections of the heart are displayed towards those who are suffering, and he forms a more charitable opinion of his neighbours than the rest of the world. Perhaps he thinks and acts more in accordance with the spirit of Christ than others. On the other hand, the legal man sees his neighbour under the vilest and foulest aspects; he comes into contact with swindling and every kind of knavery, until his mind becomes imbued with it. The lawyer becomes like the chameleon, tinged with the colours of those about him. There is an utter disproportion between such men and those whose lives are spent in doing good. I reckon myself a skilful professional beggar-man; but whether I collect for an orphanage, for building a church, or the deaf and dumb institution, I can never extract money from a lawyer. And that is the experience of others. Where can they expect to go? When a barrister gets a medical man on the table, what does he do? He has the same natural antipathy to him that a terrier has for a rat. I am happy to say, however, that the rat sometimes turns out to be a badger; and sometimes a medical witness proves to be a badger, and not a rat. I may mention here a trick which I played upon an eminent lawyer who was leading counsel on one side in a great case of lunacy which was before the Dublin law courts. This gentleman did me the honour to ask me to dine with him a day or two before the trial. I knew it was for the purpose of getting a "grind." Well, I gave him his lesson; and the learned gentleman, who was one of the greatest bullies at the bar, trotted it out in such a style that we had such a scene as was rarely or never witnessed. In these cases, the doctors on one side swear A B C, while those on the other depose X Y Z; and anything like an impartial statement is carefully excluded. I will not mention the name of the lawyer, as he is now on the bench, and it might be disrespectful in a place where there are coercion laws. I told him a few facts about lunacy, and then added that when the examination was nearly over, he was to say, "Now, sir, you are on your oath; you are giving your evidence." You know they always keep repeating, "Now, sir, you are on your oath." Well, I told him that all would go on smoothly up to a certain point; and then, just as the witness was about to leave the box, he was to say—"Now, sir, you know you are about to leave that table, and you are upon your oath; and upon your oath, do you not know that *crepitus redux* is the most fearful form of insanity which can afflict man?" I was base enough to ask my lawyer friend to get me a front seat when the case came on; and I went to enjoy the fun. I heard him put his questions in his best style, and when he came to this one, just as the witness was going to leave the table, he called him back, threw his wig back—he was a great bully, was my friend—then he put up his shoulders, and called out—"Now, sir, mind how you answer: on your oath, sir, is not *crepitus redux* the most fearful form of the affliction of insanity?" He said this in a perfect frenzy of passion; and the witness, startled at the sudden question, the question itself, and the manner in which it was put, became quite frightened, and, turning to the judge, said —"That man's mad, my lord; have him taken up."

It is unnecessary to dwell further upon this subject. The time is come when the medical profession, engineers, chemists, scientific men of every description, must peremptorily take their stand, and refuse to be treated in this fashion any longer. There is the case of the Rev. Mr. Watson, in which the most melancholy statements and counter-statements were pronounced by the medical men, and then an amateur was called in after all; and I must say, judging from what the man has written since he has been in prison, that he was a perfectly sane man, and there has been a gross failure of justice. And there has also been a most painful case in Dublin, in which the medical witnesses were carefully selected on each side, so as not to give an unbiassed judgment. They ought to be allowed to give their evidence in a dispassionate manner, without being pledged to one side or the other. The English railway companies have at length taken up the matter; and I believe that before long, in every case in which compensation is demanded in cases of accident from the great companies, a medical man will be selected by each side, as suggested by Dr. Davey, and will meet as a jury, and agree upon an umpire, without allowing any other medical man to be called; and take down the evidence, which will be presented as the facts in the case. Why, even in criminal cases, cannot we have such a supplementary jury, sworn to examine nothing whatever but the physical facts connected with the case? The witnesses may be examined by the lawyers; for they are clever at that, if at nothing else. And the verdict of the supplementary jury should be handed to the common jury as the only scientific evidence to be admitted. Such a plan would save justice from the uncertainty which is the greatest injury to which it is now exposed. A man now never knows whether he is to be hanged or not, which is a very unpleasant thing.

The duties which the medical profession discharge to the public are at present but very imperfectly understood, and I turn with special pleasure to those which they discharge to the sick, and especially to the poor. The tongue of slander has never been able to say that any large portion of the medical profession has ever neglected or deserted that duty. The blessings of the poor are always their best, and sometimes the only, reward they get for many hours of lonely toil. It is a consolation to men working in the outskirts of civilisation in many parts of the country, in remote villages and mountainous districts, where they have few companions of equal education around them, and are perhaps neglected by those superior in society to themselves—toiling almost alone; it is always a satisfaction to them to know that they are labouring in a good cause, following the footsteps of Him who not only reclaimed the sinner from his evil ways, but also healed the sick. The records of no profession can show so long a roll of obscure, able, and clever men, making in quiet great discoveries in science, in solitude doing so much good, whose names are not known during life, and to many of whom statues to perpetuate their memories are now being erected throughout England. Many an humble physician has

thus worked, seen by no eye but that of the Great Master, and at the close of his useful but neglected career sees the shadow of the evening of life close upon these labours, and may well exclaim, in the words of the great Italian poet who died among us in England, far from his native land, and forgotten by his country—

"Morte mi darai fama e riposo."
("Death! thou wilt give me fame and rest.")

This is glorious language; still it is the voice of despair.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF MIDWIFERY.

By EVORY KENNEDY, M.D.,
Late Master of the Dublin Lying-in Hospital; President of the Section.

As I understand, it is the duty of your Presidents to open each Section of the British Medical Association with something of an address. It occurs to me that, in place of occupying the valuable time of so many of my *confrères* with an historical analysis of the progress of our branch of Medicine—the usual stock subject of all introductory lectures, and one on which you are all very likely more competent to descant than myself—I might possibly occupy your time more profitably and pleasantly by giving you a few cases of not very ordinary occurrence which I have selected from my notebooks. Be not alarmed. I shall not weary you with detail in these brief *excerpta*, but merely touch the salient points of interest in each case.

I have already had the honour of calling your attention to some of the more rapidly destructive of puerperal diseases in a paper read for me, in my absence, by your Secretary, at your Dublin meeting, under the head of "Purpuric Puerperal Fever." It is now my intention to allude briefly to other forms of blood-poisoning, but more especially to puerperal arthritis and puerperal gangrene; premising that, when this disease shows itself, it is usually most rapid and unsparing in its onslaught, and no tissue in the body escapes its ravages.

Case of Destructive Inflammation of the Eye, combined with Arthritis.—B. was delivered of her first child after a labour of nine hours, on June 14, 1838. On the 16th and 17th there was abdominal tenderness, with a quick small pulse. She was leeched. On the 18th her countenance was anxious and shrunken; pulse 140, small. On the 19th sudden inflammation of the right eye set in; the conjunctiva and iris being engaged. Leeches were applied and blisters to the temples. Mercury was given. On the 21st she was salivated. The whole globe of the eye appeared prominent, with serous infiltration beneath the conjunctiva. All the tissues of the eye were engaged; the sclerotic was very vascular, the cornea prominent, the aqueous humour turbid, the iris hardly discernible; there was total loss of vision. The conjunctival vessels were freely scarified. This evening inflammation of the wrist set in, with erythema of the back of the hand. Excitement and delirium were present. On the 22nd the other wrist became engaged; her countenance was shrunken and excited. Pulse 125, small and thready. The wrists were treated with solid nitrate of silver. She sank, and died on the 24th. At the post-mortem examination, effusion of blood was found on the right side and posterior lobe of the cerebrum, and a small quantity between the arachnoid membrane and the pia mater on the left side. The brain in other respects was healthy; there was no fluid in the ventricles. The right eye was much suffused; the conjunctiva very vascular, the cornea perfectly opaque. On extracting the eye, some pus was found round the lachrymal sac. On cutting down on the carpal bones a quantity of pus was found in the sheaths of the tendons, unconnected with the joints. Pus was found in the vessels of the broad ligaments of the uterus, but there was no fluid in the cavity of the abdomen.

I would now call your especial attention to the drawing which I exhibit to you as a type of disease known as sloughing of the vagina, but which would be more correctly stated as lying-in hospital gangrene; and also to a group of cases occurring in puerperal women as the result of their state and condition, but which are now clearly established as prevailing so commonly in great lying-in hospitals, and so rarely out of them, as to stand in relation of effect and causation with the locality of their delivery. As in surgical hospitals, so in lying-in hospitals, these cases are ascribed to hospital or poisoned atmosphere.

These cases generally occurred in groups; for instance, in April, 1837, four occurred in the Dublin Lying-in Hospital, at the same time, not one of which recovered. One occurred in June of the same year, complicated with arthritis of the elbow-joint, one in October, and one in November—all being fatal. Another at the same time was complicated with erysipelatous inflammation of the buttock, followed by abscess and inflammation of the elbow, sterno-clavicular and shoulder-joints; and yet this woman (K.), the drawing of whose disease I exhibit to you, struggled through all this and recovered, after two months of as acute suffering, from the number of joints consecutively engaged, as ever I witnessed. Free incisions were made into the buttock, with escape of pus. The sterno-clavicular joint suppurated, and an incision was made; but the inflammation of the elbow- and shoulder-joints yielded to the free application of nitrate of silver and potassa fusa. On December 8 another fatal case occurred. This case was complicated with slight peritonitis; and the post-mortem examination disclosed a peculiar lesion of the peritoneal surface of the uterus at the junction of the neck and body anteriorly, which I have rarely observed, but which of itself I esteem a very fatal occurrence.

I can conceive what I term lying-in hospital gangrene to occur out of hospital; yet after a protracted and sufficiently extensive opportunity in my own practice and in consultation, I cannot tax my memory with ever having met with a case of it out of hospital. Would that I could make the same statement of my experience in hospital. It occurs in isolated cases, but more frequently prevails in groups of cases, when a tendency to its congeners—puerperal fever, erysipelas, arthritis, and peritonitis—also prevails. It is usually the effect of long-continued pressure or lesion, or of the force used by the application of instruments in forced deliveries. Indeed, so constantly is the disease observed to occur as the result of these agencies that they may be fairly looked upon as the exciting or determining cause, and the disease classed as a traumatic affection, and treated accordingly. This is so well understood by the observant hospital physician that he looks with dread to the occurrence of any lesion when the hospital is in an unhealthy state, and for the same reason hesitates to perform the simplest operations, lest they be followed by this affection—operations that in a healthy state of the hospital would not cost him a thought.

I hold that the congregation of a number of patients in common chambers generates what we term a hospital atmosphere; that this hospital atmosphere is, or more properly becomes, a poison; that, by a persistence in the causes of its production (with which we shall presently deal), it undergoes a process of what may be termed "cumulation," pervading every part of an enclosed building, until it eventually arrives at a stage which we may term "saturation," when the whole hospital is charged with a poison capable of seizing upon those who are susceptible to its influence, or who are in what we term a state of "receptivity."

Now, from this it will be seen that, by crowding patients in a hospital, we are actually exposing them to a new disease generated by the very means we adopt to cure them of the disease under which they chance to labour. But, unfortunately, the new disease is generally one most fatal in its character, as few there be who survive it.

The characters or phases of the hospital disease vary under the different circumstances of the victims susceptible to it. Thus one may be attacked with blood-poisoning or pyæmia; another with erysipelas; a third with hospital gangrene; and a fourth with metria or puerperal fever. The laws which regulate the habits of this family of zymotic disease are perhaps best arrived at by a study of the last-named poison, as, in its occurrence in our great lying-in hospitals, where it principally commits its ravages, it is less exposed to disturbing influences, and consequently pursues its own natural course free from interruptions and complications.

Out of 111 years, for which the great Dublin Lying-in Hospital has been established, it has been haunted by puerperal fever ninety-three years. For twelve years it has been comparatively, and only for eight years has it been totally, free from this fell disease. The deaths of those admitted for the last years amount to 1 in 33. Let us remember that in three small cottage hospitals in Ireland, in which accurate tables have been kept (Kilkenny, Newry, and Waterford), we find that the mortality has been 1 in 282. On the comparison of these two proportions, the conclusion is inevitable that eight out of nine patients have died in the Dublin Lying-in Hospital who would not, in all likelihood, if they had taken refuge in the cottage hospitals, which were comparatively free from the hospital miasm or poison that prevailed or lurked in the great unhealthy hospital.

A fatal error, into which we are prone to fall, is the confounding epidemic and endemic disease; and the amount of loss of life that has occurred from this error I believe to be incalculable. This will be easily appreciated when we state that what, in strictness, we should call true epidemic diseases, are unavoidable; whilst the latter, or endemic diseases, are, with rare exceptions, preventable and perfectly within our control. True, they may be convertible; but this makes the distinction the more important, in order to prevent their extension or fixture.

The contagious nature of hospital miasm is now beyond question; as also that of most of those modifications of hospital zymotocene with which we are familiar, especially metria and erysipelas.

Having satisfied ourselves that a poison is generated by the mere crowding of numbers of patients into a common atmosphere, and also that this poison spreads by contagion, the next principle or law we require to establish is, that this poison is cumulative, or developing in its quantity, commencing with a single poisonous emanation, and increasing in its quantity until the atmosphere, walls, floors, and furniture become imbued or charged with it. Unfortunately, as yet we are unable to detect this miasm or poison and display it by its sentient properties; but of its existence we cannot have the slightest doubt, from its effects, from its laws, from analogy, and especially the spread of diseases by inoculation and contact.

But why should the hospital wards ever be free from hospital miasm and these fatal results, if all this be true? This is a question to be answered by the law upon which we now dwell—cumulation. The ordinary epidemic disappears; having, as we say, worn itself out. This it does in hospitals as out of it. Precautions are taken; patients zymotically affected are separated; ablution and ventilation are carried out; admissions are refused; the wards are emptied; and the hospital becomes healthy. Weeks, months, and longer, pass over before the poison again shows itself. The cumulative process, however, is in steady operation; and at an uncertain period the poison again shows itself, and snatches up its victims. The same measures of precaution are taken to banish it, and with the same results. But it does not rest here, as has been abundantly proved by the history of our great hospitals. When the cumulation has gone on repeating itself again and again, a further stage, or that which I shall denominate the state of complete saturation, is arrived at, and then the hospital becomes the fixed *habitat* of the poison.

The death of the consumptive costermonger is not to be placed in the category of the victims to hospitalism. It has its analogue in the dog slain in the Grotto del Cane for the instruction of his slayers, by holding him so close to the surface of the deadly cavern that he can only inhale mephitic gas. Nor, indeed, is it only in St. Pancras that we have this going on. Have we not our No. 11 wards and grottoes in nightly operation for the benefit of the upper ten thousand in the West-end *réunions?* Witness the pallid and poisoned state to which our belles are reduced, at the end of the season, from breathing mephitic and animal-poisoned air for several hours nightly, with their lungs at nearly as great a disadvantage as the costermonger's, by tight lacing and waltzing. The Black Hole of Calcutta and the middle passage rendered our fathers familiar with the more immediate effects produced from a number of people breathing and rebreathing the same atmosphere; and its more gradual effect in the production of gaol-fever, grappled with by Howard in his mission of mercy, has reached us as a matter of history. We were in hopes that the labours of Boswell Reid and Arnott had exposed the defects of ventilation and directed a remedy. But the enormities occasionally cropping up from neglect in this respect show that much remains to be done. Dr. Farr, in a paper lately read at the Leeds Conference, pointed out the want that exists of an authoritative organisation charged with the ministry of public health. As it is, what is every man's business is left undone. When will our legislators waken up from their piecemeal attempts at sanitary improvement, and grapple with this great subject as it demands, and as the well-being of the community requires?

The fact is that, when the poison is generated, crowding or the cohabitation of patients in a state of receptivity secures its spread. A process of cumulation of the contagium or poisonous element occurs; and when this arrives at the stage of saturation, outbursts of erysipelas, phagedæna, gangrene, pyæmia, and metria occur; the patients are attacked wholesale; and the diseases become, as we before stated, endemic or fixed, and continue to haunt the hospitals, be they surgical or obstetrical.

Now that the blot has been hit, it requires no great philosophy to meet the difficulty. Simply cease to crowd such patients into common buildings under the same roof. All the advantages of an asylum can be afforded whilst segregation is secured, and facilities for medical instruction preserved to the schools. The substitution of cottage hospitals for these great hotbeds of contagion should be insisted upon in all future arrangements for housing cases liable to endemic poisons. The term epidemic should be applied in its true meaning. These large surgical and maternity hospitals, in which metria, erysipelas, and pyæmia have committed such havoc, should be either applied to purposes compatible with the safety to human life, or so altered in their construction as to isolate each ward from the common atmosphere now pervading the whole hospital. This may be very simply and inexpensively accomplished by opening separate entrances into each ward direct from the open air. In the existing hospitals, the communications with the common hall should be built up, and the same system carried out in the upper storeys by opening the ward-doors on flying galleries. The lifts and stairs should be placed outside of the building, the existing halls and passages being still retained for the staff, and affording an approach to the respective storeys, but no covered approach or communication of any kind allowed to remain between these and the wards. By these simple expedients, and the limiting the number of beds to three in each ward, it is probable a large saving of human life would result, and hospitalism become, like gaol-fever and small-pox, a thing of the past. Pity the founders of the great hospitals so recently erected had not applied our dear-bought experience in their magnificent constructions. The sooner these altered arrangements are made in such great palatial institutions as St. Thomas's and the Leeds Hospitals, as well as the Maternities and our other great charities subject to erysipelas, pyæmia, and phagedæna, the sooner will the insidious approaches and the fell ravages of our common enemy, hospitalism, be subdued.

Stow, in his *Survey*, mentions, in speaking of the King's Bench Prison, that the great mortality that occurred there in the six years preceding 1579, was produced through a certain contagion called "the sickness of the house." Those learned physicians who uphold the crowding in large hospitals, and imagine they can meet the difficulty by disinfectants, I would refer to the simple experience of that benefactor of our species, John Howard, as conveyed in his preface a century since. He says: "I guarded myself by smelling to vinegar while I was in those places. This I did constantly and carefully when I began; but, by degrees, I became less attentive to these precautions, and have long since entirely omitted them." John Howard discovered and carried out the best means, on true scientific principles, of disposing, once and for ever, of "the sickness of the house." If the obstinate hospital crowders would take example by him, and meet, as he did, crowding, the cause of "the diseases of the house," and, as he did, remove them, they would speedily produce an equally satisfactory result, and, like Howard, give up their futile attempt to meet the case of dealing with emergency by "smelling to vinegar."

Case of Lying-in Hospital Gangrene.—Catherine B. was delivered by crotchet, after a tedious labour, of her first child. She had one fit of convulsions on entering the ward, and was treated with tartar emetic. There was no return of convulsions. Extensive sloughing of the vagina showed itself the day after delivery, with great debility and exhaustion. Tympanitis and delirium occurred, and she gradually sank, and expired on the fourth day after her delivery. A small quantity of limpid serum was observed in the peritoneal cavity. The whole vagina and the lining of the uterus were in a state of slough. The os uteri was jagged and disorganised; and there was serous infiltration underneath the pelvic cellular membrane.

These cases are sometimes attended with hæmorrhage. For instance, in Murphy (October, 1837) there was lingering labour with slow dilatation. She was treated with tartar emetic and ipecacuanha injections. She was delivered naturally on the 17th, but with laceration of the perineum, of a still-born male child. Sloughing was perceptible, with rigors and prostration. Hæmorrhage from the vagina set in as the sloughs were separating, on the 24th; and she sank on the 25th.

In Black's case, the drawing of which I here exhibit, she had tedious labour, followed by sloughing inflammation of the vagina and external parts, of erysipelatous character, spreading from the vulva to the buttocks and back. She sank from exhaustion after a long struggle. In addition to the appearances here represented, the omentum was found adherent to the pelvis and uterus: and an abscess in the walls of the latter organ opened into its cavity.

Many more interesting cases were narrated by Dr. Kennedy, which our space precludes us from making public. We have therefore limited our extracts to that subject to which Dr. Kennedy has devoted so much attention, and on which his opinion is so highly esteemed.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
„ „	*Six* „	0 14 0
The Colonies and the United States	*Twelve* „	1 10 0
„ „	*Six* „	0 15 0
India	*Twelve* „	1 15 0
„	*Six* „	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, AUGUST 17, 1872.

THE BRITISH MEDICAL ASSOCIATION ADDRESSES.

The British Medical Association has had its annual gathering, has enjoyed its holiday, and has profited, we will hope, by its work; and now its members have again returned to their numerous and widely spread homes. The meeting appears to have been a very successful and pleasant one, and before the record of it is stowed away on our dusty book-shelves, or wherever else we store our medical journals, we are desirous of commending to the attention of our readers the addresses delivered at it. It has always seemed to us that next after the holiday-making and social dissipation these addresses form the most pleasant and useful feature of these gatherings. We fully appreciate the good work done in the sections, and the value of the papers read—and taken as read—in them, but we take it that most probably these papers would some day appear in the Association journal or elsewhere, even if they did not come forth at the annual meeting; while the addresses, on the contrary, owe their existence directly to the meeting, and are called forth by it only, as well as produced at it. They are almost always worth reading, and this year, while all are good, some are unusually admirable.

The Association met for the third time in Birmingham, and the President, Mr. Alfred Baker, congratulated it on its ever-growing importance and power. Perhaps it may to some seem rather tall talk to say that the Association has influenced "every movement—political and social—by which the heart of our Profession has been stirred since its establishment." But presidents must be laudatory and encouraging, and Mr. Baker quickly got him to the main subject of his address—the sanitary merits and demerits of Birmingham—and gave his audience an able and interesting discourse, pointing these out; telling of the professional celebrities of the place; and noting how thoroughly Birmingham shows "how advancing knowledge influences man's invention, skill, and industry, and subjects natural and chemical power to his control; how labour is dignified, and intellectual supremacy is asserted, by the employment of those potential agents—steam, heat, electricity, and chemical action, which are made here to carry out the most gigantic and most delicate operations."

The Address in Surgery was given by Mr. Oliver Pemberton, of whose high reputation among English Surgeons it would be superfluous to speak. Remarking that nowadays medical journalism places the scientific discoveries of Europe, Asia, and America within easy reach—if not on the very tables of all of us—and that therefore "it would seem but a repetition of an old story" to give a review of the progress of Surgery, he chose—and wisely chose, we think—to submit to the Association "the fruits of personal observation connected with one or more of the chief maladies that demand the skill of the surgeon." And the maladies he selected to discourse on were—aneurism, stone by median lithotomy, and stricture of the urethra. In the treatment of aneurism by the ligature, Mr. Pemberton is an enthusiastic admirer of the "prepared catgut ligature" of Professor Lister. He says—"I am glad, before such a meeting, to express my unbounded admiration of, and confidence in, the use of the animal ligature, as placed before us by Professor Lister. If the so-called 'antiseptic system' has effected no more for Surgery than to give us the means of effectually closing an artery without cutting it through, and without suppuration, it has in doing this placed the crowning glory on the treatment of aneurism, for which it has waited since the time of Hunter." This is strong praise; but Mr. Pemberton supports his opinions all through his lecture by strong cases in point. In the treatment by flexion and pressure, Mr. Pemberton supports and practises the theory and treatment of the Dublin surgeons; we mean, he holds that we ought not to seek to stop the current of blood through the aneurismal sac, and that treatment may be intermittent. "What we want," he says, "is a stream of blood flowing into the aneurism; that it should be more or less retarded there, and that there should be present something in the nature of a foreign body—for example, the fibrous laminæ—on which the blood would coagulate and deposit its fibrin." He recommends in some cases the employment of very gentle intermittent compression of the sac; and with this, as with flexion, he would combine pressure on the artery below the sac. The whole address is highly interesting and practical, and well worthy of the attention of all surgeons, who, whether they agree with the speaker or not, must admire his skill and his success in the cases by which he illustrates and enforces his teaching.

Sir William Fergusson, in opening the Section of Surgery, was modestly and gracefully careful "not to encroach on the duties which belong to a gentleman so thoroughly able to do all that has been asked of him by our Association" as Mr. Pemberton. In his short address he remarked on "precision" being "the grandest feature in Surgery," and on the supreme importance of "facts"; and then he enlarged on the fact of the disease stone in the bladder, and the fact "that our skill is such that we can combat that fact, and even assume the supremacy by surgically doing away with it." This last fact he illustrated by the exhibition of the "produce of between 330 and 350 cases of stone" personally treated by himself; the aggregate of stones being nearly 500. We will add, though it is not mentioned in the address, that the fact of this collection is one of the many proofs of another and great surgical fact—the fact of Sir William Fergusson as a great operating surgeon.

Dr. Evory Kennedy, as President of the Section of Midwifery, also made his address of the "practical" kind, composing it of "cases of not very ordinary occurrence" which he had met with during his large experience as Master of the Dublin Lying-in Hospital. And he took occasion to speak by the way forcibly and eloquently of the evils of hospital miasm and

defective ventilation, asking, as so many others ask, "When will our legislators wake up from their piece-meal attempts at sanitary improvement, and grapple with this great subject as it demands, and as the well-being of the community requires?"

Dr. Maudsley, in his most able and philosophical address on Medical Psychology, also pointed out in the most striking way the destructive effects of physical as well as moral evils of all kinds on the whole man, moral, intellectual, and physical; and he proposed and dealt boldly with the problem "whether there is the same essential connexion between moral sense and brain which there is between thought and brain, or between any one of our special senses and its special ganglionic centre in the brain?" arguing "that the moral element is an essential part of a complete and sound character, in the present state of human evolution; it was the last acquisition of development in the progress of *humanisation*, and it commonly is the first to suffer when degeneracy begins, and therefore its decay is the first sign of the commencement of such degeneracy. He who is destitute of moral sense is a defective being to that extent; he marks the beginning of race-degeneracy; and if better influences do not intervene to check or neutralise the morbid tendency, his children will exhibit a further degree of degeneracy, and be actual morbid varieties." No doubt many men will dispute Dr. Maudsley's argument, and strongly object to his conclusions, and will perhaps fling such hard words as "Darwinism" and "materialism" at him; but we think no one can begin the perusal of his eloquent address without perusing it to the end, or without being convinced more strongly than ever of the paramount and urgent necessity of our grappling sternly with all the evils that tend to produce the physical and mental degradation of man.

Dr. Wilks, in his most able and thoughtful Address in Medicine, touches on this same subject. "I believe," he says, "a much larger share of the conduct of mankind should come under the cognisance of the medical man. If it be his duty to have regard to man's bodily frame, and not merely to be (as Carlyle says) a body-cobbler, his function is very large, and he immediately enters into the domain taken possession of by the social philosopher, parson, and philanthropist. It is simply our excessive modesty which has allowed our place to be pre-occupied; for when we speak of '*mens sana in corpore sano*,' we know that the two are essentially associated. Vice and moral evil are so closely connected with defective organisation, that I believe they can never be eradicated whilst the former is untouched. It were amusing, if not at the same time painful, to see a poor human wretch sharing his life between the lunatic asylum and the gaol. The surgeon and the clergyman alternately try their hand upon him; but the material is too bad, and the man remains incorrigible. If in any way it ever becomes our more direct duty to study and endeavour to improve the physical condition of our race, we have indeed a grand and noble function to fulfil; for it will be attempting nothing less than to raise our fellow-creatures in the scale of humanity, with all that is noble and good contained within it." We cannot pretend to give, in such a notice as we are now writing, anything like a full idea of the whole scope of Dr. Wilks's address, or of the value of it, but we hope that the few words we can give to it, and the short extract we have given, may help—if any help be needed—to direct attention to it. It is an eminently thoughtful and suggestive production, dealing with subjects that puzzle sometimes the least—often the most—thoughtful amongst us; and, as Dr. Wilks observed of his thoughts on the objects and aims of the medical man, "nearly every point is open to controversy, and will allow of something being said on the other side." We are tempted before leaving his address to make one more extract. In speaking of our want of "more facts and more truth," and our too great eagerness to group facts together and build theories on them, he remarks—"So difficult does it seem to keep the great dictum of Bacon before us, and regard ourselves as the interpreters of nature, and not invent false theories to ourselves, which are only 'the children of an idle brain.' I believe Ruskin is not far wrong when he says, 'The more I think of it the more I find this conclusion impressed upon me—that the greatest thing a human soul ever does in this world is to see something and tell what it saw in a plain way. Hundreds of people can talk for one who can think, but thousands can think for one who can see.'"

In the Section of Public Medicine, the Rev. Dr. Haughton gave a capital opening address—eloquent and witty, with the racy eloquence and wit of our Irish brethren, and full of keen observation and genius, it must have been welcomed and appreciated as is a draught of true champagne in the middle of a solid repast. He took for his texts "the duty of the medical profession and the public in regard to epidemics, and the equally important question as to the mode of taking evidence in the courts of law." In connexion with the first, he clearly made out a real and very serious case of injustice to Ireland in the niggardly grant for vaccination. "In the estimates for the present year, £10,050 was voted for the National Vaccination Institution of England, in addition to which nearly as much more has been paid out of the public funds in payment for the services rendered by medical men in vaccination. Thus nearly £20,000 has been properly spent in providing the people of England with gratuitous vaccination. In Ireland only £400 per year is expended on the same object." The simple facts are nearly as eloquent as Dr. Haughton. In speaking on his second subject, the rev. doctor gives a splendid story of how, in a lunacy case, he maliciously led an eminent barrister of great bullying powers to try to utterly demolish a medical witness with—"Now, sir, mind how you answer: on your oath, sir, is not *crepitus redux* the most fearful form of insanity?"

The members of the Association have good reason to be grateful for the addresses provided for them at Birmingham.

TRIAL ON THE VALIDITY OF A LIFE POLICY.

At Bristol, on August 13, was tried the case of Wigens *v.* The Gresham Life Assurance Society. The plaintiff sued as assignee of a policy on the life of one J. B. Bowle, deceased, for the sum of £1200. The policy was dated August, 1869, and its assignment and the death of the deceased in November, 1871, being proved, the case of the defendants was opened. The defence pleaded that the declaration signed by the deceased as to the state of his health contained false and fraudulent statements, and omitted certain facts which ought to have been stated. It appeared that the deceased found it necessary, in consequence of certain calls on shares, to insure his life in order to raise money. He applied to the Gresham Society, and amongst the question put to him were—whether he had good health, whether he was sober and temperate, and whether he had an habitual cough. All these questions were answered in the most favourable manner. The referees were Mr. Bailes, a person intimately acquainted with the person proposing insurance, and Mr. Phelps, his usual medical attendant, who, however, was not applied to by the Company, who granted him a policy for £1200 after he had been examined by Mr. Burleigh, a surgeon on the part of the Company, who certified that the person he examined was a healthy, active man, free from all evidence of disease. In court an examination paper was produced, signed "B. Bowle," which Mr. Burleigh deposed was signed in his presence by the person he had examined. The case for the defendants was, that the deceased at that time was suffering from a severe cough, and had acquired intemperate habits; and that the answers he had given had been entirely untrue in almost every particular. According to the plaintiff, the deceased died from a severe cold, caught a short time before his death, but, according to the defendants, of consumption of long standing, accelerated by intemperance,

and the evidence was directed to show the state of health of the deceased at the time of the granting of the policy and thence to the time of his death. The widow of the deceased gave evidence for the defendants. "Troubles," she said, "in 1866, had driven him to drink, and from that time to his death he drank to excess. His cough was very bad in the autumn and winter of 1869. The signature to the examination paper was in her husband's handwriting." Several witnesses deposed to the fact of the deceased having had a very bad intermittent cough, and that he was of intemperate habits. The following memorandum, contained in a bible, in the handwriting of the deceased, was produced: "Memorandum—that I propose, from this day and date henceforth, to avoid all intoxicating drinks as herebefore used as common beverages. By God's help I intend to follow out that which I proposed on the 7th of December, 1868." Some conversations with the deceased were referred to, as to the policy and how he passed the medical examination, but they did not appear to have much influence on the issue. It was, however, deposed that the deceased at one time went to a sanatorium at Bath on account of his habit of drinking. The rebutting evidence for the plaintiff showed that the deceased in 1869 was proposed as a member of a lodge of Odd Fellows; that the medical officer of the lodge had examined him, and gave a certificate of good health. On the face of this he was admitted a member of the lodge, and remained so for a year. Mr. Davis, the surgeon to the lodge, admitted, on cross-examination, that he did not know the deceased, and all that he could say was that a person giving the name of Bowle had been given a certificate. He said, further, that the examination was not so strict as that for an insurance office. Other witnesses were called, who deposed to the health and temperance of the man—that his health in 1869 was good, and that his cough came on shortly before his death. Mr. Phelps was not called on either side. The deceased was insured twice in the Economic Life Assurance Society—once in February, 1871, and again in September of the same year, which was the year in which he died. Proceedings were taken in Chancery in respect of these policies by the Economic Society, and alleged discrepancies between the evidence of the witnesses for the defence and their affidavits in Chancery were relied on for the plaintiff. The judge summed up the case minutely, and left it to the jury to say whether the deceased was sober and temperate in June, 1869, whether he had been so previously, whether he had an habitual cough at that time, and whether he was then in good health. If the evidence for the defence had satisfied them that the deceased had made false statements in either of these particulars, there must be a verdict for the defendants; but if otherwise, then for the plaintiff.

The jury immediately returned a verdict for the defendants.

We have mentioned that Mr. Phelps, the medical attendant of the deceased, was not applied to by the Gresham Society for information, and was not called as a witness by it on the trial. The reason is sufficiently clear, and is deserving of especial mention. The Gresham Society all but ignores the report of the intended assurer's medical attendant, and refuses to pay him a guinea for the really valuable information he could afford it. We have always declared this to be a "penny wise and pound foolish" policy, and we are convinced in the long run the Gresham will find out the truth of this maxim. In this case the Society has obtained a verdict in its favour; but how many cases are there in which there are not as sufficient grounds for an action, in which comparatively worthless lives have been insured in the absence of information from the usual medical attendant, which information would have put the Society upon its guard and saved it from loss! It is difficult to believe that the life of Mr. Bowle would have been assured had the Society applied for and received information from Mr. Phelps. At all events, it was the duty of the Society to have made such application, and to have paid for it. There can be no doubt that the confidence of the public is more with those offices which obtain all the information in their power than with those who, with a niggardly economy, refuse to pay "a guinea" for information the most valuable they can obtain from anywhere or anybody. We are not sanguine of converting the Gresham to this way of thinking; but we can assure it that a verdict like that obtained in the above case may be "a victory, but not a gain."

ACTION FOR MALPRAXIS.

BALMFORTH *v.* BUCKLEY AND FLETCHER.

Actions for malpraxis, however the verdict may be given, cannot fail to be gravely injurious to the Profession. It is not that we are infallible, or supposed to be so; but the scandal and the injury inflicted upon us is in the conflict of Medical testimony adduced, which, we do not hesitate to say, is discreditable to us as a profession. Not that a medical practitioner who has shown gross ignorance or gross negligence has any right to complain if that ignorance or negligence be exposed, and he suffers in consequence. But there are certain cases in which the balance of testimony is so even that it is difficult to arrive at a just conclusion, and it is unjust and cruel not to give the supposed offender the benefit of any doubt which may exist on the point. A case was tried at Manchester last week which opens a wide field for discussion, involving as it does not only the reputation of two surgeons of position, but as showing a new phase in responsibility, which is somewhat startling. The actions were brought by a commercial traveller of the name of Balmforth against Mr. Buckley and Dr. Ogden Fletcher, surgeons, of Chorlton and Manchester, "for a failure to use proper skill and care as surgeons in their treatment of an injury to the hip-joint, for which the plaintiff put himself under the care of Mr. Buckley, and called Dr. Fletcher into consultation." The plaintiff received the injury in attempting to jump into a guard's van when in motion. Mr. Buckley was called in the same evening. The plaintiff was put under chloroform, and after some manipulation Mr. Buckley informed him that he thought he had suffered from partial dislocation of the hip-joint, but that he had put it all right for him. The plaintiff was kept in bed for several weeks, and was visited constantly by the defendant, who declared the leg was in its proper position, and of the proper length, and at first even a trifle longer than the other. The measurement consisted in putting the tape on the trochanter, and then passing it down the leg to the ankle. The plaintiff stated that within a day or two he called Mr. Buckley's attention to the fact that the foot on the injured side was inverted, and also that the position of the knee led him to suppose that the limb was shorter than the other; and he also pointed out to him what seemed a second projection of bone on the haunch, which he did not feel on the uninjured side. Things remained in this position for nearly five weeks, at the end of which time Dr. Fletcher was called in consultation. Dr. Fletcher, it appeared, had seen the plaintiff a month before, but simply to examine him for the Accidental Assurance Company, to assure himself of the fact of the injury. The plaintiff was in great pain; but Dr. Fletcher measured the legs, and found them of equal length. On the last occasion of seeing him, when called in consultation, he made another examination, and declared all was right, but that the joint was getting useless from too much rest. He therefore ordered the plaintiff to get about as much as possible. This he did, having been confined to his bed for seven, and to the house for eight weeks. About a week after, going out, he was advised to consult Mr. Beever, Surgeon to the Royal Infirmary of Manchester. Mr. Beever, who has since died, reported that the head of the thigh-bone was clearly out of the acetabulum, was working on the dorsum of the ilium, where it was forming a false joint, and that it was then too late to attempt reduction. This opinion of Mr. Beever's was confirmed

by Messrs. Smith, Southam, Lund, and Heath—all Surgeons to the Royal Infirmary—with the exception that the head of the femur was now resting lower down on the ilium and at the edge of the ischiatic notch. These witnesses considered that the first measures taken by the defendant were correct, but that they ought to have been more vigorously persisted in. They said that the dislocation was an ordinary one, and denied, in cross-examination, that there were any symptoms to support the theory relied upon for the defence—that the injury consisted in fracture of the rim of the acetabulum, so that the head of the thigh-bone was drawn by muscular action, and pushed by pressure on the leg in walking. Assuming, however, that the defendants' theory and diagnosis were correct, the witnesses thought the treatment was not proper surgery, since the head of the bone ought to have been drawn into the acetabulum and kept there by straight splints. They also said that the mode of measurement adopted by Mr. Buckley was erroneous, as the measurement ought to have been a perpendicular one from the acetabulum. Attempts at reducing the dislocation would now be attended with great danger, but it might have been safely attempted when Dr. Fletcher was called in consultation. A large body of medical evidence—headed by that of the two defendants themselves, and confirmed by the testimony of Mr. Maclagan, of Mexborough, who first saw the plaintiff after the accident, Mr. C. G. Wheelhouse, Mr. W. Favell, and Messrs. Broadbent, Hardie, Windsor, and Bradley, of Manchester—was called for the defence, to establish that the injury was of the more complicated character indicated, and that under those circumstances the treatment was proper and all that could have been desired. The defendants stated that at first there was no inversion of the foot, and both limbs were of equal length; and the remainder of the witnesses stated that, upon that assumption, and adding to it their own inability at the present time to feel the back or upper rim of the acetabulum, the dislocation was not, in their opinion, simple and original, but complicated, and supervening upon fracture, and that the treatment pursued by the defendants was in all respects proper and sufficient. After a very long trial, his Lordship carefully summed up the cases, pointing out that, in order to establish his right to recover in an action of this description, it was not sufficient for the plaintiff to produce evidence equal only in value to that on the other side, and in which the jury could not by their own common sense detect something better than in the opposing evidence, for the burden lies on the plaintiff, and "who shall decide where doctors disagree?" He said the jury ought not to find against Dr. Fletcher unless there was proof of dislocation in the first instance, or before January 16, when he was first called in, and that he then failed to find it out. If the jury were of opinion that it occurred at first, there must be a verdict against Mr. Buckley inevitably; and even if they thought it was subsequent, but that the defendants might have discovered it, and by reasonable skill and care have given the plaintiff a chance of reduction, which he nevertheless lost, then the plaintiff was entitled to damages, but not to so serious an amount as if the dislocation had occurred in the first instance. The jury, after a long deliberation, and at eight o'clock in the evening, returned into court with a verdict for the plaintiff—damages, 40s. in each action. His Lordship, on the application of the defendants' council, stayed execution in both cases, stating, however, that his acceding to the application was only due to the grave importance of the cases, and must not be taken as in any way significant of disagreement on his part from the verdict. The fact was that the smallness of the damages indicated, he had no doubt, the jury's opinion that the dislocation supervened afterwards, and that the chance of recovering whatever the plaintiff lost was so small as not to be of greater value, but still that there had been a slip on the part of the doctors.

We have given the case somewhat in detail, so that our readers can judge of the evidence for themselves. Now, with the conflict of testimony before him, we cannot see upon what grounds the judge ruled that under any circumstances a verdict must be found against Mr. Buckley. The treatment adopted was either proper according to the witnesses for the defence, or improper according to those for the prosecution. Surely the defendants were entitled to the benefit of the doubt! The judge took upon himself to decide when "doctors disagreed," but it is questionable whether his decision was a wise or a just one. This case, we believe, is the first in which the responsibility of a consultant practitioner has been decided upon so completely. It is due to the witnesses for the prosecution to state that they strongly advised that the case should be decided by arbitration, but this was overruled by the defendants' attorney.

THE WEEK.

TOPICS OF THE DAY.

On the day before the prorogation of Parliament the conduct of Mr. Ayrton towards Dr. Hooker was brought before the House of Commons by Mr. Fawcett. The popular idea used to be that men of science were down-trodden and ignored by insolent aristocrats. But there seems no insolence equal to that of a democrat in office.

We have to regret the decease of Sir Andrew Smith, who was made Director-General of the Army Medical Department in 1851, and continued in office till 1858, during the stormy period of the Crimean war. His researches into the zoology of South Africa and his services in helping to found the colony of Natal are not forgotten at the Cape.

Amongst items of news, we notice with satisfaction the fact that the medical students of Belfast have contributed handsomely to the Royal Medical Benevolent Fund of Ireland. It would be well if medical students elsewhere followed the example. They never can begin too soon to learn that Medicine is a poor profession for the majority, and that great frugality and self-restraint are required from the man who would provide for his own family.

The *Times*, which devoted a quarter of a column to the British Medical Association, has not yet noticed the proceedings of the British Pharmaceutical Conference at Brighton, which was fully reported in the able *Brighton Daily News*. The President, Mr. Brady, in his Annual Address, spoke of—

"The carefully devised and thoroughly practical law which we now enjoy. In a survey of the State relations of pharmacy in the various Continental countries, I know not where we should look for a broader or more satisfactory basis of legislation, or one so suited to the genius of our institutions, than exists at home. The protection of the public from errors arising out of incapacity and ignorance is, prospectively speaking, as nearly complete as legal enactments can insure. The very basis of the law is *improved education*."

He also spoke of—

"The practical unity of the examining board, and the practical uniformity of the examinations for diplomas in all cases in England and Scotland. Happily, we have not been beset with the complexities that have attended all attempts for the better regulation of the issue of licences in Medicine. . . . Pharmacy is now regulated by a law affording sufficient protection to the public by the compulsory education it necessitates, giving larger privileges to those practically engaged in it—free, on the one hand, from the looseness of voluntary provisions, and on the other from the excessive interference and inspection in vogue in many Continental States; hence that we are in a condition in which we may turn our attention to advancement *from within*."

From this serene altitude of self-complacency he can afford to look down upon the poor drudge Medicine, whose privileges and examinations are hampered with conflicting regulations and the vested rights of ancient corporations. In pity to us, he would lighten our toils, and relieve us of the necessity of

Materia Medica, which as a subject of medical study, he says, was long ago condemned by Professor Huxley—

"The extraordinary development of some all-important divisions of medical science, notably of physiology and minute human anatomy, renders it impossible to cram into the few brief years of collegiate training a satisfactory amount of knowledge in the whole of the long list of subjects which it has been the custom to embrace in the curriculum of Medical study. It is no part of my business to discuss the relations of inorganic chemistry, Materia Medica, and botany to the scheme of medical education. . . . In point of fact, 'Materia Medica' is a mere *nom de convenance* for a heterogeneous mass of facts, referable mainly to biological (chiefly botanical) and chemical science. . . . But whatever the manner of treatment, the subjects involved must be taught—if not to students in Medicine and Surgery, then the more certainly to students in pharmacy; and thus a double responsibility rests upon us in respect to these important sections of medical knowledge. . . . . Prospectively, the two avocations must be mere and more dependent on each other—the physician looking to the pharmaceutist not merely as the compounder of his prescriptions, but as to one on whom he can rely for assistance in scientific subjects closely allied to those which are his own more immediate concern."

To prepare the pharmaceutist for a higher position, the President demands a higher education, general and technical. He speaks of that "open-handed liberality that will induce students to consider whether they cannot give up another session or two, before commencing business, to that higher sort of education which is not immediately remunerative. The effect of half-a-dozen or a dozen men so trained, sent out annually from Bloomsbury-square, would be to make a British school of pharmacy, the like of which has never existed." We could have wished from the President a distinct condemnation of the counter practice—the treatment of diseases of which they know nothing—by so many pharmaceutists of good position; but as regards the public benefit of elevating a large body of men, to undertake their share in the labour of life in a scientific spirit, we cordially agree with the President. The resources which modern scientific pharmacy has placed at the command of the physician are invaluable; and we should be sorry to see the establishments of Morson, Bullcock, and Savory and Moore swamped by the competitions of Civil Service associations.

Our readers will have noticed in the newspapers the report of an action brought by Mr. Wanklyn against Mr. John Gamgee for chemical analyses performed chiefly in connexion with the *Milk Journal*. The case illustrates the expediency of a clear businesslike understanding in every work undertaken conjointly with another person, and had better have been submitted to arbitration than brought before an "eminently rural body," as the jury are designated by the *Times* reporter.

The *Times* correspondent accentuates the accounts which we have quoted from German papers of the dreadful condition of the drainage of Berlin. Open sewers, in which a horrible hell-broth seethes, and boils, and bubbles in the midst of a crowded population, go far to explain the 40 per 1000 mortality with which Berlin is discredited.

"The deaths from small-pox in London," says the Registrar-General, "which in the two previous weeks had been 33 and 28, declined to 15 last week, of which 6 were recorded in the special small-pox hospitals. So few deaths from small-pox have not been returned in London in any week since October, 1870. The cold weather which set in on the 30th ult. continued throughout last week, and the mean temperature of the week at the Royal Observatory, Greenwich, was 59·2°, and 3° below the average for the corresponding period in fifty years. More than an inch and a quarter of rain fell in London, half of which was measured on Wednesday. The low temperature and abundant rain have checked the rapid increase in the fatality from diarrhœa which has been noted in recent weeks; the deaths referred to this cause, which in the eight previous weeks had risen from 16 to 484, declined last week to 441, which, however, exceeded by 170 the corrected average number in the corresponding week of the last ten years. No less than 421 of these fatal diarrhœa cases were of children under 5 years of age, including 380 of infants under 1 year. To cholera and choleraic diarrhœa 24 deaths were referred last week, against 19 and 33 in the two preceding weeks; of these 14 were infantile cases."

Mr. Rendle and Mr. R. C. Lucas, M.B., have been appointed Demonstrators of Anatomy at Guy's Hospital. Dr. Fred. Taylor has been elected to fill the vacancy made by the resignation of Dr. Pye-Smith, of the Medical Registrarship; and Mr. Goodhart, M.B., has been appointed Surgical Registrar, in place of Mr. Rendle, one of the new Demonstrators.

DEATH OF MR. F. C. SKEY, C.B., F.R.S.

At the moment of going to press we hear that the above estimable member of our profession died on the 15th inst. We purpose giving a memoir next week.

DR. CARPENTER'S BRIGHTON ADDRESS.

The meeting of the British Association for the Advancement of Science, on August 14, was inaugurated by an address from the President, Dr. W. B. Carpenter, F.R.S., which is worthy of his well-established reputation. He said that his predecessors in the chair had spoken of Nature in her relations to Man; he proposed to take up the subject of Man as the interpreter of Nature, and to "consider the mental processes by which are formed those fundamental conceptions of matter and force, of cause and effect, of law and order, which furnish the basis of all scientific reasoning." He then compared the conception of Nature presented by the poet and the painter—who are admitted to represent what passes in their own minds—with the "scientific" interpretation, which is assumed to represent her as she really is:—

"When, however, we carefully examine the foundation of that assurance, we find reason to distrust its security—for it can be shown to be no less true of the scientific conception of Nature than it is of the artistic or the poetic; that it is a representation framed by the mind itself out of the materials supplied by the impressions which external objects make upon the senses—so that, to each man of science, Nature is what he individually believes her to be. And that belief will rest on very different bases, and will have very unequal values, in different departments of science."

This will give the key-note of an address of which it would be unjust to give an analysis in haste. We must be content with quoting the spirit of the conclusion:—

"From our study of the mode in which we arrive at those conceptions of the orderly sequence observable in the phenomena of nature which we call 'laws,' we are led to the conclusion that they are human conceptions subject to human fallibility, and that they may or may not express the ideas of the Great Author of Nature. To set up these laws as self-acting, and as either excluding or rendering unnecessary the power which alone can give them effect, appears to me as arrogant as it is unphilosophical. To speak of any law as 'regulating' or 'governing' phenomena is only permissible on the assumption that the law is the expression of the *modus operandi* of a governing power."

CHOLERA.

From the want of correct information as regards cholera we have to infer that changes for the worse have not taken place anywhere, although it is not likely that the epidemic has reached its end. In Berlin no further outbreak has taken place; therefore we might consider the related cases of cholera as having no connexion with the universal epidemic, but being more of a local endemic nature, cholera and choleraic diarrhœa occurring there every year, owing their origin only to causes of a pure local character. This makes of course a great difference, in so far as cases of this kind are not so highly contagious.

WHAT IS CRIMINAL NEGLIGENCE?

At the assizes at Monmouth, on the 12th inst., a case was tried before Mr. Justice Grove which involved the question of criminal negligence in a case of obstetricy. E. J. Humphage, an unqualified assistant of Dr. Lewis, of Newport, was put upon his trial for the manslaughter of Sarah Morgan. The evidence went to show that the prisoner was engaged to attend the deceased in her confinement, having attended her on similar occasions previously. The labour was protracted, in consequence of a "cross-birth." Some efforts were made by the prisoner to "turn the child," but without success, and the woman eventually sank "from an internal wound consequent upon her protracted labour." The prisoner, it appears, was most attentive to the woman during the night, and left her under the impression that further advice would be sought. In support of the prosecution a medical gentleman, Mr. Alfred Kidger, considered that the attempt to turn the child was fit and proper under the circumstances, but he considered the prisoner ought to have called in at an early hour further medical assistance, such assistance being at hand. The defence, as stated, was the belief of the prisoner that when he left other medical assistance would be obtained. His Lordship explained to the jury the amount of negligence which was necessary in order to render a person criminally liable, and left it to them to say whether the prisoner's omission to call in further medical assistance at an earlier stage of the case, taking into consideration the absence of proper medical qualification on his part, was or was not such negligence. The jury returned a verdict of "Not guilty," with which the learned judge expressed his concurrence.

HARVEY TERCENTENARY MEMORIAL.

At a meeting of the London General Committee lately held at the Royal College of Physicians, Dr. Bence Jones, F.R.S., in the chair, it was resolved to invite the Earl of Derby to become the chairman of the Committee. His Lordship has since announced his willingness to accept the post. An Executive Committee was appointed, consisting of Dr. Burrows, F.R.S.; Sir W. Gull, Bart., F.R.S.; Dr. Sibson, F.R.S.; Dr. W. Munk; Mr. H. Hancock; Sir James Paget, F.R.S.; Dr. Quain, F.R.S.; Mr. John Simon, F.R.S.; the Rev. W. F. Erskine Knollys; Sir Francis Hicks; Mr. T. Turner; Mr. Foster White; Mr. N. Montefiore; and Mr. Drummond. Mr. G. Eastes, 5, Albion-place, Hyde-park-square, London, W., was appointed honorary secretary to the London General Committee. The thanks of the meeting were voted to the President and Fellows of the Royal College of Physicians for the use of the room, and to Dr. Bence Jones for his conduct in the chair.

CONVICTION UNDER THE MEDICAL ACT.

However defective the Medical Act may be, there are some cases which are to be reached by its agency. Where the proof is sufficient, according to the words of the statute, a conviction may be, and is, obtained. The following case occurred last week:—Mr. D. W. Byers, of 125, St. James's-road, Holloway, was on Friday, the 10th inst., fined by Mr. Barker, the police magistrate, in the mitigated penalty of £5, and £3 3s. costs, "for unlawfully, wilfully, and falsely pretending to be, and using the title of, a surgeon, implying that he was registered under the Medical Act, 1858." The summons was taken out against him by Dr. Slater, of Thornhill-crescent.

VISIT OF GENERAL SHERMAN TO OXFORD.

On Tuesday last General Sherman, who is now on his way back to America, paid a visit to Oxford, where he examined the various antiquities with much interest. The General was the guest of Dr. Mayo, of New College, who entered the United States' service in the civil war, and served with him at the siege of Vicksburg. He was shown the museum and its valuable contents by Professor Rolleston.

CAUTION TO MEDICAL PRACTITIONERS.

Last week, at Stratford-on-Avon, a medical man was committed to the sessions, with heavy bail, for signing two death certificates without having previously attended the patients in their lifetime. It appears he was called in to the cases just after their death, and, being the regular medical attendant, certified, as it appears, without any idea of committing a criminal offence. The magistrates have dealt with the case with unexpected severity.

THE BEST-KEPT ROAD IN THE AFRICAN SETTLEMENTS.

Speaking of St. Paul de Loanda, on the West Coast of Africa, in a letter, a young officer says—"It is supposed to be the healthy season there now; perhaps that is the reason why only two out of three people living in ——'s house were down with fever. I asked one of them if there were any nice walks in the vicinity, and he told me that the only good road was the one leading to the cemetery, and that they were obliged to keep that in good repair; however, I did not go to see it."

FROM ABROAD.—PATHOLOGICAL ANATOMY OF DIPHTHERITIS—ETIOLOGY OF MENINGITIS TUBERCULOSA.

In a paper recently read at the Academy of Sciences (*Gaz. Hebd.*, August 2), on the "Pathology of Gangrenous or Diphtheritic Angina and Croup," M.M. Bouchut and Labadie-Lagrave came to the following conclusions:—In these diseases there are two kinds of anatomical lesions—the one primary, due to the ulceration of the mucous membrane or the presence of false membranes; and the other secondary, cardiac or embolic. The former are well known, but the secondary, cardiac, and pulmonary embolic lesions have not yet been described, and deserve to be known, explaining as they do the occurrence of death through an entirely special lesion of the lungs and other organs. In the heart there is almost always (fourteen times out of fifteen) an *endocardite végétante* with fibrinous deposits which are the origin of frequent emboli. The lungs frequently (forty-five times out of 180) contain knots of pulmonary apoplexy or bloody infarcti, due to arterial emboli, such infarcti being sometimes colourless at the centre, and surrounded by a zone of hyperæmic pulmonary tissue. Sometimes there are knots of purulent infiltration, or even true metastatic abscesses. The lungs also frequently present at their surface, between the lobules, small venous thrombi. These bloody infarcti are sometimes found under the pericardium among the altered muscular fibres of the heart, and in the subcutaneous cellular tissue, where small metastatic abscesses may be formed. Venous thrombi exist also in the pia mater, the brain, the liver, and in different parts of the body. With these lesions there always coexists a more or less pronounced leucocytosis, which in a bad case is very considerable.

Dr. Bierbaum terminates an elaborate paper which he has recently published in the *Journal für Kinderkrankheiten* (1871, No. 12), on the "Etiology of Meningitis Tuberculosa," with the following conclusions:—

"1. There is an hereditary predisposition to this. It is seldom confined to one case in the same family, several of the children, as a general rule, becoming subjects of it. The disposition may, however, be also acquired. 2. Such predisposition consists in the scrofulo-tubercular diathesis. There is no essential difference whether this diathesis makes itself known by altogether indubitable symptoms or only shows itself by constitutional debility, which is nearly related to scrofulosis or tuberculosis, and leads to this disease. 3. It is nowise a necessary condition that the father or mother of the child should at an earlier period have been the subject of the disease. 4. The direct transmission of the scrofulo-tubercular diathesis from the parents to the children is of far

greater etiological signification than the occurrence of the predisposition among collaterals. 5. Meningitis tuberculosa is peculiarly a disease of infancy, appearing far more frequently during the first than the second dentition period. 6. The sex exerts no especial influence on its frequency. 7. Whether the warm or cold season of the year most favours its occurrence is not decisively settled. 8. Climatic, social, and anti-hygienic conditions are only so far operative as they influence the production of the scrofulo-tubercular diathesis. 9. This cerebral affection does not assume an epidemic character. 10. The exanthemata, and especially measles, are exciting causes of great importance. 11. Inflammatory affections of the respiratory organs more seldom give rise to this disease than pertussis. 12. In the abdomen lies a fertile source of many exciting conditions."

MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The fortieth meeting of the British Medical Association—the second held in Birmingham—is past and gone, but doubtless its memory will remain, for it has been altogether highly successful. Not perhaps that the excellence of the papers read has been greater than in any former years, though the addresses delivered have been singularly good. One thing marks pre-eminently the Birmingham meeting, and it is neither of these, but rather the wonderful hospitality of the local practitioners, which will remain impressed on the memories of those who were present.

Last week we briefly alluded to the President's Address and to the Address in Medicine; elsewhere we comment on these and on those that came after. There was an admirable Address in Surgery by Mr. O. Pemberton, and one equally admirable, as President of the Section of Surgery, by Sir William Fergusson. Three other sections were inaugurated by formal addresses, chief among which was that introductory to the Section of Public Medicine, by Professor Haughton: powerful and racy, its delivery was received by shouts of applause, and, were it decorous to say so, roars of laughter. Equally powerful, though in a totally different style, was that by Dr. Maudsley, as President of the Psychological Section. On another day and hour Dr. Evory Kennedy also delivered a formal address; but the practical President of the Medical Section contented himself with a few observations preliminary to the actual work of the section under his presidency. These various addresses, which we publish for the most part in abstract—for our space would not avail for all—are elsewhere commented on; but whatever may be said or thought of the opinions embodied in them, there can be but one opinion as to the ability and skill of their distinguished authors. Whilst on this subject, however, we cannot forbear from pointing out certain blemishes in the generally excellent management of the business of the Association meeting. The Addresses in Medicine and Surgery were delivered on successive days; but, with the exception of Dr. Kennedy's, all the others were delivered on Wednesday afternoon. Now, there were many who would have liked to hear Sir William Fergusson as well as Professor Haughton; and many would have liked to hear Dr. Maudsley as well as some of the papers and discussions in the Medical Section; but, till we discover the mode of being in two places at the same moment, we shall fail to hear half a dozen speeches in half a dozen different places at the same time; so that next year these arrangements had better be altered. It is hardly worth while, as Dr. Bell Fletcher doubtless thought, to have an Address in Medicine delivered before the whole Association, and to have another an hour or two after delivered before the Section of Medicine; and so with regard to Surgery. It would be far better to make the President of these sections the public orators as well as heads of sections; and so of the other sections into which the work of the Association is divided.

As regards the working of the various sections, it was somewhat interesting to note that the most active seemed to be those on Public Health and those on Midwifery; Medicine languished, and Psychology early burnt itself out. Surgery, too, flourished for a while, but either perished of inanition or closed early, some of the papers being taken as read, for the President returned to town before the formal close of the Association.

The arrangements of the Association were on the whole remarkably perfect. When the stranger arrived, he visited the reception-room at King Edward's School, entered his name and address in the book kept for the purpose, and was thereupon presented with a short account of what was likely to be transacted in the Association, and a list of the most prominent places of interest in Birmingham open to members. The ticket of membership was included in the *brochure*, as well as a map of central Birmingham, so that the volume became in a true sense a *vade mecum* during the time of meeting. Day by day there was published a journal—the daily journal of the meeting—and in it was included the list of visitors who had already arrived, with their addresses, the work arranged for that day, and the work of the foregoing, so that one might see at a glance what had been done and what remained to be done.

One of the most interesting features of the meeting was the Annual Museum. This was so arranged as to be close to the reception-room, and was indeed used as the place of chief resort by the members during their visit. This certainly was the most convenient arrangement, and made the museum useful in a way and to a degree it had never been before. Moreover, it was rich in curiosities, and would amply have rewarded a day's study by itself. There were surgical instruments of all kinds, from the best London makers and from such provincial competitors as Salt, of Birmingham; Ferris, of Bristol; and Young, of Edinburgh. This department was exceedingly well worth inspection, and we are happy to think that the exhibitors earned something by their exhibitions.

Aural and ophthalmic surgery were well represented. Many specimens of apparatus and many drawings were exhibited. Those that struck us most were a series of valuable drawings illustrative of diseases of the ear, exhibited by Mr. Hinton. Instruments, specimens, and drawings relating to ophthalmic surgery were there in abundance.

There was a special department for obstetrical instruments, drawings, etc. In it Dr. Barnes's fine illustrations of gynæcology were most prominent; and doubtless that distinguished physician's presence at the Obstetrical Section did much to keep up the interest in the discussions which took place on the various papers.

Some exceedingly interesting preparations of remedies were exhibited, especially by Southall, of Birmingham, and Ferris, of Bristol.

Some of these remedies are of great value; and this was the first time we have had an opportunity of inspecting such very fine specimens of them. There was also a new French preparation, the value of which has to be ascertained—viz., the wine and syrup of the lacto-phosphate of lime, introduced by Dr. Dusart. Dr. Lauder Lindsay exhibited some admirable specimens of reindeer moss, and a spirit made from it. The quality of this last has yet, however, to be fully appreciated. Messrs. Young and Postans, of Baker-street, Portman-square, showed some fine specimens of granulated remedies; and Messrs. Calvert, various preparations of carbolic acid. To describe the various drawings and pathological specimens would simply be impossible; many illustrated forms of disease familiar to us, but some were unique, both as representating Medicine and Surgery. Such a collection, though brought together from all parts of the country, was of course mainly derived from local sources, and reflects the highest credit on the pains and industry of the Birmingham faculty.

There were also some microscopes exhibited—chiefly speci-

mens of Pillischer's St. Thomas's microscope, which we do not particularly admire.

One notable incident in the meeting was a paper read by Mr. Acton as to the treatment of advanced constitutional syphilis. This paper was mainly intended to illustrate the views of Ricord, as he holds them at the present day, and to elicit from him some observations, he being present at the meeting. To this end the principal meeting-room was for the time being devoted to the Surgical Section, and at an early period of the Thursday meeting the paper was read. Unfortunately it was very indistinctly heard, so that when Ricord rose and announced that his views were in accordance with those just enunciated, there was a general feeling of regret at not knowing more clearly what these were. M. Ricord, who looks wonderfully young for his age, addressed the meeting in remarkably good English, and very briefly recapitulated the main points it had been his life's work to demonstrate: chiefly the distinction between an infecting and a non-infecting sore. He was listened to with rapt attention, and loudly applauded. Next rose M. Demarquay, who, unable to speak in English, addressed the meeting in sonorous French—many, doubtless, fancying that he was continuing the debate on syphilis, after the English fashion; but, *more Gallico*, he mounted his own hobby and held forth on the beauties of pneumatic aspiration. M. Labbé, of the Pitié, we understand, also addressed the section on the same subject.

One of the most prominent visitors of the Association was Professor Gross, of Philadelphia, a thin, fine-looking man with grey hair, but not looking nearly so old as those who have studied his book on "Surgery" for any one of these years, we know not how many back, would expect. He spoke freely, and without any of the twang common to many American speakers. Besides these there were a good many foreign visitors—among them a Pole, whose name we found no one bold enough to attempt.

The work of the Association proceeded briskly all Wednesday and Thursday, but the public dinner on Thursday evening seemed to be a kind of signal for the play part of the meeting to begin. On Friday morning many of the members devoted themselves to the interesting manufactures of the town; many, too, who had not previously visited the hospitals did so. One thing we noticed with regret: in the local papers there appeared a testimonial, signed by two eminent surgeons, as to the admirable condition of the General Hospital. Surely an institution of such a kind, and of such a standing, can afford to stand on its own legs without testimonials from anyone! Such testimonials, as a rule, are suggestive of a screw loose, rather than otherwise. The Children's Hospital, too, which is comparatively a new institution, and managed in splendid style, was visited by many. As to the Women's Hospital, which has recently acquired a female resident medical officer, we did not hear much.

The excursions, especially that to Dudley, on Friday, were fully taken advantage of, perhaps too much so; for many, doubtless making up their minds at the last moment, seeing the weather was good, came down on the local branch, who had invited all visitors to dinner, in astounding numbers. We should hardly care to give the proportions of those provided for and those who went—at all events, none went hungry away.

And here we must end as we began, commenting on the princely hospitality shown on the occasion. Birmingham, Dudley, Warwick, Leamington, Stratford-on-Avon, it was all the same—a hearty welcome and a hearty lunch. During the three days of the sitting of the Association there was a daily luncheon free to the members; not a mere bread-and-cheese affair, but fish, flesh, and fowl, with wine *ad libitum*. On the occasion of the President's *soirée* in the Town-hall the refreshments were on the most sumptuous scale, whilst private hospitality was unbounded. No one can come away without thinking of all this, and in the mouths of not a few we heard what we were fain to re-echo—"Is not this too much?" More than 500 medical gentlemen attended the Association, and, though the local branch be a large, powerful, and rich one, we leave with a half-painful feeling that we have been too well treated. Anyhow, the gratitude of all visitors must remain due to the branch and its officials—to all concerned, in short, with the conduct of the meeting; but if we might venture, where all comparison is invidious, to speak of one more than another, we should say that these deserve especially well of all visitors—the President, Dr. Foster, and Mr. Bartleet.

REPORT ON THE

TEACHING OF PRACTICAL PHYSIOLOGY IN THE LONDON SCHOOLS.—III.

5. St. Bartholomew's Hospital.

At St. Bartholomew's Hospital the course of practical physiology is conducted by the Demonstrator "under the superintendence of the Lecturers on Physiology and Chemistry." It occupies nine months—*i.e.*, both the summer and winter sessions—and "embraces physiological anatomy or histology, physiological chemistry, and physiological physics." For the first three (or summer) months histology alone is taught. During the previous winter the students have heard descriptive lectures on the tissues in the class of systematic physiology; they are accordingly prepared to begin practical work at once, after a few preliminary remarks by the Demonstrator, Mr. Symons, before each lesson, their attention being at the same time directed to large and prominent cards on which are printed the leading characters of the subjects of examination.

There is, as yet, no special accommodation at St. Bartholomew's for the class of practical histology, which is accordingly held in an upper reading-room, temporarily provided with tables, etc., for the purpose. This room is large and well lighted at either end by ordinary windows, but in the centre by roof-lights, an arrangement which necessitates an awkward sloping of the microscopes on the tables underneath to obtain sufficient illumination. There is also of course in such a room a want of space and provision for preparing and storing reagents, material, preparations, etc.

The students, numbering on an average about seventy, meet once a week for an hour and a half, some twenty or more at once, the class being held three times a week. At first a few lessons are given on the vegetable tissues, to familiarise the workers with the manipulation of the instrument. The animal tissues are then gone through in order, beginning with the blood, the connective tissues, etc., always mounted by the student himself; thereafter the organs are similarly examined, and the art of cutting sections, staining, and permanent mounting acquired. The microscopes used are all English, by Beck or by Crouch, and fitted with two powers, a high and a low. From those students who do not bring their own microscopes with them a fee is charged for their use; the result of this rule is that two-thirds of their number are now in possession of instruments of their own, and we believe the £5 microscope of Pillischer is a great favourite with them.

In the first part of the following winter session histology is completed, the previous arrangements being continued. The students thereafter devote their attention to physiological chemistry for some two months, each man once a week for an hour and a half. This part of the course is conducted in the magnificent practical chemistry laboratory, of which St. Bartholomew's has just reason to be proud. The animal fluids are analysed, especially blood, milk, and urine.

The remaining part of the winter is occupied with experimental physiology—*i.e.*, with the experimental demonstration of living processes, as the action of the heart for example, etc. We understand that this part of the course is likely to be considerably remodelled next year. The fee for the course is £5 5s.; unlimited, £7 7s.

6. St. George's Hospital.

The means adopted in this medical school for teaching physiology practically are—in the first place, illustrative experiments in the systematic lectures on physiology delivered during the winter; secondly, a series of practical lessons on physiological chemistry by the Demonstrator of that subject; and thirdly, a course of instruction in microscopy by the

Demonstrator of Practical Histology. It is to the last of these means that the following remarks will chiefly apply:—

Practical histology is taught in winter by Dr. Cavafy. The students attend for from an hour to an hour and a half three times a week, each man receiving instruction for from an hour to an hour and a half a week. Here the pupils are trained by frequent practice to acquire a perfect familiarity with the microscope and with microscopic appearances, and at the same time to investigate for themselves the minute anatomy of the animal tissues and organs. Each day's work is prefaced by a rapid description by the Demonstrator of the particular subject under examination, the attention of the students being recalled to the description which they have already heard in the systematic lectures, and then especially directed to the distinctive characters on which they have to fix their eyes. The tissues and organs are gone through much in the same order as at the other schools already reported on; but we specially observed at St. George's the application of the more recent and improved methods of preparing and examining objects. Some of the other provisions for teaching histology are, however, less satisfactory. Thus, the accommodation is extremely deficient—there is not even an attempt at a room for the purpose, but in the museum at one end of the gallery a table is placed against the railing, leaving sufficient room for some nine seats, on which the pupils work. The light reaches the microscopes by falling over the students' shoulders from a roof-window behind them, so that the workers, to catch a ray, have to twist their bodies half round, and turn their microscopes into a most awkward position. Of course such an arrangement can be but provisional. Neither is there any sufficient space available for keeping reagents, preparations, instruments, etc., which ought of course to be constantly at the worker's hand in practical histology. We were therefore prepared and pleased to learn that there are proposals on foot either for building a new laboratory, or for converting into such a room in the neighbourhood of the school. The microscopes are few in number, and English, of a size somewhat incompatible with much useful work. And, what struck us as being not only unusual but quite peculiar, was that the number of objectives belonging to the class is insufficient to supply all the microscopes at once, so that some of these are virtually useless.

Instruction in practical physiological chemistry is given by Dr. S. W. Moore three times a week also, for an hour and a half. The subjects studied are those usually given for examination.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, August 12.

Carrier Pigeons—Unhealthy Dwellings.

The competition organised by the "Société Péristéraphile" of Courtrai, Belgium, to test the speed and utility of the pigeon-carriers took place yesterday, and notwithstanding the early hour, numbers of visitors were present to witness the interesting scene. After the ceremony of stamping the pigeons, 499 in number were liberated at 10.45 a.m., when all, except one which lagged behind, took their flight towards the north, and the following despatch was received from Courtrai on the same day:—"The first three were caught at twenty minutes to two, and 200 more at 2 p.m." What prodigious speed! The Parisians may well take a lively interest in these volatile messengers, as they had rendered them such service during the siege.

Your editorial note about the "Artisans' and Labourers' Dwellings Act and Unhealthy Houses," which appeared in the *Medical Times and Gazette* of the 3rd inst., reminds me of a very important measure which has recently been taken respecting unhealthy lodgings in certain quarters of Paris, which consists in the appointment of inspectors to examine not only the exteriors of the buildings, but to enter the lodgings, and report upon their sanitary condition; and, in case of any breach of hygiene, the parties concerned are to be severely punished. This is a step in the right direction; and in order to enable the poor to purify the air of their lodgings, they are provided gratuitously with disinfectant substances.

The *concours* for aggregation or sub-Professorship in Surgery and Midwifery has ended in the nomination of MM. Ferrier, Nicaise, Delens, and Benjamin Anger for the former, and M. Charpentier for the latter.

WEST INDIES.

Port of Spain, Trinidad, July 26.

Small-pox—Manners and Customs—A Good Opening.

I regret to have to say that small-pox, after having almost entirely ceased in this town, and in the island generally, has reappeared in its most malignant form. The cases at present are but few in number, and are confined to refugees from Venezuela, all persons of the Spanish and Indian half-blood. It is remarkable with what extreme severity small-pox attacks these people. The Health Officer of Shipping proposed several weeks since to put all vessels arriving from Venezuela, where it was known that the epidemic was raging, under a quarantine of observation. His motion, however, found no seconder, and therefore fell to the ground. Owing to the continual revolutions in Venezuela, numbers of persons are driven for refuge to Trinidad, which is only ten miles from the nearest point of the main. These people crowd into houses and neighbourhoods already densely populated; they live in a state of filth which is indescribable—("As dirty as a Spaniard" has passed into a proverb here)—and they eat all sorts of garbage. The consequence naturally is that they get hæmorrhagic and confluent small-pox in its worst forms.

There has been a good deal of diarrhœa and dysentery here lately. Hooping-cough is likewise epidemic. The mortality continues high, notwithstanding the cessation of the epidemic.

There will be a vacancy in the appointments of Health Officer of Shipping, Vacciuator-General, and Medical Attendant of the House of Refuge, caused by the resignation of Dr. Bakewell, who goes home by next packet on three months' leave previous to retirement from the service. The salary is £450 a year, with private practice allowed; there are also fees as Health Officer of Shipping, which bring about £50 a year. The appointment is in the gift of the Secretary of State for the Colonies.

The appointment of Medical Officer of Health for the Colony, which Dr. Bakewell resigned in January last, has been given to Dr. Crane, the Surgeon-General.

Trinidad offers a fair opening in a pecuniary point of view, and there is no doubt that any decent practitioner coming here might make a good living; but it has terrible drawbacks. First of all, the population is very mixed—French and English, coolies and Chinese, and, worst of all, niggers of every shade of colour, make a most heterogeneous society. Then the climate is pestilential. Port of Spain is built on a swamp; the country districts are many of them more unhealthy than the town; and there are no amusements of any kind except occasional balls. I should exempt the chief amusement, which is telling lies of their neighbours. A more prolific soil for scandal cannot exist.

If, however, a man will come here unmarried, has an easy temper, and can stand a good deal of alcohol, he may pass a very agreeable, lazy sort of life. The manners of the ladies are pleasant and courteous, and they are very hospitable to bachelors.

GENERAL CORRESPONDENCE.

MAUNDER *v.* WAKLEY.

Letter from Mr. W. Rivington.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your impression of August 3 there are some strong remarks on the trial Maunder *v.* Wakley, and to your report of that trial is appended the following objectionable paragraph:

"The Deputy Chairman of the London Hospital, Dr. Risdon Bennett, Dr. Robert Barnes, Dr. Samuel Wilks, Mr. Campbell De Morgan, Mr. Alfred Poland, and others were in court prepared to state that in their opinion the cause of humanity and the interests of a hospital and school must be paramount to all personal considerations, and that Mr. Maunder was fully justified in calling upon the lay authorities to investigate the conduct of a colleague." As it is very well known that I am the colleague who was secretly attacked by Mr. Maunder on two occasions, and as the remarks in your article and the paragraph thus authoritatively inserted is equivalent to a further attack upon me sanctioned by the gentlemen therein named I must ask you to allow me to state—

1. That the first opinion quoted against me is a mere truism, scarcely requiring such a weight of authority for its establishment but that it will cut the other way, for had it been put

into practice in the first instance no one would ever have heard of that personal matter called the "London Hospital Scandal."

2. That the second opinion—if entertained (which I very much doubt)—is valueless because founded on *ex parte* statements to which you so strongly object, and because it was not submitted, as it would have been, to cross-examination and to the opposing testimony of eminent witnesses, who were only not present in court because it had been arranged that they should attend later in the day. It certainly, therefore, appears to me to be unfair to quote evidence which has never been given or tested, and opinions which have never been publicly stated.

3. That the *Lancet's* retractation of expressions admittedly libellous is a purely technical matter, and does not amount to any kind of change of opinion or apology, or admission of error on the part of Mr. Maunder's opponents.

4. That I have as good surgical grounds—not to mention other grounds—for a secret attack upon Mr. Maunder before the lay authorities of the Hospital, as he had for his secret attacks on myself.

I am, &c.,

WALTER RIVINGTON, M.S. Lond.,
Surgeon to the London Hospital.

P.S.—Absence from town prevented an earlier reply.

OBITUARY.

CHARLES JOHNSTON, M.R.C.S. Eng., L.S.A.

THIS gentleman, who died at his residence, The Square, Barnstaple, North Devon, on the 16th instant, in his 62nd year, deserves more than a passing notice of the event in a local newspaper. We believe he was born at Birmingham, where some of his relatives still reside. After a good elementary education, he entered on the study of the medical profession, which he prosecuted with great success to please his friends, although he never liked it, always preferring literary pursuits. On the completion of his studies he came to London, and became a Licentiate of the Society of Apothecaries in 1833, and being of a very erratic disposition, he immediately offered his services to the Portuguese Government, but became an Assistant-Surgeon in the Queen's service, in which he remained until the close of 1834, seeing much active service. He then returned to London, and in 1835 became a Member of the Royal College of Surgeons, soon after which he became a Surgeon in the Honourable East India Company's service, and in this he remained from 1839 to 1841. This engagement he also resigned, and then commenced his travelling adventures through a large part of Abyssinia; and there must have been something in the man who could conciliate, win, and retain the friendship of such men as King Theodore and his wild subjects. The result of his observations amongst the many predatory tribes in this then little known country, he communicated to the public in two volumes octavo. The correctness of his views were subsequently confirmed by another dear friend of the writer of this notice, the late Dr. William Freeman Daniel, F.R.C.S., with whom and Johnston a great friendship subsequently existed until severed by some professional jealousy on the part of the subject of this notice.

About this time he was introduced by the writer to the late Mr. Frederick Knight Hunt, then the editor and proprietor of *Hunt's London Journal;* he at once engaged Johnston as a contributor, who shortly after became sole proprietor, and published in the *Journal* the contents of a *third* volume of his travels in Abyssinia, with other interesting papers of great merit. A paper on "Medical Etiquette," partly written by the deceased, and published in the "Medical Directory," brought him into favourable notice with a gentleman who gave him considerable pen-work; but, desirous of another change, he suddenly—having again quarrelled with his best friends—made up his mind to take a voyage to the Cape of Good Hope. He settled at Natal, where for some time he practised his profession, and soon after, on publishing his "Observations on Health and Disease in Natal," was elected a member of the Legislative Council, on which he served from 1856 to 1858. On the loss of his wife he returned to England, and settled at Barnstaple, North Devon, where he married a widow lady, and soon after was appointed Surgeon to the Barnstaple and North Devon Dispensary; but latterly his health a d strength much failed him, and a few weeks ago, on the occasion of his son coming up to London to undergo his preliminary examination in Arts, etc., at the Royal College of Surgeons, thinking the change would be beneficial, he accompanied him, but was soon obliged to return. Mr. Johnston, who was an accomplished writer, was also a great archæologist, to which favourite study he devoted much of his time. He leaves a widow and large family.

WILLIAM TAYLOR, M.R.C.S., L.S.A.,

WHO belonged to the "old school of physic," died at his residence, 126, St. John-street-road, Clerkenwell. He succumbed from the exhaustion and prostration consequent upon fracture of the tibia and fibula. He was knocked down by a milk-cart, and, being in the vicinity of St. Mary's Hospital, was taken to that institution, where he received every kindness and attention, and died there seven weeks after admission. Mr. Taylor was a man above the ordinary average of what are called "general practitioners"; he was not only well and practically acquainted with his profession, but had an accurate knowledge of commercial and mercantile transactions. His patients found in him not merely a medical adviser, but a friend to whom they could resort at any time, with the full assurance of receiving good and sound counsel. His dignified and manly bearing gained for him respect amongst those to whom he was not intimately known. He was a student at St. Bartholomew's, and qualified as a Member of the Royal College of Surgeons and Licentiate of the Apothecaries' Company in 1830. He was Surgeon to a division of the Metropolitan Police Force, and during the prevalence of cholera was an energetic surgeon to a cholera hospital. In the midst of an anxious and laborious practice he found time to publish a work of remarkable merit, "On a New and Successful Treatment of Febrile and other Diseases through the medium of the Cutaneous Surface." The theory he advocated was the application of oil to the surface in cases of scarlatina, typhus, and measles. He illustrated this mode of treatment in a paper which he read before the Medical Society of London in 1851, and which gave rise to an animated and instructive discussion. It is not too much to say that he fairly supported his case. Mr. Taylor, even to the last, was a working man. He died in harness.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following is a list of candidates who have passed the recent examinations:—

FIRST M.B. EXAMINATION.

First Division.

Crocker, Henry Radcliffe, University College.
Dunean, Peter Thomas, University College.
Gould, Alfred Pearce, University College.
Herman, George Ernest, London Hospital.
Houghton, Walter Benoni, University College.

Second Division.

Barrow, Albert Boyce, King's College.
Batterbury, George Henry, King's College.
Briggs, George Chapman, King's College.
Garlick, George, University College.
Harris, Vincent Dormer, St. Bartholomew's Hospital.
Hetley, Henry, Guy's Hospital.
Hullard, Jean Arthur, University College.
Jameson, Hampden Gurney, University College.
Maelean, Thomas Edwin, University College.
Moore, George Edward, King's College.
Morley, Thomas Simmons, Guy's Hospital.
Palmer, Frederick John Morton, Guy's Hospital.
Sawtell, Tom Henry, St. Bartholomew's Hospital.
Verco, Joseph Cooke, St. Bartholomew's Hospital.
Vines, Sydney Howard, Guy's Hospital.
Whittle, Edward George, University College.

EXCLUDING PHYSIOLOGY.

Second Division.

Harrison, Charles Edward, St. Bartholomew's Hospital.
Homan, George William, King's College.
Keyworth, George Hawson, Guy's Hospital.
Rigby, James Arthur, Guy's Hospital.
Steil, George Robert, University College.

PHYSIOLOGY ONLY.

Second Division.

Davison, Wm. J., Coll. of Med., Newcastle-on-Tyne, and Univ.
Nicholson, Arthur, King's College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council of the Royal College of Surgeons on Thursday, the 8th inst., the following Members were admitted to the Fellowship of the College, having been elected at previous meetings of the Council, viz.:—

Bowes, Richard, of Richmond, Yorkshire, diploma dated November 4, 1831.
Spencer, Francis, of Chippenham, diploma dated November 20, 1839.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of

Medicine, and received Certificates to practise, on Thursday, August 8, 1872:—

Elliott, Norman Bruce, Denmark-hill.
Hedley, John George, York-street, Portman-square.
Palmer, Montagu Henry Campbell, Newbury, Berks.

The following gentleman also on the same day passed his Primary Professional Examination:—

Clare, John, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Barwell, Richard, F.R.C.S., formerly Surgeon with care of out-patients —Surgeon to the Charing-cross Hospital.

Cooper, Alfred, F.R.C.S. (Exam.)—Surgeon to the West London Hospital, *vice* Mr. William Bird, F.R.C.S., resigned.

Cowen, Philip, M.R.C.S. Lond., L.S.A. Lond.—Medical Officer to the Workhouse and Infirmary of St. Mary, Islington, London, N.

Hughes, Richard, M.R.C.S., L.S.A.—Indoor Physician's-Assistant at the Royal Infirmary, Manchester, *vice* Mr. S. Buckley, appointed Medical Officer to the Prestwich Union.

Lewis, Mackenzie, M.R.C.S. Eng., L.R.C.P. Lond.—House-Surgeon to the London Hospital.

Lloyd, Robert H., M.R.C.S., L.S.A.—Resident Medical Officer at the Lambeth Workhouse.

Lucas, J. C., L.R.C.S.—House-Surgeon to the Edinburgh Royal Maternity Hospital, *vice* Mr. Rue, whose appointment has expired.

Lucas, Richard Clement, M.B. Lond., F.R.C.S.—Assistant-Demonstrator of Anatomy at Guy's Hospital.

Maclean, Mr.—Assistant House-Surgeon at the Hospital and Dispensary, Rotherham.

Oates, James P., M.R.C.S. Eng., L.S.A.—House-Surgeon and Secretary to the Stourbridge Dispensary, *vice* Geo. Birt, resigned.

Parker, R. W., M.R.C.S.E.—House-Surgeon to the Children's Hospital, Great Ormond-street.

Robinson, John Musgrave, L.R.C.S.I., L.K. & Q.C.P.I., and L.M.—Medical Officer for the Ballintra District of the Ballyshannon Union.

Smith, Richard T., M.D., M.R.C.S.—One of the Honorary Physicians to the St. Pancras and Northern Dispensary.

Steele, Sidey, M.R.C.S.E., L.R.C.P. Edin.—Assistant House-Surgeon at the Halifax Infirmary and Dispensary.

Thornton, J. Knowsley, M.B. and C.M. Edin.—Medical Officer and Public Vaccinator for Fort District of Glendale Union.

BIRTHS.

Barry.—On August 10, at Twickenham, the wife of D. Paterson Barry, M.D., Surgeon-Major, half-pay, of a daughter.

Cringle.—On July 11, at 252, Mile-end-road, the wife of Dr. W. H. Cringle, of a daughter.

Fairbank.—On August 13, at Lynton, North Devon, the wife of F. Royston Fairbank, M.D., of a daughter.

Husband.—On August 14, at Stroud-green-road, the wife of H. Aubrey Husband, M.B., C.M., of twins—boy and girl.

Ireland.—On August 6, at The Limes, Linton, Cambridgeshire, the wife of Edward Ireland, surgeon, of a son.

Skinner.—On August 5, at Clevedon, Somerset, the wife of Stephen Skinner, M.B., of a son, prematurely.

Smith.—On August 7, at 45, Euston-square, N.W., the wife of Abbotts Smith, M.D., of a son.

Thomson.—On August 8, at Dunedin, Bournemouth, the wife of J. Roberts Thomson, M.D., of a daughter.

MARRIAGES.

Batten—Bowly.—On August 8, at Saltburn-by-the-Sea, Rayner Winterbotham Batten, M.D. Lond., of Brunswick-square, Gloucester, to Eliza, youngest daughter of Samuel Bowly, Esq., of Saintbridge House, Gloucestershire.

Paddon—Roberts.—On August 7, at St. Philip's Church, Kensington, George Paddon, of Putney, L.R.C.P., M.R.C.S., to Amy, elder daughter of Robert Roberts, of Calcutta.

Snow—Strouge.—On August 8, at Christ Church, Bray, county Wicklow, William V. Snow, M.D., of Bournemouth, to Charlotte Ivy, second daughter of the late James Whitelaw Strouge, M.D., of Dublin.

Welch—Jupp.—On August 13, at Christ Church, South Hackney, Charles, elder son of Dr. Charles Welch, of Hackney-road, to Rose Maria, younger daughter of John Jupp, Esq., of Victoria-park-road and Fenchurch-street.

DEATHS.

Astley, Edward D'Oyley, only son of Edward F. Astley, M.D., on May 18, at Coromandel, New Zealand, after a very short illness.

Holmes, Arthur Joseph, son of the late Joseph Holmes, M.D., of Fulham, at Marlow Cottage, Cricklewood, N.W., on August 13, aged 42.

Smith, Sir Andrew, K.C.B., M.D., F.R.S., etc., at 16, Alexandra-square, on August 11, in the 75th year of his age.

Thompson, Susan Hamilton, widow of the late Francis Decimus Thompson, Surgeon, on August 6, at 10, Nicholson-street, Sunderland, aged 64.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Burton Infirmary and Dispensary.—House-Surgeon. Must be duly qualified to practise. Applications to Mr. J. C. Grinling, Burton-on-Trent, on or before August 21.

Clitheroe Union.—Medical Officer for the Gisburn and Slaidburn Districts of this Union. The gentleman appointed must possess the qualifications prescribed by the General Orders of the Local Government Board. Applications must be sent to Mr. John Eastham, Union Clerk, before August 19. The election takes place on September 2.

Daventry Union.—Medical Officer and Public Vaccinator for the No. 5 District of this Union. Applications to Mr. G. Norman, Clerk, on or before August 20. Election the following day.

Great Northern Hospital, Caledonian-road.—House-Surgeon and Junior Resident Medical Officer. Both must be qualified to practise. Applications to the Secretary, Mr. George Reid, 46, Great Coram-street, W.C., on or before August 26.

Liskeard Union.—Medical Officer for the Callington District. Candidates must be duly qualified. Applications, with testimonials, to Albert C. L. Glubb, Clerk to the Guardians, on or before August 24.

Northampton General Infirmary.—Dispenser. Applications, with testimonials, to S. P. Bennett, Secretary, on or before August 30.

Provident Medical Institution and Lying-in Charity, 20, Pimlico-road, Pimlico, S.W.—Attending Medical Officer. Must be duly qualified to practise. A gentleman residing in Chelsea or Brompton preferred. Applications to the Committee on or before September 3.

St. Pancras and Northern Dispensary.—Resident Medical Officer. Candidates must be qualified in both Medicine and Surgery. Applications to Mr. S. S. Wigg, 33, Gordon-street, Gordon-square, W.C., on or before August 17.

Surrey Dispensary.—Physician. Applications, with testimonials, to R. G. Minshull Jones, Secretary, before August 20.

Trinity College, Dublin.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

Warneford Lunatic Asylum.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

Westminster General Dispensary.—Honorary Physician. Must be a Doctor or Bachelor of Medicine, and be registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

Westminster General Dispensary.—Resident Medical Officer. Must be duly qualified and registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATION.

Bridgwater Union.—Mr. W. A. Summers has resigned the North Petherton District; area 12,412; population 4569; salary £84 per annum.

APPOINTMENTS.

Hawarden Union.—Francis Stewart Manisty, M.R.C.S.E., L.S.A., to the Third District.

Honiton Union.—Fredk. Augustus O'Meara, L.R.C.P. Edin., L.S.A., to the Third B District.

Leominster Union.—H. T. de Montarville Pentland, L.R.C.P., L.R.C.S. Edin., to the Leominster District and the Workhouse.

Autumn Manœuvres.—Head-quarter Staff: Principal Medical Officer, Inspector-General James Fraser, M.D., C.B. *The Southern Army Corps.*—Staff of Corps: Principal Medical Officer, Deputy Inspector-General J. M. S. Fogo; Staff Assistant-Surgeon W. Alexander, Staff Assistant-Surgeon P. W. Stafford. 4th Field Hospital—Acting Veterinary Surgeons Haseldon and Grainger. Staff 1st Division: Principal Medical Officer, Staff Surgeon-Major J. A. Thompson. 1st Field Hospital—Staff Surgeon M. J. A. Woolfreyes; Assistant-Surgeon Owen Owen, 50th Regiment, and Assistant-Surgeon R. C. Lever, M.D., 7th Hussars. 2nd Field Hospital—Surgeon-Major W. Peake, M.D., 88th Regiment; Assistant-Surgeon R. W. Forsayeth, 95th Regiment; Assistant-Surgeon R. H. Bolton, 3rd Dragoon Guards. 3rd Field Hospital—Surgeon M. B. Tydd, 2nd Battalion 23rd Regiment; Assistant-Surgeon C. A. Atkins, 1st Battalion 7th Foot; and Assistant-Surgeon A. L. Malladen, M.D., 12th Lancers; Staff 2nd Division: Principal Medical Officer, Surgeon-Major R. Gilborne, 6th Dragoon Guards. 1st Field Hospital—Surgeon F. W. Moore, 2nd Dragoon Guards; Assistant-Surgeon W. H. Harman, M.D., 4th Battalion 60th Rifles; Staff Assistant-Surgeon E. J. Clarke. 2nd Field Hospital—Surgeon A. Reed, 2nd Battalion 16th Regiment; Staff Assistant-Surgeon J. J. M'Carthy; and Staff Assistant-Surgeon R. W. Lowe. 3rd Field Hospital—Staff-Surgeon H. Titterton, M.D., Staff Assistant-Surgeon D. Murray, Staff Assistant-Surgeon T. G. Bolster, M.D. *The Northern Army Corps.*—Staff of Army Corps: Principal Medical Officer, Inspector-General J. Fraser, M.D., C.B.; Staff Assistant-Surgeon, G. Duncan; Staff Assistant-Surgeon, J. White. Staff 3rd Division:

Principal Medical Officer, Staff Surgeon-Major G. A. F. Shelton. 1st Field Hospital—Surgeon-Major B. Lane, 2nd Battalion 4th Regiment; Assistant-Surgeon J. Paxton, M.D., 30th Regiment; and Assistant-Surgeon J. Bourke, 2nd Battalion 15th Regiment. 2nd Field Hospital—Surgeon F. S. G. Gunn, 99th Regiment; Assistant-Surgeon H. Harrison, 46th Regiment; and Assistant-Surgeon T. Steward, M.D., 90th Regiment. 3rd Field Hospital—Surgeon W. H. Polland, 2nd Battalion 22nd Regiment; Assistant-Surgeon J. D. Milburne, 13th Hussars; and Staff Assistant-Surgeon E. Chandler. Staff 4th Division: Principal Medical Officer, Surgeon-Major E. J. Franklyn, Royal Horse Artillery. 1st Field Hospital—Surgeon B. Burland, M.D., 13th Hussars; Staff Assistant-Surgeon J. G. Grant; and Assistant-Surgeon J. V. T. Malcolm, M.D., 9th Lancers. 2nd Field Hospital—Surgeon O. L. Patterson, 1st Battalion 22nd Regiment; Assistant-Surgeon E. S. Lowe, M.B., 102nd Regiment; Staff Assistant-Surgeon A. W. Sheddon, M.D. 3rd Field Hospital—Surgeon R. W. Jackson, 100th Regiment; Assistant-Surgeon A. A. Macrobin, M.B., 2nd Battalion Rifle Brigade; and Staff Assistant-Surgeon J. H. Reynolds, M.B.

The widow of Dr. Tylecote, of Great Haywood, has been elected Matron of the General Infirmary, Stafford, by an overwhelming majority, out of seventeen applicants.

Where is the Sanitary Inspector?—In a case heard on Tuesday at the Middlesex Sessions, a lodging-house keeper in George-street, Shoreditch, stated that in her three bedrooms she accommodated ninety-two persons of either sex, who paid her threepence each for their beds.

We regret to state that Mr. William Millward, a young gentleman of great talent, 21 years of age, who had matriculated in Galway College, and obtained high classifications and degrees for the medical profession, in which he was about to embark, lost his life near the family residence in the river beyond Clon-road, near to the town of Ennis. It appears he had gone out to fish in a boat, which was plied by a man named Moroney, and the craft upset, by what means is as yet unknown, as up to the present time Moroney is in an unconscious state. The deceased was a son of the late Mr. John Millward, formerly and for years manager of the National Bank in Ennis.

The Cholera in Russia.—In those districts of Russia which lie near to the Prussian and Austrian frontier, cholera seems to be on the increase. In Petersburg it has already attained immense prevalence, as there are from 250 to 260 cases daily, with more than 100 deaths. It is time we made energetic sanitary preparations for this unwelcome guest. An immense number of cases have been announced at Insterburg.—*Berlin Klin. Woch.*, July 29.

The French Mineral Water Stations.—Never in the memory of the oldest hydrologist have these been so crowded as they are this season, and they are likely to be still more so. One reason is, that all Frenchmen deserving of the name refuse to place a foot on German soil, while the number of foreign visitors is also greatly increased. The French visitors constitute three distinct batches—First, there are the real patients, who, seeking the mineral waters for the purpose of cure, resort to them early in the season and leave about the middle of July, in order to avoid the crowd. Next, from then to late in August we have the aristocratic and wealthy visitors. And, after the middle of August, until more or less late in September, there is a vast swarm of the political, professional, and learned classes, set free by the holidays.—*Union Méd.*, August 10.

Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland.—On August 7 the quarterly committee meeting of this branch society was held at No. 33, High-street, Dr. T. H. Purdon in the chair. Amongst the other members present were—Dr. M'Gee, Dr. James Moore, and Dr. Stewart. The President stated that he, together with Dr. C. D. Purdon, had attended the annual meeting of the parent society in the King and Queen's College of Physicians, Kildare-street, Dublin, held in June. Amongst the resolutions unanimously passed at the meeting, was one to the effect that "the thanks of the Society be given to the medical students of Belfast for their generous contribution to its funds," which Dr. Duncan said was the first occasion when there had been any united contribution as a class. Sir William Wilde, M.D., observed that, "Now, whenever and wherever the medical students of Belfast may meet, they can remember with pride that they inaugurated this noble design, and set this bright example to their fellow-students in all other schools." The total sum at the command of the Society for distribution this year was between £800 and £900, which enabled assistance to be given to seventy-seven applicants, in sums varying from £26 to £5 each recipient.—*Belfast Evening Telegraph*, August 10.

Small-pox is still a fatal and prevailing epidemic in England and Wales. During the ten years 1860-69 the annual deaths from this disease ranged from 7684 in 1864 to 1565 in 1869; and the average quarterly number in the ten years was 873. Last quarter the fatal cases were 6521—a decline, it is true, of 1199 from those in the first quarter of the year, but with one other exception a higher number than were returned in any quarter of the past thirty-one years; they were equal to an annual rate of 1·1 per 1000 persons living. Scarlet fever was severely epidemic during 1870, and caused 11,746 deaths in the last quarter of that year, since which the quarterly numbers have rapidly declined, and the 2206 fatal cases returned last quarter were considerably below the number registered in any quarter since the end of 1869; this decline has been general throughout the whole of England and Wales. The deaths referred to fever, which in the second quarters of 1870 and 1871 had been 3524 and 3269, further declined to 2745 last quarter; compared with the numbers in the three months ending June 30, 1871, those returned last quarter showed a decline in each of the registration divisions, except the fourth, containing the eastern counties. In London, where the sanitary superintendence is perhaps somewhat in advance of the greater part of the country, the decline in the death-rate from fever has been rapid and continuous in recent years. The force of public opinion in recent years has done much to improve the sanitary condition of many of our large towns, in spite of the rapidly increasing difficulties arising from the sewage and water problems; in the smaller towns and villages, however, the same progress has not been made, and it is to their formation into working sanitary districts that we must look for any considerable amelioration in their condition. —*Registrar-General's Quarterly Report.*

Composition and Quality of the Metropolitan Waters in July, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	18·13	0·104	0·147	0·002	13·7	3·4
West Middlesex .	18·53	0·079	0·147	0·002	13·8	3·9
Southwark & Vauxhall . . .	17·93	0·109	0·147	0·003	14·0	3·3
Chelsea . . .	18·37	0·100	0·100	0·003	13·9	3·9
Lambeth . . .	...	...	...	...	...	...
Other Companies.						
Kent	27·13	0·005	0·217	0·000	20·5	5·4
New River . .	17·87	0·013	0·147	0·000	13·7	3·2
East London . .	17·37	0·055	0·167	0·001	13·0	3·8

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Chelsea Company.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 114,860,743 gallons; and the number of houses supplied was 496,495. This is at the rate of 35·2 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 26·1 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The case of Damant *v.* Jackson shall be noticed next week.

F. W. L.—An answer has not yet been received.

A. T. S., Highgate.—In June, 1847.

Professional.—The course you have adopted is quite in accordance with the usage of our Profession in such a case.

Mr. B. Clarke, Hampstead, has a plan for stamping out scarlet fever and small-pox, by a system of isolation and suppression, to be enforced by the police. His pamphlet has received the approval of Dr. Budd and Dr. French, and well deserves perusal.

A Surgeon to an Emigrant Ship.—We have carefully perused the "Report of the Commissioners appointed to inquire into certain matters connected with the Immigrants by the ship *England*," published in the *New Zealand Mail* of May 18. The Report discloses a state of things of the most painful character, and such as should not, and would not, exist under a proper system of supervision and a proper amount of responsibility.

W. S. G., Bolton.—1. The first recorded outbreak of yellow fever in the West Indies was in 1647. 2. Our forefathers, no doubt, were acquainted with cholera in Europe. Old records show it was known in Madras in 1769, 1770, and 1774; and since 1817—the great epidemic in Lower Bengal—we know it has been frequently prevalent all over India. In England the first cases showed themselves at Sunderland, in October, 1831, and the epidemic prevailed in the British Empire for fourteen months. In England, in 1832, the deaths to cases were 47 per cent.; in 1848-49, 45 per cent.; and in 1853-54, 46 per cent.

A Timely Warning: The Army Medical Department Warrant.—The following appears in the *United Service Gazette* of last week:—

"We are certain to have a good deal of serious—if not dangerous—illness in the camps, and the Army Medical Officer will become one of the most important functionaries in the manœuvring army. Under such circumstances we trust we shall not be deemed premature in suggesting to Mr. Cardwell that of the many important papers now lying on his table waiting his decision, the long delayed Army Medical Department Warrant is not the least deserving of his immediate attention. Mr. Cardwell should certainly determine without delay what is to be done with the officers of the Army Medical Department. One step is all that is demanded, a step which would have to be granted to only a mere handful of Senior Assistant-Surgeons, and at an expense which would be almost covered by the pay and allowances of a single general of division. On the men, who have so patiently waited for that step, will devolve all the heavy medical work of the Autumn Manœuvres; and how can they be expected to go to work with zeal and alacrity when they know that their promotion warrant is allowed to lie neglected on the War Minister's table, without any sufficient reason, except that they had no powerful friend in either House of Parliament to quicken the movements of official personages? This delay presses sorely on the immediate head of the Medical Department, who, in order to prevent the "block" which shuts in the upper ranks from increasing, has been obliged to decline adding any fresh names to the already overladen list of juniors. Are we to have no medical officers to look after the sick and wounded soldier but inspectors of thirty-five years', and surgeon-majors of twenty-five years' service?"

Without the constant infusion of fresh blood the Department must rapidly decay, and ultimately perish; and no professional fresh blood will flow towards army channels so long as it is felt that once there it must lie content in the dull, eternally stagnant pool of subaltern rank. Six hundred most deserving and long suffering army medical officers depend for a pull out of that terrible slough of despond in which they have so long been permitted hopelessly to flounder.

COMMUNICATIONS have been received from—

Mr. T. L. Plant; Mr. R. C. Lucas; Mr. J. C. Smith; Mr. Grimes; Mr. Blanchard; Mr. L. Mackenzie; Mr. Woolcott; Dr. J. Thompson; Dr. Bakewell; Dr. Fayrer; Dr. Nursey; Professor Brazier; Mr. Robert Baker; Mr. Walter Rivington; Mr. Reid; Dr. H. Griffiths; Mr. Amyot: Dr. Whitmore; Mr. O. H. Bell; Mr. Ross; Dr. Fairbank; Dr. Cousins; Dr. Hutchins; Dr. J. Hughlings-Jackson; Mr. J. Chatto.

BOOKS RECEIVED—

Coxe on the Causes of Insanity—Reports of the Inspectors of Factories—De la Fièure Traumatique, par Dr. Lucas-Championnière—Fayrer's Venomous Snakes of the Indian Peninsula.

APPOINTMENTS FOR THE WEEK.

August 17. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

19. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

20. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

21. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

22. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

23. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 10, 1872.

BIRTHS.

Births of Boys, 1122; Girls, 1047; Total, 2169.
Average of 10 corresponding weeks, 1862-71, 1993·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	861	737	1598
Average of the ten years 1862-71	777·2	738·9	1516·1
Average corrected to increased population	...	...	1668
Deaths of people aged 80 and upwards	...	...	35

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	...	...	3	...	1	2	66
North ...	751668	7	5	...	2	12	1	1	1	110
Central ...	333887	...	1	1	1	1	...	1	1	26
East	638928	3	5	5	...	8	...	4	1	93
South... ...	966132	5	6	6	3	13	2	5	2	146
Total	3251804	15	18	12	6	37	3	12	7	441

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·561 in.
Mean temperature	59·2°
Highest point of thermometer	77·9°
Lowest point of thermometer	48·6°
Mean dew-point temperature	54·9°
General direction of wind	Variable.
Whole amount of rain in the week	1·38 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 10, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Aug. 10.	Deaths Registered during the week ending Aug. 10.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2169	1598	77·9	48·6	59·2	15·11	1·38	3·51
Portsmouth ...	115455	12·1	71	52	73·4	46·4	58·5	14·72	0·87	2·21
Norwich	81105	10·9	43	40	73·0	48·0	58·4	14·66	1·21	3·07
Bristol	186428	39·5	121	87	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	51	27	69·8	46·8	57·3	14·05	1·71	4·34
Birmingham ...	350164	44·7	251	192	69·4	47·8	58·0	14·44	1·65	4·19
Leicester	99143	31·0	89	79	...	...	...	...	...	...
Nottingham ...	88225	44·2	48	63	72·6	45·0	58·4	14·66	1·09	2·77
Liverpool	499897	97·9	372	330	71·9	49·8	58·5	14·72	0·92	2·34
Manchester ...	352759	78·6	269	198	78·0	50·0	59·8	15·44	1·43	3·63
Salford	127923	24·7	129	69	74·8	48·0	57·8	14·33	1·40	3·56
Oldham	84004	20·2	71	58	...	...	...	...	...	...
Bradford	151720	23·0	145	82	70·0	49·7	58·4	14·66	1·79	4·55
Leeds	266564	12·4	261	180	71·0	46·0	57·3	14·05	0·94	2·39
Sheffield	247847	10·9	239	143	72·0	45·0	58·2	14·55	1·51	3·84
Hull	124976	35·1	85	80	70·0	42·0	57·2	14·00	0·76	1·93
Sunderland ...	100665	30·4	92	57	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	73	76	...	...	...	...	...	...
Edinburgh	205146	46·3	116	78	64·0	49·7	56·3	13·50	0·75	1·90
Glasgow	489136	94·8	332	265	65·7	46·8	56·0	13·33	1·85	4·70
Dublin	310565	31·9	210	155	72·7	44·0	58·8	14·89	1·59	4·04
Total of 21 Towns in United Kingd'm	7393052	34·0	5237	3909	78·0	42·0	58·0	14·44	1·30	3·30

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·56 in. The highest was 29·87 in. on Friday morning, and the lowest 29·30 in. on Wednesday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL COMMUNICATIONS.

ILIAC ABSCESS.

By J. FAYRER, M.D., C.S.I.,
Hon. Physician to the Queen.

I HAVE in a former paper (*vide* "Clinical Surgery in India") noticed the not unfrequent occurrence of iliac abscess in natives of India, as well as in Europeans, describing also the symptoms, and treatment most appropriate. I would further remark that in well-marked cases, where pus has formed in considerable quantity, with prominent symptoms of fever, there is little or no difficulty in deciding on the nature of the case or the necessary treatment; but in the early stage, and before the symptoms of deep-seated suppuration are pronounced, diagnosis is sometimes obscure and difficult. It is exceedingly important, however, that the true state of the case should be detected early, as its recognition diminishes not only present risk, but, if promptly followed by treatment, renders recovery more rapid and certain.

The pathology of these iliac abscesses is simple enough—a collection of pus under the iliac fascia, either on, in, or beneath the iliac muscle. The causes, however, are not always so apparent, but they seem to be referable to either fever (when no doubt they are the result of capillary embolism due to the hyperinotic condition of the blood) or to other such causes as induce suppuration in septicæmic states; to external violence, strains, or over-exertion; to sudden and perhaps inordinate muscular efforts, in which a muscular fibre, being wrenched from its attachment, tears away a fragment of periosteum, and thus induces superficial necrosis and suppuration in that area, which becomes the nucleus of the abscess. I have never detected any loose bone in these cases, but the fragment may have been so minute as to escape detection, or, indeed, the suppurative action may have been a result of the disruption of a small portion of periosteum without any exfoliation or death of bone; or it may well be that a combination of these conditions may be the cause in certain cases, occurring in persons who are afflicted by a malarious state of climate. The treatment is simple, though it is heroic. Exit must be given to the deep-seated matter, or it will find its own way out either through the intestines, the bladder, or the groin, or through the loins, causing caries and all the consequent dangers and suffering; or it may enter the peritoneum and rapidly destroy life by peritonitis—if, indeed, blood poisoning from septic absorption do not terminate life before these events can occur. The earlier, therefore, that an opening be made, the better are the patient's chances of recovery.

The depth at which the pus is situated, and the nature and position of the superjacent structures, render it impossible that marked pointing should indicate its presence. In the earlier stages—the period which should not be allowed to pass without interference—a certain tension, hardness, and fulness of the iliac regions takes its place. This, in conjunction with the history, the presence of fever (not always preceded by well-marked rigors, but sometimes by symptoms that simulate low forms of slight remittent malarious fever), pain of a constant and wearing character, with contraction of the thigh upon or towards the abdomen (in the commencement but slightly so), the general appearance of suffering all this entails, and added, that peculiar feeling communicated to the educated finger only, of pus lying deeply seated under tissues, and a certain amount of œdema of the surface, proclaim the necessity of immediate surgical interference, and I know of no case in which it gives greater or more signal relief. As to the operation, for its completion, an incision through the abdominal wall dividing integument, aponeurosis of external oblique, and internal oblique, and transversalis muscles, must be carefully made. The transversalis fascia being carefully divided, and the peritoneum, which is generally thickened, pushed aside, the finger being gently and carefully introduced, the iliac fascia is scratched through with the point of the finger or with a director, and the pus is reached either immediately under the fascia, in the substance of the muscle, or on the bone. The subsequent treatment is that of any other abscess that has been opened, and, as I have said, the earlier this opening is made the less the risk, and the greater the chance of speedy recovery.

I may add that I have found the use of carbolic acid of service in diminishing suppuration, and favouring the granulation and cicatrisation of the cavity.

The following short abstract of a few cases, the notes of which I happened to have by me, illustrate the disease I have endeavoured to describe:—

Case 1.—Hurry D., a Hindoo, aged 20 years, admitted September 14, 1868, with a hard tense swelling in the left iliac region, of twenty days' duration. It came on after a long and fatiguing walk. The thigh was flexed rigidly. Had fever every third or fourth day; says he has had rigors four or five times during the last three weeks. Patient weak and anæmic. He was placed under the influence of chloroform, and an incision made through the abdominal wall just over the iliac artery. The peritoneum was thickened and indurated. The finger being carefully insinuated down towards the iliac fossa, a collection of one pint and four ounces of pus was evacuated. The tissues were found to be œdematous. He was much relieved by the operation; no return of fever; but after a time diarrhœa set in, and this, combined with the exhaustion of profuse suppuration, proved fatal on November 14 following. Had this case come under observation at an earlier period, before suppuration had become so excessive, it is very probable that he would have recovered. Death resulted from exhaustion of diarrhœa, due most probably to absorption from the large suppurating cavity in the iliac region.

Case 2.—P., Hindoo, aged 55 years, admitted July 15, 1868, with an elongated indurated swelling in left iliac region, which he stated to be of a month's duration, and to have come on after a long and fatiguing walk, about six weeks ago. After the fatigue there were some glandular swellings in the groin, which subsiding, were followed by the swelling. There is no positive evidence of rigors having occurred at any time, but the temperature was higher and the pulse quicker than natural when admitted. It appears that he has been treated by the internal use of iodide of potassium, and the application of tincture of iodine to the swelling.

On the 22nd he was placed under the influence of chloroform and an incision made through the abdominal wall down to the transversalis fascia, which being divided, and the finger carefully insinuated into the iliac fossa, a quantity of pus was evacuated. He was immediately relieved, and was discharged cured on November 10, 1868. A slight sinus remained, but his health was restored, and he could walk without pain, the motion of the limb, which was contracted, being quite restored.

Case 3.—Kally C., a Hindoo boy, aged 11 years, admitted on April 26, 1868, with an oval-shaped swelling on the right iliac region. It made its appearance fifteen days after an attack of fever; its formation attended with fever, and probably rigors, but no very distinct account is given by the boy, As it was evident that a deep-seated collection of pus had formed, he was put under chloroform, and an incision made down to the peritoneum, which was pushed aside, the finger insinuated into the iliac cavity, and a quantity of pus evacuated. He was immediately relieved. The contraction of the thigh relaxed, the feverish condition subsided, he gained strength and health, and was discharged cured on July 20 following.

In this case, as in others, the cavity of the abscess was washed out with carbolic acid lotion, ʒj. to Oj., and the treatment was after the (so called) antiseptic method.

Case 4.—An English girl, aged 14, stout, well developed, and healthy; complained of pain in the right iliac region, attended with a low febrile condition, loss of appetite, and want of rest. On examination, these symptoms having continued some days, the thigh was found to be flexed, extension causing great pain; induration and tenderness in iliac region, pulse quickened, tongue coated, and a low febrile condition present. There certainly in this case had been no distinct rigors. There was no history that satisfactorily accounted for her condition, but she appears to refer it to over-exertion or a strain some weeks previously. Her general health has been good, and menstruation regular. As it appeared to me evident that an iliac abscess had formed, I made an incision through the abdominal wall just above Poupart's ligament, and, carefully protecting the deep-seated parts by insinuating the finger, a collection of about an ounce of pus was evacuated. She began to improve immediately; in a few days the leg was restored to its power of extension, the wound healed, and she rapidly recovered her health and strength. I saw her some months later, and she was perfectly well.

Case 5.—I was asked to see, in 1871, an English officer of about twenty years' service, who hitherto had had good health, but had been suffering for some days, if not weeks, from a low form of fever, attended with great prostration, debility, and wasting. There had been severe abdominal pains, which had been referred to the probable passage of either biliary or renal calculus, or to some cæcal mischief. I found him depressed and low, pulse quickened, that peculiar look of suffering so often present when

deep-seated suppuration has occurred, temperature higher than normal; no very satisfactory evidence that any positive rigor had taken place; the febrile symptoms nearly always present. I examined the abdomen carefully, and found tension and fulness in the iliac region, with considerable pain on pressure. He was not able thoroughly to extend the thigh. As it appeared to me that a deep-seated collection of pus was forming in the right iliac fossa, I proposed an incision, which was assented to. Chloroform being administered, I carefully divided the structures of the abdominal wall, opposite but rather lower than the anterior spinous process of the ilium, and, carefully protecting the abdominal viscera with my finger, introduced a director into the iliac fossa, and gave exit to a collection of a few drachms of pus. This afforded him complete relief; he rapidly recovered, and in two months was able to resume his duties, which were of an onerous and important nature. The only explanation he could give (and he was a physician) was that he had caught cold in playing croquet in damp weather.

PUERPERAL DISEASES TREATED WITH TURPENTINE.

By E. COPEMAN, M.D., F.R.C.P., F.R.C.S.

(*Continued from page* 94.)

Case 14.—Mrs. D. C., aged about 32. Had been confined twelve days with her second child when I was called to her on June 4, 1866. Labour natural, but followed by sharp after-pains. Had a chill on the second day, and soon after the lochia became offensive. She has had no refreshing, calm sleep since her labour; but several copious motions—some fluid, and others containing heavy solid fæces; no sickness; abdomen prominent; uterus too large; pain and tenderness over the right ovary; nervous system quiet; pulse rather more than 120; secretion of milk good; no lochial discharge or offensive smell at the present time, and the uterus per vaginam not now tender.

Next day she had two loose motions, and the pulse was 120.

On the 6th she had more pain above the right groin, but had a good night, and is not worse in other respects. Countenance good. Bowels acted twice in the night. The treatment since the 4th has consisted of an anodyne draught at night, turpentine fomentations to the abdomen, milk and brandy for nourishment, and half a drachm of pulv. cret. c. opio after each liquid relief. To-day, in consequence of the increased pain above the groin, a blister was applied, and an opium suppository into the rectum.

June 7.—Slept well. Blister drawn, and pain removed. Complains of pain under the right breast when moving or breathing deep; but the lung appears to be free. Uterus smaller; bowels rather more distended, and not relieved since yesterday. Suppository to be repeated at night, and a turpentine enema to be given to-morrow morning.

8th.—Bowels relieved several times; motions pulpy and offensive; pulse 108.

9th.—Pulse again 120; but manner improved, and she has but little pain in the side. No vaginal discharge; several pulpy motions. Powders to be repeated.

10th.—Lay upon her sofa, partly dressed, for two hours yesterday and again to-day. Pulse 120, but inclined to abate. Three or four motions of the same character.

12th.—Seemed weak to-day, with pulse varying from 108 to 120. Several motions, large and pulpy; no diarrhœa, properly so called. Ate some bread and butter, and partakes freely of milk and custard with brandy.

15th.—Still weak. Bowels acting in the same way; motions heavy and pulpy; pulse nearly 120; spirits not so good. Ordered gr.j. quin. sulph. three times a day.

19th.—Two days ago she was sick, and vomited the milk and custard. She had also some headache, and severe pain in the cæcum, which frightened her, and she became very depressed. The diet was altered to jelly and brandy, and beef-tea; and another small blister was applied to the seat of pain. In the evening she passed a large quantity of fæces—some very lumpy. Yesterday she had also a large lumpy motion, and took an anodyne draught, which produced a good night. To-day I found her very cheerful; but her pulse was 120, and her abdomen much distended, as if there was more fæcal matter to come away. The blister had relieved the pain, but pressure on the cæcum still produced uneasiness. Her tongue was clean, and she said she was hungry, so we allowed her a mutton chop; and believing her altogether better, and only wanting the bowels cleared to insure greater improvement still, we gave her a dose of castor oil, and repeated the anodyne at night.

21st.—Found her lying on the sofa, looking very delicate. She had had several motions since the castor oil, and a rhubarb draught which she took the following morning. Some of them were still lumpy, and others more or less fluid. Pulse 120; abdomen less distended.

26th.—I found her in the drawing-room, very much better, and took her in to dinner. Bowels acting two or three times a day, tongue clean, and pulse below 100. I now took my leave, and she continued to make a good recovery.

Case 15.—Mrs. J., of Mendlesham, aged about 23 years, was confined about a month before I saw her, on October 8, 1867, having once before had a miscarriage. She went on well apparently for a fortnight, when she had a decided shivering fit, and her surgeon discovered a very offensive smell from the lochial discharge. The chill was soon followed by rapid pulse and severe hemicrania, the latter symptom being so distressing as to induce Mr. C. to apply a few leeches behind the ear, and this afforded so much relief that next day she was supposed to be going on quite well. However, the next symptom was a very severe hysterical attack followed by great depression, and two days ago there was evidence of pneumonia of the base of the right lung, for which first a mustard-poultice and then a blister had been applied. For several days there had been profuse perspiration. The previous treatment had consisted of frequent vaginal washings and turpentine; and now we agreed to give tinct. ferri sesq. mxx. three times a day, and a turpentine enema. The distance was so great that I did not see her a second time, but I was informed that after some temporary disappointment the case went on to a favourable termination.

Case 16.—Mrs. R., aged 26, was confined with her third child on January 8, 1868, and had a good natural labour. One of her children was attacked with scarlet fever on the 9th and died on the 11th, which greatly distressed her mind. She was seized with rigor on the 10th, and I was called to see her on the 11th. In the morning she had considerable pain in the abdomen and right inguinal region. The bowels had been largely relieved twice in the night, and turpentine stupes had been freely applied to the abdomen, which had greatly relieved the pain by the time I saw her. Her pulse was 120, and manner anxious. The lochia were free yesterday, but colourless and unhealthy to-day; indeed, there was every appearance of a severe attack of puerperal fever impending. The turpentine fomentations were continued; she had a mixture with turpentine and a little spirit of lavender to take every four hours, and an opiate when required. The case after this went on slowly but favourably, and after a few weeks Mr. —— reported her convalescent.

Case 17.—Mrs. E. was confined with her first child on February 2, 1868, and went on well for a few days; but then symptoms arose which aroused the attention of her surgeon, and he gave her turpentine and laudanum, and applied turpentine stupes to the abdomen. On the 10th she had a severe shivering fit, followed by abdominal pain and some tympanites, for which Mr. M. gave her drachm doses of sp. tereb. and half-drachm doses of tinct. opii every two hours. I was summoned on the 11th, and found her easier, but with a pulse at 140 to 150, dry tongue, and a countenance indicative of serious disease. The abdomen was not now very tender nor much distended, the latter symptom having been much relieved by a turpentine injection, which brought away some unhealthy fæces. She has not been able to pass water for several days, and has the catheter passed night and morning. We agreed to continue the remedies and to give her a little champagne. She had a good night, and was sufficiently better the next morning not to require a visit from me. On the 13th she had some return of the symptoms, and the turpentine began to make her sick, but when I saw her the pulse was only 120, and her general appearance struck me as being improved; but she had told her husband she was sure to die, and her father and mother were quite prepared for such a result. A soap-and-water enema had produced another motion, and she felt better afterwards. We gave her a grain of quinine and some of her opiate mixture every three hours, and ordered a turpentine enema at night instead of giving it internally for a few hours. I left her with the impression that she was better, although by no means safe. She passed water freely in the night, and this morning ceased to require the catheter. There was still a dirty discharge from the vagina from some laceration just within the orifice. She frequently had plentiful vaginal washings to keep the parts clean and prevent any lodgment of unhealthy matter. This poor woman eventually recovered, but I saw

but little more of her, except occasionally, to witness the extreme care and attention of her most kind and painstaking surgeon, who spared himself no trouble in endeavouring to get her well. She remained a long time in a very weak state, but is, I believe, now (1871) in very good health.

Case 18.—On December 24, 1867, I was called to Mrs. B., aged about 30, who had been confined a few days, and was now suffering from a very threatening form of puerperal fever, but was fortunately attended by a surgeon who had often acted with me in similar cases, and had full confidence in the turpentine treatment. He had already administered it internally, and used it externally to the abdomen, which was the seat both of pain and flatulent distension. The lochia were also offensive, and he had vigorously employed vaginal washings. I regret to say I have very few notes of this case, as I was very much occupied at the time and did not often see her. But she derived great benefit from the treatment as regarded the abdominal and uterine pain and tenderness, and then she had phlegmasia dolens in one leg, which was treated also by turpentine with success. Her illness was, however, very severe, and her recovery slow, for she became the subject of several secondary abscesses in the limbs, which kept her in a weak state for a long time. She, however, eventually got quite well, and has had children since, being strong and well at the present time—June, 1871.

Case 19.—Mrs. R., aged only 19 years, was confined a few days ago with her second child, and is now very ill, with all the usual symptoms of puerperal fever—rapid pulse, oppressed sensorium, tympanitic abdomen, anxious countenance, and offensive lochia. Her respiration also was laboured, panting, and I thought her almost without hope of recovery, especially as she had taken turpentine, and it made her sick, so that it could not be continued. She had, however, derived much relief from pain from the free use of it externally to the abdomen. She had had no sleep for many hours, and her general appearance was very unfavourable. I advised turpentine in the form of enema, with laudanum added to it, so as to procure sleep, if possible; and sustained her with as much food and stimulants as her stomach would bear; but treatment was of no avail, and she gradually sank and died.

Case 20.—Mrs. M., aged 25, was confined, eight weeks ago, with her first child. Labour natural, but severe. She went on well for a fortnight, and then had a rigor and other symptoms of puerperal mischief, which passed off under the use of turpentine. But in about three weeks she had another rigor, and has had a quick pulse ever since, with pain and tenderness in the left iliac region, and difficulty in passing urine. She had no other very decided feverish symptoms at this time, but became very pallid, and showed signs of great prostration, when I was summoned to visit her. On examining per vaginam I could feel a hard swelling to the left of the os uteri, pressure on which caused the same kind of pain and in the same place as pressure above Poupart's ligament, and my impression was that a pelvic abscess was forming. We agreed to foment the painful part freely with poppy liquid, and to give her steel and quinine, and a mixture containing ammonia and gentian, with a view to restore appetite; nourishing diet and wine. She lingered on for some time, but I encouraged her to hope for recovery. I did not see her again, but I believe there was an abscess, which discharged itself either by vagina or rectum, and she at last perfectly recovered.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

CYSTIC CARCINOMA OF RIGHT BREAST—TAPPING—AFTERWARDS EXCISION—RECOVERY.

(Under the care of Mr. POLAND.)

For notes we are indebted to the House-Surgeon, Mr. Jalland.

E. G., aged 37, married, no children, was admitted on June 19. General health good; no history of cancer in the family; one sister died of consumption. About six months ago was struck on the upper part of right breast by the handle of a mangle, which caused a good deal of pain and discoloration. Has felt shooting pains in the breast ever since. Two months ago she noticed a small hard swelling, together with increase of pain in the part. The breast was strapped for a fortnight by a medical man. Finding the tumour increase, she came to the Hospital.

On Admission.—Patient is a stout, healthy-looking woman. On manipulating the right breast a large circumscribed tumour is felt, which communicates a sense of deep fluctuation to the touch; there is a large amount of fat developed around the gland; very painful on pressure. Some slight enlargement of axillary glands.

June 26.—The patient being placed under the influence of chloroform, the tumour was punctured with a trocar and canula by Mr. Poland, and about sixteen ounces of bloody serous fluid was drawn off; only some slight hardness remained of the tumour. The breast was strapped afterwards. Mr. Golding Bird examined the fluid, and reported—"Fluid red. When standing separated into a clear yellowish-red fluid above, and thick, blood-like, partially-coagulated sediment. The last was composed nearly entirely of blood corpuscles, which adhered in lines (*rouleaux*). Besides blood there were small isolated patches of white cells of different sizes, nucleated and hidden with much granular matter."

July 9.—Since tapping, the tumour has got much harder and very painful, so to-day, chloroform being administered, Mr. Poland excised the breast. Torsion applied to the vessels, and the edges of the wound brought together by sutures.

Since the tapping the cyst had gradually filled again, so that at the time of the excision the breast was as large as before. On section of the tumour there was found a large cyst cavity, and several smaller cavities opening into it. There were also numerous masses projecting into the cyst cavity, which were hard in consistence, and readily yielding juice when scraped. The cyst-wall was vascular, and the deeper part could be dissected off the breast-tissue beneath without much difficulty. On examining the fresh section under the microscope, countless oval and round cells, with delicate outline and one or more nuclei, were seen among a delicate network of fibres.

12th.—The dressing removed to-day; a good deal of discharge; wound looking healthy. Temperature 101·2°; pulse 98.

28th.—Manages to get about the ward now; wound granulating up nicely; some enlargement of axillary glands to be distinctly felt. Complains of no pain, and may be considered to be convalescent.

ST. GEORGE'S HOSPITAL.

INTENSE PAIN IN HEAD—PARTIAL PARALYTIC SYMPTOMS—GREAT MITIGATION ON REMOVAL OF DECAYED TEETH—SUPPOSED SYPHILITIC ORIGIN OF THE AFFECTION.

(Under the care of Dr. OGLE.)

William G., aged 35, who had had syphilis fourteen years before, was admitted into St. George's Hospital in September, 1871, for pain in the head and suffering from epileptic fits, under Dr. Fuller's care. He so far improved as to go down to the Convalescent Hospital, where he had more fits. He again was admitted into St. George's Hospital, complaining of much pain in the head, right arm, and hand, but not at all in the leg, and also of constant vomiting. The pupils were dilated, and there were some "nodes" on the ulna and sternum. His case was described as one of syphilitic periostitis. Under the use of ten-grain doses of iodide of potassium, and subsequently of iodide of sodium and citrate of iron, he continued to improve until he left the Hospital at the end of October.

At the end of December he was re-admitted under Dr. Ogle, suffering from intense pain in the head and neck and right ear. The power of vision, especially with the right eye, was defective, and he was passing very sleepless nights. The urine was alkaline, and free from either sugar or albumen. Twenty-grain doses of bromide of potassium were given three times a day, and thirty-grain doses of chloral at bedtime, with occasional simple aperients, also nourishing diet. The teeth were exeessively decayed and painful, and Dr. Ogle thought the headache might be connected with their condition, but, the dentist at the time objecting to remove them, they were undisturbed. Subsequently, as the pain in the head was so severe, a blister was applied to the nape of the neck, and ten grains of the iodide of potassium were added to his medicine.

At this date (Jan. 19) the patient could hardly see with either eye, and he was very confused in thought, and irrational, and in much distress. The tongue, when protruded, was deflected to

the right, and the right nostril and the aperture of the right eyelid were much larger than those on the left side. On touching and pinching the skin of the right side of the face and neck and right arm, distinct numbness existed; not so elsewhere. Morphia draughts were given at night.

On the 28th, eyesight in both eyes was quite gone, and a distinct "rash" existed over the entire face. The pupils of both eyes were very large, and entirely inactive to light. He was very low and depressed. The pulse fell considerably in strength, and he appeared greatly to have lost muscular power in general. At one time (for three or four days) it was thought he must have died. Mr. Carter examined the eyes at this period, but found nothing abnormal with the ophthalmoscope. Pain still being so complained of in the head, in spite of continuance of medicine, at Dr. Ogle's request several decayed offensive teeth were extracted, and another blister applied to the neck, the medicines being omitted.

For several days after this the pain was much mitigated; vision returned gradually, but completely, strength was regained, and, saving some degree of headache, the patient went to the Convalescent Hospital again tolerably comfortable, having latterly only taken gentian and senna aperients, and a warm bath or two.

In this case Dr. Ogle recognised the syphilitic character of the disease, yet he attributed much of the severe headache, sleeplessness at night, and defective vision to the effects of the decayed teeth, on the removal of which improvement in respect of the above symptoms quickly resulted. From the history, symptoms, and results of treatment, Dr. Ogle thought the case had undoubtedly a syphilitic origin.

PECULIAR DELIRIUM—SLOWNESS OF PULSE—SUDDEN ACCESSION OF HEMIPLEGIA—PECULIAR SUPPURATION OF THE EYELIDS ON THE PARALYSED SIDE.

(Under the care of Dr. OGLE.)

J. H., aged 33, was admitted November 30, 1871. He was a well-made man, with rather a pale face, and had been in the army, where, as it appeared from his discharge-paper, he had suffered much from syphilis and delirium tremens. On admission he was unable to give any clear account of himself, so confused was he in mind. He was in no great pain at the time, but said he had slight headache in the forehead, and had a very heavy look. He was in a very unquiet state, continually moving his fingers about as though he had something in his hand, and when asked, said "he was feeling for a key." He also was frequently plucking at the counterpane of the bed, as though picking up something. There was, however, no tremor of the muscles, and though there was some delirium, it was not like that of delirium tremens. The pulse was remarkably slow, being only *forty-eight per minute*. The temperature was 98·4°. Some tenderness was complained of when the abdomen was touched. The tongue was protruded straight, and was coated at the base. There was no want of equilibrium in the facial muscles, no appearance of want of power in any of the limbs, and no unnatural appearances were noticed about the eyes. Free purging was resorted to, and chloral at bedtime; and in a day or two ten-grain doses of bromide of potassium, increased to twenty grains thrice a day. Later on iodide of potassium was added. Mr. Carter found no morbid appearances on examining the eye with the ophthalmoscope. Under treatment he went on very well, but became very deaf with the left ear, and was about to be discharged, when great pain at the left side of the head came on, and on January 7, some days afterwards, he was affected by complete loss of power in the *right* side of the face and the *right* arm and leg. There was apparently no anæsthesia, and the power of swallowing remained perfect. Speech was, however, very greatly affected, and the tongue was much protruded to the right side. A blister was applied to the nape of the neck, and an oil aperient enema given; the iodide and bromide of potassium being continued. Two days after the hemiplegic attack more power had been regained in the arm and leg, and the speech had much improved. This power over the limbs continued to increase, and the tongue to become straighter. Complaint was made of stiffness about the jaws. Whilst in this state suddenly the conjunctiva of the right eye became vascular and then greatly irritated, and subsequently the eyelids swelled and became much inflamed, and a large and painful lachrymal abscess formed in the lower lid, which prevented sleep. Under poultices, etc., the abscess quite healed, and the eye recovered its natural condition. Treatment was continued, and bark given, but he remained at a standstill until about the second week in February, when it was recorded that there was much more power in the affected limbs, the memory was much clearer, etc.; and on the 20th he went out of the Hospital, able to walk several miles a day, and in a very comfortable condition. No albumen and no sugar were at any time found in the urine.

Dr. Ogle specially commented on the condition of the eye and eyelids which supervened on the side which was paralysed; also on the condition of the pulse which preceded the hemiplegia that suddenly came on. He supposed that syphilis and alcoholism were probably combined in leading to the morbid state in this case.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
,, ,,	*Six* ,,	0 14 0
The Colonies and the United States	*Twelve* ,,	1 10 0
,, ,,	*Six* ,,	0 15 0
India	*Twelve* ,,	1 15 0
,,	*Six* ,,	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, AUGUST 24, 1872.

THE ADDRESSES AT THE MEETING OF THE BRITISH ASSOCIATION.

The address of the President of the British Association for the Advancement of Science has this year redeemed the character of these annual orations. Their reputation as scientific theses had been rapidly declining until last year, in Sir William Thomson's theory "Of the Introduction of Life into this Planet," it seemed difficult to conceive how, under the name of science, a lower bathos of unscientific and baseless fiction could be reached. We are heartily glad that the honour of recalling the present generation of scientific members and workers to a truer appreciation of the powers, scope, and limitations of inquiry, has been achieved by one who has long held a foremost place amongst the cultivators and teachers of biology. The boldness with which Dr. Carpenter set himself to denounce "the fallacious and misleading philosophy," "the oppositions of science, falsely so called," abroad in the present day, was the more conspicuous from the position which the orator occupied, not only as the President of a body amongst whom are a large number of distinguished men who could not but feel the home-thrust, but also, inasmuch as he occupied his position by virtue of his attainments as a foremost representative of a science, the cultivation of which has of late years been generally supposed of necessity to encourage materialistic and evolutionary views of man and the universe. After the brilliant, but, as we may be allowed to hold, most unscientific teaching which we have lately listened to from one of the presidential chairs of the British Medical Association,

it is quite refreshing to hear from the lips of the President of the British Association such truths as that the profoundest researches of philosophy, as well as the deep-seated instincts of humanity, point to *mind* as the one and only source of power; and that, while our notion of matter is a conception of the intellect, *force* is that of which we have the most direct—perhaps the only direct—cognisance.

Dr. Carpenter's address undoubtedly took his audience by surprise. He neither expatiated at any length, as he was certainly entitled to do, on the results of his own researches in marine zoology, his accurate investigations of *Foramnifera*, and his remarkable observations of the extraordinary species *comatulæ;* neither did he enlarge upon the additions to science made by himself and Dr. Wyville Thomson by their inquiries into the physical and biological conditions of the deep sea—inquiries which seem destined to have such an important influence, not only on current ideas of the distribution of species in space and time, but on theories of the relations of strata and of geological time. These, which are pre-eminently his own subjects, he passed over in a few sentences, and then he boldly took up the new ground he had marked out for himself. His predecessors had opened these meetings with a discourse on some aspect of Nature in her relation to man. He invited their attention to the other side of the inquiry—that which concerns man as "the interpreter of Nature"—to a consideration of the mental processes by which are formed those fundamental conceptions of matter and force, of cause and effect, of law and order, which furnish the basis of all scientific reasoning, and constitute the *philosophia prima* of Bacon." He hoped to satisfy his hearers that "those who set up *their own conceptions* of the orderly sequence which they discern in the phenomena of Nature, as fixed and determinate *laws*, by which those phenomena not only *are* within all human experience, but always *have been*, and always *must be*, invariably governed, are really guilty of the intellectual arrogance they condemn in the systems of the ancients, and place themselves in diametrical antagonism to those real philosophers, by whose comprehensive grasp and penetrating insight that order has been so far disclosed." Man, Dr. Carpenter said, is the interpreter of Nature in three characters—the artist, the poet, the man of science. To the artist, who, as the interpreter of Nature, endeavours to awaken within his fellow-men the perception of those beauties and harmonies which his own trained sense has recognised, *Nature is what he individually sees in her.* To the poet, who renders into appropriate forms those deeper impressions made by the nature around him on the moral and emotional part of his own nature, and transfers those impressions to the corresponding part of ours, *Nature is what he individually finds in her.* So to the man of science, *Nature is what he individually believes her to be.* It is true that the philosopher's interpretation of Nature *seems* less individual than that of the artist or poet, because it is based on facts which anyone may verify, and is elaborated by reasoning processes of which all admit the validity. There are many intellects employed on the different chapters of the book of the universe—each takes his special direction; but the general method of study is the same for all. It is a testimony alike to the truth of that method and to the unity of Nature that there is an ever-increasing tendency towards agreement amongst those who use it aright. This agreement it is which give rise to the general belief—in many to the confident assurance—that the scientific interpretation of Nature represents her not merely as she *seems*, but as she *really* is. But careful examination of the foundation of that assurance leads us to distrust its security; for it can be shown to be no less true of the scientific conception of nature than it is of the artistic or poetic; that it is *a representation framed by mind itself* out of the materials supplied by the impressions which external objects make upon the senses. The individual belief of the scientific man rests on very different bases, and has very unequal value in different departments of science. In the exact sciences, of which astronomy may be taken as the type, the data afforded by precise methods of observation can be made the basis of reasoning, in every step of which the mathematician feels the fullest assurance of certainty, and the final deduction is justified by its conformity to known or ascertainable facts, or by the fulfilment of predictions it has sanctioned, or by the actual discovery of phenomena until then unrecognised, as when the unknown disturber of Uranus was found in the place assigned to him by the computations of Adams and Le Verrier. But there is often a liability to serious error in the very first stage of the process—the interpretation of observations. The verification of the prediction, with the facts of observation, is far from proving the intellectual process by which it has been made to be correct. The Ptolemaic system of astronomy, with its cumbrous ideal mechanism of "centric and excentric, cycle and epicycle, orb in orb," did intellectually represent all that the astronomer, prior to the invention of the telescope, could see from his actual stand-point—the earth—with an accuracy *which was proved by the fulfilment of his predictions.*

"And in that last and most memorable anticipation, which has given an imperishable fame to our two illustrious contemporaries, the inadequacy of the basis afforded by actual observation of the perturbations of Uranus, required that it should be supplemented by an assumption of the probable distance of the disturbing planet beyond, which has been shown by subsequent observation to have been only an approximation to the truth. Even in this most exact of sciences, therefore, we cannot proceed a step without translating the actual phenomena of nature into intellectual representations of those phenomena; and it is because the Newtonian conception is not only the most simple, but is also, up to the extent of our present knowledge, *universal* in its conformity to the facts of observation, that we accept it as the only scheme of the universe yet promulgated which satisfies our intellectual requirements."

In other sciences an equal certainty is generally claimed for conclusions that seem to flow immediately from observed facts, though really evolved by intellectual processes; the apparent simplicity and directness of these processes either causing them to be entirely overlooked, or veiling the assumptions on which they are based. Thus, on the assumption that a certain line which is seen in the spectrum of a hydrogen flame *means* hydrogen also when seen in the spectrum of the sun's chromosphere, Mr. Lockyer speaks as confidently of the sun's chromosphere of incandescent hydrogen as if he had been able to capture a flask of the gas; but it is by no means inconceivable that the same line might be produced by some other substance at present unknown. So Dr. Huggins, on a like assumption, deduces from the different relative positions of certain lines in the spectra of different stars that these stars are moving from or towards us in space. The assumption possesses a high probability, because the same chemical elements have been detected in those filmy cloudlets which seem to be stars in an early stage of consolidation. There is less ground for assuming the existence of the new hypothetical substance "helium," simply because Frankland and Lockyer have discovered in the spectrum of the yellow solar prominence a bright line not identifiable with that in any solar flame; the conclusion may be doubted until the assumption receives the confirmation Mr. Crookes was able to supply in the case of thallium.

But, in a large number of cases, scientific interpretations are simply matters of judgment, eminently personal acts; the value of the result depending in each case on the qualification of the individual for forming an opinion. The surest of such judgments are those dictated by common sense. The trustworthiness of common-sense decision arises from its dependence, not on any one set of experiences, but upon our unconscious co-ordination of the whole aggregate of our experiences—not on the conclusiveness of any one train of

reasoning, but on the convergence of all our lines of thought towards this one common centre. For instance, it is common sense that has decided that the flint implements of the Abbeville gravel-beds were shaped by human hands, and the accumulation of the examples has given irresistible cogency to the conclusion. In proceeding upwards, however, from such questions as the common sense of mankind is competent to decide, we come to those in which special knowledge is necessary to give value to the judgment, and then the interpretation of nature by the use of that faculty comes to be more and more individual. Of all sciences geology is that which seems to Dr. Carpenter most completely to represent Nature as seen through the medium of the interpreting mind.

"The whole tendency of the ever-widening range of modern geological inquiry has been to show how little reliance can be placed upon the so-called 'laws' of stratigraphical and palæontological succession, and how much allowance has to be made for local conditions. So that while the astronomer is constantly enabled to point to the fulfilment of his predictions as an evidence of the correctness of his method, the geologist is almost entirely destitute of any such means of verification."

Dr. Carpenter then proceeded to inquire into the origin of those primary beliefs which form the groundwork of all scientific reasoning, the subject so long debated by the intuitionists and the advocates of experience as the basis of all knowledge. He thinks that a means of reconcilement between the two sections of philosophers may be found in the idea that *the intellectual intuitions of any one generation are the embodied experiences of the previous race.* He believes that there has been a progressive improvement in the thinking power of man, and that acquired mental habitudes impress themselves upon the organisation, and thus become hereditary. Knowledge itself is not hereditary; but aptitude for the acquirement of knowledge may be inherited. Acquired aptitudes, produced by the intellectual culture of ages, become a second nature to everyone that inherits them. Thus it is that we find generations capable of accepting conceptions which appear to them self-evident, that have been rejected by previous generations in consequence of the want of intellectual power to apprehend them or of mental preoccupation. This theory does not exclude the intuitions of individual genius. But who can suppose that a Bidder or Colburn could suddenly appear in a race of savages that could not count beyond five, or a Mozart could be born amongst a tribe whose only instrument was a tom-tom?

The conception of matter in its relation to force, and the question whether the world is real or ideal, were next discussed. Matter in the abstract is a something which has a permanent power of exciting sensations; a property of matter is the mental representation of some kind of sensory impression received from it; and the idea of any particular kind of matter is the representation of the whole aggregate of its sense-perceptions which its presence arouses. All we know of matter is an intellectual conception; and it is only because the healthy mind finds its own experiences consistent with each other, and consistent with the experiences of others, that we can draw a distinction between a real and ideal world—between our waking state and our dreams. Here common sense comes to the rescue. Whilst our notion of matter is a conception of the intellect, force is that of which we have the most direct, perhaps even the only direct cognisance. Force is not a mere fiction of the imagination, it is not merely matter in motion. In a machine in action the motion can be seen by the eye, but the moment the hand is put upon any part of the machine in order to arrest its motion direct cognisance is taken of the force which produced that motion, through the feeling of the effort required to resist it.

"Now, since it is universally admitted that our notion of the external world would be not only incomplete, but erroneous, if our visual perceptions were not supplemented by our tactile, so, as it seems to me, our interpretation of the phenomena of the universe must be very inadequate, if we do not mentally co-ordinate the idea of force with that of motion, and recognise it as the 'efficient cause' of those phenomena—the 'material conditions' constituting (to use the old scholastic term) only 'their formal cause.' And I lay the greater stress on this point, because the mechanical philosophy of the present day tends more and more to express itself in terms of *motion* rather than in terms of *force*; to become *kinetics* instead of *dynamics*. Thus, from whatever side we look at this question—whether the common sense of mankind, the logical analysis of the relation between cause and effect, or the study of the working of our own intellects in the interpretation of nature—we seem led to the same conclusion; that the notion of *force* is one of those elementary forms of thought with which we can no more dispense than we can with the notion of space or of succession."

It is the substitution of the dynamical for the mere phenomenal idea which gives their highest value to our conceptions of the order of nature. The so-called laws of planetary motion discovered by Kepler are nothing more than comprehensive statements of certain groups of phenomena determined by observation. The interpretation of that motion given by the profound insight of Newton is the most illustrious example of the dynamical conception. Whilst no law which is simply a generalisation of phenomena can be considered as having any coercive action, we may assign that value to laws which express the universal conditions of the action of a force whose existence we learn from the testimony of our own consciousness.

"The assurance we feel that the attraction of gravitation *must* act under all circumstances according to those simple laws which arise immediately out of our dynamical conception of it, is of a very different order from that which we have in regard (for example) to the laws of chemical attraction, which are as yet only generalisations of phenomena. And yet, even in that strong assurance, we are required, by our examination of the basis on which it rests, to admit a *reserve* of the *possibility* of something different; a reserve which we may well believe that Newton himself must have entertained. A most valuable lesson as to the allowances we ought always to make for the unknown "possibilities of nature," is taught us by an exceptional phenomenon so familiar that it does not attract the notice it has a right to claim. Next to the law of the universal attraction of masses of matter, there is none that seems to have a wider range than that of the *expansion of bodies by heat and their contraction by cold.* Excluding water and one or two other substances, the fact of such expansion might be said to be *invariable*; and, as regards bodies whose gaseous condition is known, the law of expansion can be stated in a form no less simple and definite than the law of gravitation. Supposing those exceptions, then, to be unknown, the law would be *universal* in its range. But it comes to be discovered that water, whilst conforming to it in its expansion from 39½° *upwards* to its boiling-point, as also, when it passes into steam, to the special law of expansion of vapours, is exceptional in its *expansion* also from 39½° *downwards* to its freezing-point; and of this failure in the universality of the law no *rationale* can be given. Still more strange is it that, by dissolving a little *salt* in water, we should remove this exceptional peculiarity; for *sea*-water continues to contract from 39½° downwards to its freezing-point 12° or 14° lower, just as it does with reduction of temperature at higher ranges. Thus, from our study of the mode in which we arrive at those conceptions of the orderly sequence observable in the phenomena of nature which we call 'laws,' we are led to the conclusion that they are human conceptions, subject to human fallibility; and that they *may* or *may not* express the ideas of the Great Author of Nature. To set up these laws as self-acting, and as either excluding or rendering unnecessary the power which alone can give them effect, appears to me as arrogant as it is unphilosophical. To speak of *any* law as 'regulating' or 'governing' phenomena, is only permissible on the assumption that the law is the expression of the *modus operandi* of a governing power. I was once in a great city which for two days was in the hands of a lawless mob. Magisterial authority was suspended by timidity and doubt; the force at its command was paralysed by want of resolute direction. The 'laws' were on the statute-book, but there was no power to enforce them; and so the powers of evil did their terrible work, and fire and rapine continued to destroy life and property without check, until new power came in, when the reign of law was restored. And thus we are led to the culminating point of man's intellectual interpreta-

tion of Nature—his recognition of the unity of the power of which her phenomena are the diversified manifestations. Towards this point all scientific inquiry now tends. The convertibility of the physical forces, the correlation of these with the vital, and the intimacy of that *nexus* between mental and bodily activity, which, explain it as we may, cannot be denied, all lead upward towards one and the same conclusion; and the pyramid of which that philosophical conclusion is the apex, has its foundation in the primitive instincts of humanity."

"Science deals with our conception of the order of nature, theology with its cause; and when science attempts to substitute the former for the latter, it is invading a province of thought to which it has no claim; "for whilst the deep-seated instincts of humanity, and the profoundest researches of philosophy, alike point to mind as the one and only source of power, it is the high prerogative of science to demonstrate the *unity* of the power which is operating through the limitless extent and variety of the universe, and to trace its *continuity* through the vast series of ages that have been occupied in its evolution."

We have thus endeavoured to give our readers some idea of the line of thought running through this magnificent address. The length to which our abstract and quotations have run compels us to postpone for the present any notice of the work done in the Section of Biology. We can only indicate the tenor of the address delivered by Dr. Sanderson in the Department of Anatomy and Physiology.

Dr. Sanderson excused himself from the task of giving a retrospective account of the progress of physiological research during the past year on the ground that, although the work done was not inconsiderable, we in England have taken very little part in it. Had he attempted it, he would only have been chronicling the achievements of the physiologists in Germany, who are now holding their scientific meeting at Leipsic. It is more agreeable and encouraging to look forward than to look backward. He then inquired the reason why physiological research is less successfully pursued in England, and this he found in the general want of scientific education. If a man wants to be a physiologist, he must, as things at present stand, study Medicine. Although there is no logical reason for it, Dr. Sanderson thinks that this close connexion between Medicine and physiology is likely to continue, on the general ground that any science is likely to be studied with more earnestness by those who have to practice an art founded upon it than by others. Physiologists, however, are not yet in a position to advise the doctors very successfully, "and they, resting on the more reliable teaching of experience, are quite willing to do without us." The English medical schools and an ordinary medical education afford a very poor preparation for a scientific career. The reason is that the medical sciences have developed far too fast for the resources of the medical schools. Dr. Sanderson then took a retrospective view of the position of physiological science twenty years ago, when a lecture-room and a gallery for showing preparations with a microscope were all that was thought necessary even in large schools of Medicine. In the present state of things, Germany has done much of the work, France not so much. In England physiology has been represented by the teachers of Medicine, and it must be confessed that we have not been possessed either of the men or means for experimental research. The melancholy picture, however, which Dr. Sanderson drew of our benighted state in England, was redeemed by a reference to the efforts which are being made in the great schools of London, and in the elder universities and the University of London, to provide adequate buildings and appliances for the teaching of experimental physiology. The initiative has been taken by Trinity College, Cambridge, which has provided a place for study, from which three valuable researches have already sprung. Dr. Sanderson then proceeded to discuss the requisites of a scientific education, of which he said mathematics must be the corner-stone, and then physics and chemistry. Physiology could not be recommended as a branch of education on the same high grounds. It could not be made a descriptive or a mental drill, but it should be taught on the ground that it is usefully applicable to the common affairs of life.

We have not space at present to discuss several of the important questions raised by Dr. Sanderson's paper. The relation of physiology with modern Medicine, we think, is really closer than the Professor allows. At all events, we believe that without the interest which practical Medicine has lent to physiology, that science would never have reached even its present imperfect development.

ARMY MEDICAL REPORT, 1870.

The Blue-book containing the Report of the Army Medical Department for 1870 is a bulky volume of 670 pages. Its contents are of the varied character such volumes ordinarily present, and to the public generally their value is very unequal. The Report is favourable as compared with past years, both as regards the number of men admitted to hospital and the number of deaths, but the ratio of those discharged invalided is considerably higher than the average of the previous nine years. The ratio per 1000 admitted to hospital was lowest in Canada of all stations—lower even than in this country,—and highest in China and Japan, India coming next in unhealthiness, though the sick-rate of Ceylon, Mauritius, St. Helena, and the Cape were all high. The mortality was decidedly lower than the average of the last ten years, especially in India, Bermuda, Ceylon, and the Straits Settlements. As usual, there has been very much sickness at Labuan, and the mortality has been great. In Western Africa the mortality was less than half that of the preceding year. So much, briefly, for the statistics afforded by the earlier part of the volume—the Report proper. Let us turn to the Appendix, which contains matter more likely to interest the mass of the Profession.

The Appendix begins by a report on Hygiene, for the year 1871, by Dr. Parkes, of Netley. In it he gives an interesting abstract of Ehrenberg's interesting work on the minute organisms found in the atmosphere. In this work are collected the results of the researches of Ehrenberg himself and others since 1847. Relating to water, the most interesting abstracts are those of Cohn "On the Microscopic Examination of Water"; of Sanderson "On Microzymes"; and Wohlrab "On the Spread of Typhoid by Water." The German food-supplies during the war were reported on by Dr. Roth, Surgeon-in-Chief to the Saxon army, who also reports on knapsacks and marches, which are here noticed; and some interesting details are given of the food of Paris during the siege. The views of Dr. Oldham on malaria are noticed, but not exactly approved; and some interesting particulars are given, on the authority of Dr. S. Meredith, as to the malarious sites of Assam and Demerara. The cholera at Königsberg, too, comes in for notice. In short, the report is the most complete and useful thing of the kind one can readily lay their hands on.

An interesting account of the field medical service of the Prussian army, from the pen of Surgeon-Major Fitzgerald, comes next. This, though of much technical value, we are compelled to pass over. Next follows an article by the same author on battle-field surgery, mainly as seen with the Prussians. Among them amputations in the field are discouraged and resections forbidden. The author is strongly in favour of early amputation, and delay in all kinds of operations is deprecated; nevertheless, it is clear that in many instances, where the wounded are numerous, some operations must come later than others. The plan of amputating most in favour with the Prussians was by the circular operation. Ordinary flap operations are clearly unsuited for military surgery, but skin-flaps with circular cuts through the muscles do well. Sédillot proposed a plan of allowing the bone to project beyond the soft parts at first, but this plan he subsequently

abandoned. For dressings Mr. Fitzgerald speaks very highly of prepared oakum; and no doubt this is one of the best dressings we have seen.

A valuable paper, by Professor Longmore, on the preservation of attitude in soldiers killed by gunshot wounds, follows. This is an extremely interesting topic. A number of exceedingly curious examples of this phenomenon are given. In it the living pass instantaneously into the condition of a statue, and remain in whatever attitude was last assumed until decomposition sets in. Nor is it necessary that the wound should be instantaneously mortal to produce this effect. It is attributed by Dr. Rossbach, who has written on the subject, to the instantaneous setting in of cadaveric rigidity, but this will not account for the phenomenon; more probably is it due to something which produces for a time after death a contraction of the muscles, till they become rigid in the usual way, whatever that may be.

The next paper consists of a report on the Medical arrangements for the Autumn Manœuvres of last year by Inspector-General Lawson; on which follows an exceedingly interesting report on the Medical Division of the Royal Victoria Hospital, Netley, by Professor Maclean. He explains why so many men are discharged the service from Netley. It is the great invaliding station. Men arrive from India by hundreds in the day sometimes, and all, whatever their complaint, are suffering more or less from the effects of climate. Now, many of these, if properly treated and kept at home for a time, might return to duty; but this is not possible, and so they have to be discharged. He reports on the whole favourably of the use of quinine hypodermically. If the neutral sulphate be used, no ulceration follows. Such a plan is likely to be highly serviceable where there is much gastric irritation in intermittent fevers.

Dr. Maclean also points out what is of great interest, that much of the lung disease, which is such a scourge in the army, is not tubercular, but inflammatory. This is a matter of very great importance; such lung diseases are in great measure preventable and remediable, and steps ought to be taken to diminish their prevalence. We cannot do full justice to this valuable report, but we shall briefly point out some of the practical hints to be obtained from it. First, Dr. Maclean recommends to our notice the eucalyptus globulus in cardiac asthma. The leaves are used as cigars, and relief commonly follows. The next is the great value of the pneumatic aspirator in the treatment of hepatic abscess. On this point Dr. Maclean gives us certain observations of great value. The third and last point is, that in subacute and chronic dysentery ipecacuan may be given with advantage in doses of twenty-five or thirty grains, notwithstanding that the debility of the patient is excessive, and even after his return to this country. Nay, more, this dose may be repeated in twelve hours, if necessary.

Professor Longmore's Report on the Surgical Division of Netley Hospital follows. He points out that the number of surgical patients admitted had greatly fallen off in 1870. This he attributes to the fact that, so many invalids coming together, they have to be placed anywhere, and not drafted regularly into the surgical division, as they used to be when they came round the Cape. Some exceedingly interesting observations on syphilis follow. Professor Longmore points out that in advanced syphilis peculiarities of constitution commonly induce the disease to settle in one particular organ or tissue, though affections of the periosteum and bones always occupy a prominent place. Experience, he says, does not confirm the belief that mercury has any special effect in inducing these—indeed, some cannot be cured without the use of that drug. Curiously enough, the West Indies, though by many believed to be the original source of syphilis, now seems to enjoy an immunity from that disease. Professor Longmore thinks the prognosis in many cases of secondary syphilis bad—bad in itself, but much worse from the risk of intercurrent mischief, which carries off these invalids only too readily. Attacked by any serious illness, they fall as the leaves in November.

To some of the many other interesting points in this Report we must return on a future occasion.

ACTION FOR NEGLIGENCE.

The case of Watkins *v.* Mecres was tried at Bristol on the 15th inst. The plaintiff was cook and housekeeper in Sir John Awdry's family, and was 34 years of age. On November 24, 1870, on going an errand, her foot slipped on a small stone; she fell, and broke her leg a little above the ankle. Dr. Crisp saw her at a cottage near the accident, and packed up the limb. She was then removed to her master's house, and his family surgeon, Dr. Meeres, was sent for on the following morning. McIntyre's splint and Salter's cradle were employed. Some conflict of evidence took place as to the exact time the splints were kept on; but it appeared that the first was taken off on the third and fifth days of the accident, as muscular action had displaced the limb. The plaintiff said the splint was removed on December 24; but the defendant said it remained on until January 3.

On January 12, in consequence of the crowded state of the house, she was removed to a cottage near, and on February 13 she returned to her work. Great discrepancy occurred in the evidence respecting her using the injured leg, the plaintiff declaring that she was advised by defendant to use it freely, and that Lady Awdry had not cautioned her about it. This statement was positively contradicted by the defendant and Lady Awdry. The plaintiff said that the leg was not straight when she went back; the defendant declared it was. Some time after the leg became worse, and the union of the bones began to give way. The injury became permanent, and the plaintiff was crippled.

In support of the case the first witness called was Dr. Bishop, to whom she applied in April, 1871. He appears to have thought there had been some negligence, and plaintiff got from him a pair of boots with splints, which enabled her to go about. The two grounds of complaint were that the defendant had not treated the fracture correctly, so that the foot became inverted, and that his direction to the plaintiff to exercise her leg was utterly wrong. Dr. Crisp, who had first seen the accident, said both bones of the leg were broken—the fibula three inches from the ankle, and the tibia close to the joint. He could not say the treatment of the defendant was wrong. Dr. Bishop thought the amount of exercise which had been taken was the chief cause of the failure. Mr. Gore, Senior Surgeon of the Bath Hospital, believed that the case was one of "Pott's fracture," and did not believe that the tibia was not broken. "Taking this view of the case, he was of opinion that the treatment was quite wrong. He assumed, however, that the plaintiff was permitted by the defendant to use the limb at the end of two months, but stated that, looking at the foot now, he was of opinion that it never had been rightly placed in position." A number of witnesses were called for the defence, to show that the injury was caused by overwork at a busy time, and that she had been directed to keep the limb perfectly at rest. The defendant described the nature of the injury, which was an oblique fracture of both bones close to the joint. He detailed his mode of treatment. He had told the plaintiff there might be some deformity, but if she followed his directions, and kept the limb at rest, she would have a useful, if not a perfect one. The injury had certainly resulted from her not following his directions. A number of leading medical practitioners of the city and neighbourhood were called for the defendant, who, assuming the fracture and treatment to have been as described by the defendant, considered his treatment was skilful and correct. The plaintiff, in April of this year, applied to the defendant for assistance, and he appeared willing to give her £50, while repudiating

any liability, but declined to give her £100, for which she asked. The learned judge directed the jury that a medical man was only expected to bring reasonable care and skill to the exercise of his calling. In order to charge the defendant there must be something more than a mere mistake on his part. There must have been in treating the case either culpable ignorance of his profession or culpable want of care in his treatment of the case. The learned judge then went carefully through the evidence, and the jury, after a minute's consultation, returned a verdict for the defendant.

Now, we must find fault with Mr. Gore. He was bound, in appearing against a brother-practitioner—a man of position and acknowledged ability—to have made himself well acquainted with the case, not only by examination (which he no doubt did), but from the defendant himself. "Beliefs" and "assumptions" should not be entertained by a medical witness, particularly when he is hostile, and is liable to error. He had no business to "take his own view" of the case without such due and searching inquiry from the person whose character was at stake as should justify him in taking such a "view." Mr. Gore's opinion was unsupported by a single witness for the plaintiff or defendant.

THE WEEK.

THE BRIGHTON MEETING.

Amongst topics of the day must be mentioned the superb hospitality shown to the members of the British Association for the Advancement of Science by the Brightonians generally, and by our *confrère* Mr. Cordy Burrows in particular. That there was a remark of questionable taste made in Mr. Stanley's presence is true, but the whole thing is now apologised for and forgotten. We can afford to laugh when one of Mr. Stanley's faithful toadies of the *Daily Telegraph* describes the Brighton medical practitioners as "Diafoiruses who inhabit huge houses, roll about in huge chariots, wear sparkling diamond rings, and generally disport themselves in lordly style. Their fees are high, their knowledge of Medicine is sometimes of the kind which would have taught Molière new jokes, but to their importance there is absolutely no limit."

DEATH OF MR. ALFRED POLAND, F.R.C.S.

To the death of Mr. Skey we have now to add that of another distinguished member of the Profession. Mr. Poland, of Finsbury-circus, expired at his suburban residence on the 21st inst., aged 51, after a short but severe illness, accelerated by domestic trial. He received his professional education at Guy's Hospital, and was admitted a Member of the Royal College of Surgeons on August 4, 1843, and a Fellow, by examination, on August 12, 1847. He had previously obtained an extraordinary premium of fifty guineas from the Council of the College for his dissertation on the "Nerves of the Orbit in Mammalia and Man"—the subject of the Collegial-Triennial Prize. In 1853 he obtained the Fothergillian Medal for an essay on "Injuries and Wounds of the Abdomen," and in 1857 he was successful in carrying off the Jacksonian Prize for his paper on "Gunshot Wounds and their Treatment." As editor of the Guy's Hospital Reports, and by his numerous and valuable contributions in Holmes's "System of Surgery" and the medical journals, he was deservedly well known. Mr. Poland was Surgeon and Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery at Guy's Hospital. Mr. Poland was a private pupil of Mr. Aston Key's. Amongst his professional friends his practical skill in Surgery was held in the highest estimation.

A MEDICAL CANDIDATE FOR PARLIAMENT.

Dr. Evory Kennedy has issued his address to the electors of Londonderry, his native city. He is an advanced Liberal, and advocates "Home Rule."

BANQUET OF THE BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

The Brighton and Sussex Medico-Chirurgical Society gave a grand banquet on Saturday last in honour of the meeting of the British Association. The President of the British Association, Mr. Hancock, the President of the College of Surgeons, Sir W. Thompson, Mr. Erichsen, Mr. Prestwich, Dr. Burdon-Sanderson, Mr. Flower, Dr. Gamgee, Mr. Stanley, the Mayor and Vicar of Brighton, &c., were present. The Presidents of the Colleges of Dublin and Edinburgh were invited, but could not attend. The dinner was served in the magnificent banquetting-room of the Pavilion. Music and singing enlivened the proceedings.

ANDERSON'S UNIVERSITY, GLASGOW.

Among others, we hear that Dr. D. Campbell Black is a candidate for the Professorship of Medical Jurisprudence in Anderson's University, Glasgow, void by the resignation of Dr. Simpson.

THE CHOLERA.

The maximum of the epidemic in St. Petersburg, as to *morbility*, took place from July 20 to 27, the average of patients amounting daily to 426; but as to *mortality*, it reigned between July 13 and 24, when two-thirds of all patients died. Cholera has spared women very much; 70 in 100 patients belonged to the male sex, but nearly one-half recovered. Women, on the contrary, if once attacked, cannot resist as strongly as men do; out of 100 female patients, only 33 overcame it. Taking the whole population of the invaded Russian districts together, not more than 5·4 in 100,000 suffered from cholera. In the last four years Kieff has been regularly visited by it, and decimated in a deplorable manner. Besides Moscow and St. Petersburg, there occurred in Russia this year—from June 11 to 27—in sixteen days 8688 cases of cholera, out of which 3181 died. On the latter day 1500 patients were under medical care. In Moscow, from June 2 to 22, 138 cases came under notice, out of which 67 succumbed. In St. Petersburg, from June 11 to 19, 1669 cases were reported, with 768 deaths. In Kieff, from June 11 to 19, 2744 cases, with 1261 deaths. Besides, there were cases observed at Cronstadt, Bucharest, and Constantinople, which places only slightly suffered. It is considered that the European powers ought to act in accordance, in order to stamp out this most dangerous and ugly foe.

ACTION AGAINST THE "AUSTRALIAN MEDICAL JOURNAL."

An action was brought by Dr. Frederick Lloyd, J.P., of West Melbourne, to recover £1000 damages from Mr. John Stilwell, trading as Stilwell and Knight, proprietors of the *Australian Medical Journal*, for the following alleged libel upon the plaintiff, published in the number of the publication for February, 1872:—

"As this antagonism was known to be based on personal dislike only, it would have been bad taste, even if Dr. Lloyd's qualifications had rendered him in other respects eligible to include him with Dr. M'Crea. With Dr. Gunst and Mr. Reid the trio of absurdity is complete. A commission which should represent the Profession, is its scorn and its laughing stock. We have the three preposterous tailors of the Tooley-street of Melbourne. A board bursting with confident ignorance; an alliance of ridiculous incapacity, claiming to be able to discover something more than the best skill in Europe, after many years of patient toil, has given to the world. . . . . We shall look with considerable interest for the report of the Diphtheria Commission, not for the sake of any information it may furnish us withal, but because it will serve as a record of that ambitious incapacity which is known to distinguish certain ill-furnished pretenders to science, of whom our Profession has but too many examples."

The defendant pleaded not guilty, and that the words complained of were a fair and *bonâ fide* comment upon the appointment of the plaintiff to a public function. The plaintiff's counsel

said that the libel was not sought to be justified. It was pleaded that the words were a fair comment upon the plaintiff's appointment to the commission, but their assertion simply was that the plaintiff was an incompetent medical man. The defence was that the words used were a fair comment upon a man assuming a public position, and that they were written in the interests of the public; that the appointment of the Commission was a farce; and that the style of comment indulged in by the *Medical Journal* was quite usual amongst members of the medical profession. His Honour summed up, pointing out to the jury that the main question they had to consider was whether the words complained of exceeded the bounds of fair criticism and were written in malice. The jury, after a short retirement, sent in to the court to inquire if the parties would accept a three-fourths verdict. The plaintiff declined to do so.

FROM ABROAD.—CHOLERA AND QUARANTINE AT ODESSA.

One of the communications to the *Gazette Médicale* from M. De Valcourt, who at present is on a medical tour, contains some observations which at the present time may be of interest to our readers. It is dated from Odessa, and relates to the cholera and the system of quarantine put into force in that city. This disease, he observes, after having prevailed in several Russian cities last year, and then almost disappearing during the winter, has now reappeared with a new intensity, without, however, by any means assuming the same proportions which have been heretofore witnessed in France—at Paris, Toulouse, and Amiens for example. The towns in the basin of the Black Sea which have paid the heaviest tribute are Kieff, Ekoterinoslaw, Cherson, Kichineff, and Odessa. Up to the date of July 7 there had been 2625 persons attacked at Kieff alone, the number of deaths amounting to 1229. It is not, indeed, surprising that Kieff should have presented a larger number of cases than elsewhere, as it is the holy city, or Russian Mecca, to which crowds of pilgrims resort in order to adore the relics of saints deposited in subterraneous galleries. Poverty, filthiness, and the fatigues of the journey render these unfortunates especially liable to seizures.

At Odessa the number of victims has been less, and the disease has scarcely been met with amongst those living at their ease amidst favourable hygienic circumstances. The scourge recruits its victims almost exclusively from one quarter of the town, the Moldavenka, which is filled with the lowest classes of Jews, workmen, and waggon-drivers. In consequence of the fasts of Peter and Paul these last have lived during the heats of the summer upon cucumbers, gooseberries, and more or less damaged fish. They drink abundantly of water of a very bad quality (a great scarcity of water prevailing at Odessa, which will be remedied by the canal of the Dneister now constructing) of a fermented drink made of black bread and apples, and of corn brandy. In fact, it is a matter of surprise that the mortality has not been greater. Fortunately, some of the circumstances of Russian life are unfavourable to the propagation of epidemics. Thus, the houses consist only of a ground-floor, or at the most of a floor above this, so that each contains but few inhabitants. The streets are generally in a straight line, and most of them are from thirty to forty metres broad. And then all the cholera cases occurring in the city are carried to a special, isolated, well-ventilated hospital, and the few sailors who are attacked in the port are taken to the lazarette.

The quarantine regulations have undergone much alteration. Until recent years the number of travellers arriving in Russia, deterred by the villanous land-carriage and the delays of quarantine by sea, were few in number. Until 1856 every passenger without exception was submitted to from ten to twenty days' quarantine, even when they came from quite healthy ports, and this obligatory and general quarantine was only abandoned in May, 1856, in order to facilitate the evacuation of the Crimea by the army. Other regulations were made in 1858, under fear of importing the plague supposed to be prevailing in Turkey, and continued in force until 1860. During the next four years no quarantine was enforced; but in June, 1865, a quarantine was enforced against Egypt and Turkey on account of cholera, but was abolished next year. As, in 1872, the cholera exists in Odessa, all ships are admitted to free pratique. Those which have had cholera on board are submitted to purification, and the patients are taken to the quarantine hospital. The quarantine establishment at Odessa is of very considerable size, and has a large *personnel* attached to it. The residences for the suspected are numerous, well built and ventilated, and the magazines for goods, etc., are on a large scale. The whole must have cost a great deal in its erection, but is becoming dilapidated; for it is common in Russia to spare no cost in the establishment of public buildings, but to begrudge the annual sum requisite to keep them in repair. The *employés* are numerous and well paid; and on the occurrence of plague, every month of service counts as a year, while if the *employé* dies while on duty his family enjoys great privileges; and one is pointed out, who upon this system of computation enjoys a retiring pension calculated at 120 years of service. The last epidemics of plague occurred in 1828 and 1837. The passengers detained in quarantine are obliged to pay 30 copecks a day for their room, and as much for their attendant, whose living, as well as their own, they have to provide for. Since 1870 the quarantine buildings have not been employed, except for the reception this year of four sailors, who died of cholera. While there are, on the average, but thirty passengers who disembark at the port of Odessa, subject, if need be, to the rules of quarantine, fully 400 travellers arrive by rail free to enter the city without any obstacle. Modern modes of communication render all systems of quarantine entirely illusory—the very persons who arrive most rapidly from the seat of contagion being those who are exempted! M. De Valcourt severely criticises the rules laid down by the International Sanitary Conference of 1866, which, in place of making provisions for the sanitary conditions, which it stated to be all-important, greatly aggravated the quarantine provisions then in force.

"These regulations," he observes, "are no longer possible in face of an immense railway traffic. What has been the result? Turkey, in order to protect herself from the cholera prevailing in Russia, has established a quarantine of ten clear days at Sulina for vessels navigating the Danube, at the Bosphorus for those destined to Constantinople, and at Batoum for those coming from the ports of the Caucasus, although cholera does not exist either at Tiflis or Poti. Consequently, the steam service has been suppressed between Galatz and Odessa, and the sea voyage to Constantinople rendered very long and tiresome, and that without any utility, for nothing prevents travellers leaving Russia by hundreds by taking the Wolociska railway, on the Austro-Russian frontier, and reaching Constantinople by Vienna and Basiach, as the Russian ambassador has just done. Very soon the line uniting Kicheneff and Jassy will be completed, and the distance be much abridged. The system of quarantine, therefore, becomes more and more inefficacious, and occasions obstacles and annoyances which are compensated by no useful result. The rapidity of intercommunication, and the large number of travellers, render the isolation of centres of infection in Europe impossible. The quarantine system has seen its day; and it is now only urgent to insist, but that with redoubled vigilance, upon the adoption of hygienic measures in all centres of population."

The marriage, on Tuesday, August 20, of Professor Odling, of Oxford, with the daughter of Alfred Smee, F.R.S., was celebrated at Wallington, near Carshalton, amidst the good wishes of nearly 2000 guests, including every medical and scientific person of celebrity in town, and all the neighbourhood, gentle and simple. The party adjourned in the evening to "My Garden," where music and dancing were kept up till a late hour.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

No. XX.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

The Medical Society of London—Fothergill, Lettsom, Sims—Library of the Society—Medley's Famous Picture of the Society in 1800—The Medical and Chirurgical Society an Offshoot of the Medical—Expulsion of Mr. Lambert—Reporting and its Difficulties—Drs. Clutterbuck, Uwins, and James Johnson—Dr. Golding Bird—"A Mare's Nest"—The Fothergillian Gold Medal—Mr. Nunneley, of Leeds—Westminster Medical Society—Royal Medico-Botanical Society.

At the time when the Medical Society of London was established in 1773, there was only one similar society in the metropolis, and that was the Physical Society of Guy's Hospital, which still exists, but is little heard of. Amongst the chief founders of the London was Dr. Fothergill, then in extensive practice. It was soon joined by the *élite* of the Profession, and, as the City proper was then the centre of medical practice, it was located in Bolt-court, Fleet-street, in which place it continued to hold its meetings until its amalgamation with the Westminster Society, when it migrated west. Rather later, its chief supporter and munificent donor was John Lettsom, who, like his predecessor Fothergill, belonged to the Society of Friends. These remarkable men were both possessed of considerable talents and acquirements, but differed widely in their mental and moral attributes. Fothergill was a man of the highest honour and of the most benevolent disposition. He practised his profession mainly for the purpose of doing good, and made the pecuniary object of his calling the last of his considerations. Lettsom was of a contrary tone of mind, and was one of those who, if he "spoke of his fee last, was the first to think of it." He amassed a considerable fortune, chiefly from the merchant firms of the City, who then resided for a considerable portion of the year in their mansions within the City walls. But it is due to Lettsom to state that, if he was "greedy of gain," he was munificent in his donations to the Medical Society, to which he appeared to have an ardent attachment, and was for many years its leading mind. For a long period he was a collector of rare books and manuscripts, and these he bequeathed to the Society. Few persons are aware of the value of this bequest. It is not too much to say that the collection of medical books and manuscripts possessed by the Medical Society of London is unique, and the most valuable in the world. But Lettsom did more than this. He left the freehold house in Bolt-court to the Society, so long as the number of its Fellows was not below ten. If ever this occurred, then the house was to become the property of his legal representative. When the Society amalgamated with the Westminster it was thought desirable that some definite arrangement should be come to respecting the house in Bolt-court, and accordingly the trustees of the real property of the Society waited upon Mr. John Lettsom-Elliott, the grandson of Lettsom, and his heir-at-law, on the subject. This gentleman immediately acceded to the request of the deputation, and in the handsomest manner resigned all his interest in the house, which then and there became the property of the Society, and is now let at a very inadequate rent. Those who are curious with respect to physiognomy should inspect the portraits in the library of the Society, of Fothergill and Lettsom, presented some years since by Mr. Edwin Canton. These original likenesses are admirable, and fully bear out the description of the originals.

Whilst on the subject of pictures, it may not be out of place to allude to a remarkable picture which is placed over the chair of the President. The history of this picture is curious and interesting. In the year 1800 a young painter came to London without friends and without patronage. This gentleman, Samuel Medley, was the grandfather on his mother's side of Sir Henry Thompson. Medley had been under some obligation to the President, Dr. James Sims, and, in return for the services rendered to him, painted a portrait of his friend. This was so good a likeness that Sims engaged the artist to portray a meeting of the Society. The result was the picture alluded to. Those of the present day who have not seen this extraordinary picture should see it. The grouping is considered by many to be faulty, but the likenesses are excellent. I have heard the late Dr. Clutterbuck, who knew well all those delineated, say that nothing could be more lifelike. The Fellows are twenty-five in number, and are assembled round the large table, which was then placed in the middle of the room. We have no picture containing so many medical celebrities as this. In the chair is Dr. James Sims, with the President's cocked-hat upon his head, and the wand of Æsculapius before him.(a) Sims was a man of considerable ability, but somewhat overbearing and tyrannical. He managed to retain the chair for many years, and was only removed from it by the strenuous exertions of some of the younger Fellows—Babington and Clutterbuck taking the most active part. Opposite the President, and in the act of addressing the meeting, is John Coakley Lettsom in his Quaker dress. There are also present Dr. Saunders, Physician to Guy's Hospital, and one of the founders of the Ophthalmic Hospital in Moorfields; Edward Jenner, standing conspicuously to the right of the President; William Woodville, the author of the "Medical Botany"; William Babington, the Assistant-Physician to Guy's, and lately apothecary to that institution. There also are John Aikin, the well-known author of some works on popular science; Robert Thornton, the author of a work on medical botany; John Haighton, the uncle of the present Dr. Blundell, and one of the profoundest physiologists and soundest obstetric practitioners of that or any other time. There also are Hooper, the author of the "Medical Dictionary," and the first Ware, who lived to a great age, and was the most famous of oculists. When the picture was cleaned and revarnished, twenty years ago, I mentioned the fact in the *Lancet*, and wrote a few lines on the subject. I had no idea that the painter of a picture fifty years old was living: certainly all those whose faces he has left to us were gone. One man alone was living who had known them all, and he was nearly 90 years of age—Henry Clutterbuck. I was agreeably surprised one morning to receive a visit from Sir Henry Thompson, who came to say that his grandfather, Mr. Medley, had expressed himself as pleased at my notice of his picture, and had sent me a proof impression of the engraving of it; this is signed "Samuel Medley, November 4, 1853." I need scarcely say that I value it very much.(b)

The Society at first published *Transactions*, but this was not found to answer, and they were discontinued. About twenty-five years ago a single volume was published; none have appeared since. The first quarrel of any importance in the Society was on the occasion of removing Dr. Sims from the chair; but no permanent harm was done to the Society by the proceeding. A law was then framed having for its object the limiting of the tenure of office by the President to two years; now it is limited to one year. In 1809 some disagreements took place, and the Medical and Chirurgical Society was established by the secession of several of the most prominent Fellows of the old institution.

In 1828 the expulsion of Mr. Lambert for his libel on Mr. Bransby Cooper took place. It gave rise to a very animated, indeed angry discussion; the anger being considerably augmented by the conduct of the chairman, Dr. Haslam, who was directly against the expulsion, and spoke as a partizan rather than a judge. Eventually, however, the vote for expulsion was carried by an overwhelming majority. When I first attended the Society to report the proceedings, in 1834, the recollection of this famous libel was still strong in the minds of most of the Fellows. I was at first treated with much coolness, and was expected to sit on a back bench, and not communicate with anyone. This was sufficiently irksome, and most inconvenient for me in the matter of hearing the papers or the speeches. After a time Dr. Hardwick, the present deputy-coroner, came on to the reporters' bench, as representative of the *British Annals of Medicine*, a periodical edited by Dr. Wm. Farr. This journal, however, did not long survive, and I was again "alone in my glory." As time

(a) This cocked-hat was worn until about 1832. I believe it is still in possession of the Society. The wand is even to the present day placed before the President.

(b) Copies of this engraving are occasionally to be met with in the print shops.

went on, all ill-feeling towards the *Lancet* subsided, and I became one of the secretaries, orator, and subsequently Vice-President of the Society. I moreover, on one anniversary, received the silver medal for "services rendered to the Society." The more prominent Fellows at this period were Drs. Uwins, Clutterbuck, Whiting, Leonard Stewart, James Johnson; Messrs. Headland, Dendy, Crisp, Callaway, Procter, and Hutchinson.

The papers were usually very practical and good, and the debates animated and to the point. At this time the duties of the reporter were most onerous and difficult; it was very rare for an abstract of a paper to be furnished to me, and I had to take notes of the entire proceedings of the evening. After a hard day's work this was occasionally most laborious, and as the meeting lasted an hour and a half I had as much work to do as two "turns" by a reporter of Parliament, who takes only three-quarters of an hour's duty, and is not often called upon for his second turn. Besides, there was the difficulty of condensation—the most difficult of all reporting; for the mere transcript of the shorthand writer is far less trying than the condensation of long speeches into a moderate length, and retaining the meaning without giving the exact words of the speakers.(c) In after years it was, however, a much easier task, and before I left off reporting I could do a night's work without any great strain on the mind. Besides, I had got, as it were, to estimate the value of the speeches of the various speakers, and knew how to abbreviate or extend accordingly. This saved an immense amount of labour, and on the whole answered well. My work was facilitated, also, in many instances, by knowing pretty well what certain speakers would say in debating certain subjects. This seems a strange statement to make, but it is literally true, and on some common questions I could actually make up a report by merely knowing the names of the speakers. Speakers at the old medical societies were not numerous, and were limited to perhaps a dozen at the London, and the same number at the Westminster Medical Society. Discussion, as I have said, was encouraged in the Medical Society. It was no uncommon thing for the President to leave the chair in order to address the meeting, which he would do at considerable length, and after finishing his speech would resume his seat.

With reference to the attendance of Fellows in Bolt-court, there was usually a goodly number, and I have known many occasions when the library was absolutely crowded. Amongst the more prominent speakers were Drs. Clutterbuck, James Johnson, and Uwins. Clutterbuck was unquestionably the ablest man in statement or reply that I ever heard in any society. He never used an ambiguous word, and made no "flourish of trumpets" in his speeches. Nothing could be simpler, clearer, or more classic. A reporter to report him literally would require not to alter a syllable or a period. In fact, he was perfect as a spokesman. Dr. James Johnson was a facile and clear speaker, occasionally a little ornamental and "Irish," but on the whole he was very pleasing and very easily followed.(d) The very contrary of these was David Uwins, a man of vast erudition and experience as a writer, but, without question, the worst speaker, so far as speaking is concerned, I have ever had occasion to report. Those who recollect the late Dr. Mayo may form some idea of the speaking of Dr. Uwins. Mayo always addressed the meeting with his eyes partially closed, hesitated, and "parenthised"—to coin a word—to such an extent that it was exceedingly difficult to follow him. Uwins was of a highly nervous temperament, was a little man with a large head, a long pale and anxious face, and dressed in the true style of the doctor of the last century. He was a most amiable and gentlemanly man, with the highest sense of medical honour and propriety. The moment he got up to speak, his mind for a moment would seem to desert him, and he would stand with his eyes perfectly closed for half a minute before he could "call it back." Then he would splutter out some admirable remarks on the subject under discussion, and would sit down apparently overcome with the effort he had made. I have spoken of his chivalrous bearing, which seems almost incompatible with his nervousness and hesitation. I recollect on one occasion that on the Saturday previously a short conversation took place at the Westminster on the "new heresy," which was regarded as the sheerest quackery. On the Monday following the subject was broached in Bolt-court, and some remarks derogatory to the now oldest living homœopathic practitioner were made. Uwins defended his friend with a vigour and decision which surprised his auditory. Later in the history of the Society, Dr. Golding Bird was a prominent and effective speaker. I never knew any man who could at once bring all his knowledge to bear upon the point in dispute as could Bird. It was a remarkable gift, and gave him great power and influence in debate. It is seldom that one has to record anything comical in the history of a learned society. There were the usual rising and falling of interest in its proceedings, the little excitement of elections and annual dinners, and the occasional display of temper on the part of disputants; but fun was rare. One instance, however, I can call to mind. Amongst the Fellows was a gentleman who had long practised in Sussex, and came late to London life. He was a big, pompous man, always spoke with an oracular decision, and placed the fingers of his right hand in his waitcoat. We were discussing cholera. The oracle rose, and said he had made the discovery that cholera was known to Shakespeare. This statement immediately arrested the attention of the meeting. "Yes; I was at the theatre last night, and saw the play of *Taming of the Shrew*. Petruchio says to Katherine 'You are *choleric*.'" A burst of laughter followed this announcement, but the speaker gravely asserted that, to convince himself that the actor had made no mistake in the word, he had referred to the works of Shakespeare, and found that the word had been rendered correctly! Our friend never could be convinced that he had found a mare's nest, but prided himself on his discovery ever after.

The meetings in Bolt-court were getting less and less; partly in consequence of deaths, and partly from many of the Fellows migrating westward. Under these circumstances, it was arranged that an amalgamation between the London and Westminster Societies should be carried out. This was accordingly done; and these two societies now represent the Medical Society of London at 32, George-street, Hanover-square.

Dr. Lettsom bequeathed a sum of money to found a medal to the memory of Fothergill. This money was placed in the hands of trustees to carry out the object. The "Fothergillian Gold Medal" was to be given annually to the writer of the best essay on some given subject. The Fothergillian Committee appointed by the Society were the adjudicators of the merits of the various papers. These were of unequal merit, but some were of great value, and have become standard works—notably those of Dr. Frederick Headland and of Dr. Waters. Once, however, the medal was awarded to a gentleman, a Fellow of the Society, on condition that he did *not* publish his essay! There is one circumstance connected with the Fothergillian Medal which deserves to be recorded in these papers. I am most anxious to refer to it in consequence of a kind of quarrel I had with the able and distinguished surgeon who was the author of an essay sent in to the Fothergillian Committee, and which was rejected on the most trifling technical grounds. It will be remembered that, some two years since, "a hole-and-corner" meeting was held, by a small and insignificant clique, to ruin, if possible, the Royal College of Surgeons. A small body of disaffected persons had met in a back room in the Strand, in which they privately drew up a certain number of resolutions. These resolutions were condemnatory of the College, and, if they could have been carried and acted upon, would have been ruinous to that institution. The "conspirators" had succeeded in getting to attend a meeting at the College, amongst other gentlemen from the country, the late Mr. Nunneley, of Leeds. Mr. Nunneley, it is stated, felt himself aggrieved at having been passed over as a Councillor; however this may be, he, in moving one of the resolutions, spoke with much bitterness of the College and its governors. It fell to my lot, to answer him, and, in doing so, he fancied that I treated him with too much sarcasm, and scarcely paid him the respect that was due to his position and character. But the clique was mortified by so overwhelming a defeat, that the wretched minority literally sneaked out of the theatre. I offered my hand to Nunneley in the hall of the College; he refused it, and thus ended a friendship of many years' standing. Well, it was Nunneley who sent in an essay to the Fothergillian Committee, I think about 1840, on "Erysipelas." This was rejected for some informality, so trifling that I cannot recollect it; but the rejection gave rise to an angry correspondence, and to the publication of letters in the journals. I always sided with Nunneley, who had a just ground of complaint. He subsequently published his essay, and it proved to be one of the most valuable works that has ever issued from the press.

(c) Sir Walter Scott was asked why he had not written his "Life of Napoleon Buonaparte" in three instead of in nine volumes. "I had not time," was the reply.

(d) Johnson had usually an eye to the main chance in his contributions to the Society, which were generally in the form of short practical cases having a favourable termination. I remember on one occasion, when walking home with him, he told me that every case of his that had been published in the *Lancet* had brought him at least ten guineas.

The Westminster Society was founded in the beginning of the present century, and was originally confined chiefly to the students of the Great Windmill-street School, where Wilson lectured and Brodie demonstrated. Every student, with scarcely an exception, was elected a member of the Society. The payment for a life subscription was but a guinea; but for many years the Society was prosperous and numerous, and had a certain amount of funded property. The fact was, there were scarcely any expenses incurred. The meetings were held in the museum of the School—that museum built and filled by William Hunter. The character of the Society became altered after the retirement of Thomas and Wilson, and a great number of members entered who were not of the student class. When I joined the Society it was well attended, the papers were valuable, and the discussions animated and interesting. But when the Hunterian school broke up the Society began to decline; expenses increased, whilst income diminished. The Society at various times held its meetings in Sackville-street, Savile-row, and Exeter Hall. It was all but defunct at the latter place. I have been present on several occasions when the only persons present were the President, Mr. (now Sir) John Fisher, Dr. Sayer, and myself. But on the amalgamation things of course took a turn, and the Society has been flourishing in connexion with the "London" ever since.

At this time (1834) and for several years I attended pretty regularly the meetings of the Royal Medico-Botanical Society at 32, Sackville-street, of which the late Earl Stanhope was the President, and Dr. Sigmond and Mr. John Foote honorary secretaries. The meetings were held twice a month, and were not well attended, but the proceedings were occasionally of great interest. The most regular contributor of papers was Dr. Sigmond—a man of vast erudition, and a charming writer. His lectures on Materia Medica, published in the *Lancet* thirty years since, are most delightful reading. Dr. John Hancock, who had lately returned from British Guiana, also read some papers before the Society. Lord Stanhope was a thorough believer in vegetable medicines, and patronised anything which promised to bring them into use. The consequence was that occasionally papers were read of a very questionable character. Thus the keeper of a herb-bath, under the auspices of the President, read a paper to show that the influenza, at the time epidemic, was caused by the cows eating buttercups, which that season were most prolific!

The evenings at the Medico-Botanical were, however, pleasant in many respects. Humphry Gibbs, the florist, was a Fellow of the Society, and sent at every meeting a superb collection of flowers in season. The tables and mantelpiece were tastefully decorated with these, and each Fellow or visitor could select a bunch and take it home with him. The Society also prided itself on its tea and coffee, which were certainly excellent. The history of the Society is curious; it was founded by John Frost, a kind of amateur botanist, who had invincible perseverance and indomitable courage. He succeeded in getting all the members of the Royal Family of England to become honorary Fellows of it, as he did also many of the crowned heads of Europe, great statesmen, poets, warriors, and philosophers. The book which contained the names of the honorary and other Fellows was a curiosity. A page was devoted to the signature of each of the Royal and distinguished Fellows. The signature was encircled by a wreath of flowers, painted in the first style, and, as a picture, intrinsically of great value. The book disappeared at the time of the collapse of the Society, which did not long survive its President, Earl Stanhope.

ABSTRACTS OF SOME OF THE PAPERS READ BEFORE THE BRITISH MEDICAL ASSOCIATION.

MEDICINE.

The Lactic Acid Treatment of Diabetes.

By Balthazar Foster, M.D.

Dr. Foster began by calling attention to the reduction of bodily temperature which occurred, and the bearing which this had on the respiratory theory of diabetes. By means of a diagram, he showed the relation between daily excretion of sugar and water, and the body-weight of the patients. He concluded, as the results of his analysis, that the lactic acid diminished the sugar excretion and the quantity of water passed; while it increased the bodily temperature and restored the functions of the skin.

Cases of Diabetes Mellitus treated with Lactic Acid.

By John W. Ogle, M.D.

Dr. Ogle described several cases of saccharine diabetes, in which he had, in addition to the use of a non-amylaceous diet, used lactic acid in considerable quantities. The details and results of some of these had been already mentioned in some of the weekly periodicals; and Dr. Ogle now brought before the Section the particulars of two cases which had recently been under his care at St. George's Hospital, and of which daily notes, with registration of amount of urine and its specific gravity, of the weight, and sometimes temperature, of the body, had been carefully noted. The two cases were admitted into hospital on the same day—one being a male, aged 20; the other a female, aged 28. In both cases meat, and non-amylaceous vegetables, with gluten bread, etc., were given for several days, without the administration of any remedies. In the case of the woman, who was treated for eleven weeks before the lactic acid was given, the urine ranged in quantity between 112 and 178 ounces per diem; after the use of the acid the quantity quickly sank, and throughout its use fluctuated between forty and seventy ounces daily, one day being as low as thirty ounces. During the whole of this time the specific gravity remained much the same as when the patient came to the hospital. In the case of the man, who was treated for seven weeks, under the lactic acid treatment no marked diminution of urine and no change in the specific gravity was observed; but, after its long continued use, whether owing to it or not was doubtful, great constipation came on, requiring active aperients. As regarded the weight of the body, in both cases during treatment it fell; in the man from 8st. 5lbs. to 7st. 7lbs., in the woman from 7st. 3lbs. to 6st. 8lbs. In the case of the man the temperature was chiefly *above* the normal, on one occasion only being below, and then it was 97·4—on one occasion reaching 102·8. In the woman it was almost always *below* the normal, mostly being below 98. In both cases the morning and evening temperatures were often taken, but neither one nor the other was uniformly below or above the other. In both cases the lactic acid was increased until four drachms were taken in the day, and this was persisted in for several weeks. In neither case were any sting-like pains, rheumatic or other, complained of during the entire treatment, and in neither was any noticeable perspiration produced. In both cases the sweet and hay-like smell of the breath existed. In neither case was there any indication of interference with or affection of the nervous system; power of movement of the entire muscular system, and sensibility, both general and of particular organs, was entire throughout. The uvula, palate, and pupils were natural. In neither case was there albumen or uric acid in the urine; and in neither was there any decided lung mischief manifest, though a degree of harshness of respiration was perceptible in the woman. Although in one case a decided diminution of the amount of urine without increase of specific gravity followed the use of the lactic acid, yet in both cases flesh and strength were lost, and Dr. Ogle did not think that these cases showed that any benefit arose from treatment.

On the Bending of the Ribs in Forced Expiration.

By Dr. A. Ransome.

The author called attention to the great extent of the forward motion of the ends of the upper ribs during forced respiration. This fact had been ascribed to the angular upward movement of the ribs from an oblique to a more horizontal position. That this explanation does not suffice was proved (1) by reference to the normal angles made by the ribs with the spine, (2) by a comparison between the proportions of the upward to the forward movement of the ribs, and (3) by the varying relations between the three dimensions of this motion. It was shown that a portion of this forward push is due to the inbending of the ribs during the forced expiration preceding inspiration—(1) By actual diametric measurements with callipers, (2) by the large proportionate motion of the more flexible upper ribs, (3) by noting the extent of this movement in women and children, and its diminution as age advances, and (4) by several pathological facts. The bearing of the subject upon practical Medicine was briefly indicated.

On the Treatment of Rheumatic Gout by the aid of the Continuous Galvanic Current.

By Julius Althaus, M.D., M.R.C.P.

The author commenced with some remarks on the pathology of rheumatic gout, comparing it with the atheromatous process in arteries, or endo-arteritis deformans, and looking upon it as

one of those highly insidious and chronic inflammatory conditions which are characteristic of the period of involution and senile decay. He said that the continuous current could not cure rheumatic gout, but it did a great deal of good in the following manner:—1. It acted as a general tonic to the system, and especially to the nervous system. 2. It promoted sleep, even where morphia and chloral had failed, or were inapplicable. 3. It relieved pain. 4. It reduced deformities. Dr. Althaus described the mode of application in such cases, and laid stress upon the necessity of persevering with the galvanic treatment for some time.

SURGERY.

Colotomy for Intestinal Obstruction.

By Charles Steele, F.R.C.S.

Mr. Steele commenced by observing that many cases of intestinal obstruction terminated fatally without surgical interference, which, were timely operative measures adopted, would very probably end in recovery. He related the case of a man aged 52, who, usually enjoying good health, had lately suffered from diarrhœa. On June 2 he was unable to relieve his bowels; he took castor-oil, but without effect. Mr. Steele saw him early next day, and found tympanitis, colicky pains, and fæcal accumulation in the rectum, with strong desire for defæcation. Various aperients and enemata were unavailing; the rectum was cleared out, and galvanism was applied, but without result. Bad symptoms soon set in, succeeded by failing power of the heart. This was relieved by ether and laudanum. Liquid food was well taken, and retained. On the sixth day, the patient, who had somewhat rallied, suddenly becoming worse, colotomy was performed. Flatus immediately escaped, and fæces some few hours afterwards. Localised peritonitis, inflammation of the skin, diarrhœa, gastric and intestinal irritation, etc., gave anxiety for about four weeks. By this time the wound was well healed round the intestine, and the patient improved and became restored to fair health, but remained weak. No passage per rectum had since occurred; but free discharge of thick mucus had proved troublesome. A swelling high up in the pelvis, which before operation seemed like fæces accumulated in the intestinal coils, afterwards descended and proved to be a tumour, and the cause of obstruction. The patient was doing well. Mr. Steele concluded with observing that, where the cause of obstruction is obscure, and appears to be fæcal accumulation, all legitimate endeavours should be made to dislodge the same; that when the cause of obstruction is clearly mechanical, opiate treatment should be immediately commenced, and operative interference promptly adopted; that in such a case as the one narrated, surgical aid is the only means of saving life; that a person with a tumour compressing the lower bowel is in a much better condition with an artificial anus than with a constantly forced passage by the natural orifice; that the growth of the tumour will not be nearly so rapid as if it were subject to compression by the fæces and strained defæcation; and that operation is most likely to be successful when the obstruction is caused by tumour—there not being sloughing to fear, as in twisting, internal hernia, or intussusception.

Three Additional Cases of Subcutaneous Division of the Neck of the Thigh-Bone: with Remarks.

By W. Adams, F.R.C.S.

The cases occurred in the author's practice at the Great Northern Hospital. The first was that of a young man, aged 18, from Albania, who had been the subject of rheumatic fever five years previously. The right hip-joint was anchylosed in a flexed position, with extreme deformity. The case proceeded favourably, without suppuration, and the limb was brought nearly into a straight position, but the obliquity of the pelvis and lordosis of the spine could not be completely overcome. The second case was that of a young woman, aged 20, who had been the subject of strumous disease of the left thigh when 6 years of age. The thigh was anchylosed in the flexed position, with extreme deformity. The wound healed by the first intention, and the case progressed favourably; but more pain was complained of than in the other cases, and extension could not well be borne. Between five and six weeks afterwards deep suppuration occurred, and matter was discharged through the wound made at the operation, and also through one of the old cicatrices which reopened. This continued for more than two months, and, in consequence of loss of health, she was sent into the country. It was intended after her return to continue the treatment by forcible extension of weights. The third case was that of a young man, aged 17, who had been the subject of strumous disease of the hip nine years previously, and the right hip-joint was anchylosed with the thigh in a flexed position, with extreme deformity. The wound healed without any suppuration, and the case proceeded in an extremely favourable way. Extension by weights was well borne, and at the present time the leg was in a nearly straight position, and he was able to walk about, but had not yet left the Hospital.

Dislocation of the Patella on its Edge.

By Geo. Southam, F.R.C.S., Manchester.

This accident occurred in a gentleman, aged 22, in good health, and with well-developed muscles, whilst wrestling with some companions in a first-class railway-carriage. The patella was in a vertical position, the outer edge resting on the outer side of the external condyle of the femur, the inner forming a sharp projection at the front of the knee. The skin over it was so tense that the bone seemed as if it would force itself through the integuments if pressure were applied to it. The pain was most excruciating. Chloroform was administered, and the leg raised to relax the extensor muscles. Pressure on each side of the bone was then made, but its position could not be altered. The knee was now bent; and when the leg was at a right angle with the thigh, the bone suddenly slipped into its place. Mr. Southam believes the difficulty hitherto experienced in reducing this rare form of dislocation may be obviated by placing the patient well under the influence of chloroform before any manipulation is attempted; the pain which usually accompanies these cases forming a serious obstacle to their reduction.

MIDWIFERY.

On the Treatment of Puerperal Eclampsia.

By A. B. Steele, Liverpool.

The object of the paper was to show that the treatment of puerperal convulsions must be based upon a pure system of eclectism. In plethoric conditions of the system, free general depletion was essential. The amount of blood to be taken depended, not, as has been laid down by authors, upon the severity or frequency of the paroxysms, but upon the state of the circulation in the intervals. In an overloaded state of the vascular system, bloodletting had a directly sedative action on the spinal centres; while in an anæmic state of the system it only increased the mischief, by adding to the already augmented spinal irritability due to anæmia. Bloodletting in suitable cases had a twofold action—curative in its action on the spinal cord, preventive in its action on the brain, preserving that organ from the injurious effects of pressure liable to result from the continued pressure during the paroxysms. Convulsions had been attributed to cerebral congestion, but Dr. Marshall Hall has shown that no cerebral disease can produce convulsions which are exclusively a lesion of the true spinal system, although congestion or fulness of the cerebral vessels may indirectly cause convulsions by counter-pressure on the medulla oblongata. In uræmic convulsions, bloodletting acted also as an eliminant, by removing at once and directly an appreciable quantity of the poisoned fluid. Manual dilatation of the cervix and immediate delivery has been recommended as a universal rule, on the ground that the uræmic condition was speedily fatal—first to the child, and then to the mother. That this is a fallacy is shown by the fact that convulsions often persist for a long time after delivery, and, further, sometimes cases terminate favourably both to mother and child after some hours' duration; besides, uræmia is not a constant condition in this affection. Early delivery, while proper in certain conditions, is hurtful in others by adding to the already exalted excitability of the reflex system. Statistics have shown that the mortality is less when labour is not artificially hastened. The author attributed the death of the child to violent uterine action rather than to uræmia, and the maternal deaths were chiefly referable either to exhaustion or secondary cerebral mischief. Chloroform was most valuable under certain conditions, but could not supersede the necessity for depletion in cases of extreme vascular fulness.

On the Internal and External Orifices of the Uterus: their Anatomy, Physiology, and Pathology.

By J. Henry Bennet, M.D.

Dr. Bennet commenced by stating that, owing to the non-recognition of some important facts connected with the anatomy and physiology of the orifices of the uterus, which he pointed out twenty-four years ago in the second edition of his work on "Uterine Inflammation," practice continued in a chaotic state, as regarded the pathology and treatment of these orifices. Thus, some practitioners, following the example of

the late Sir James Simpson, constantly saw stricture of the os uteri internum in varied morbid uterine conditions, and divided it in a routine manner; whereas other practitioners, of whom Mr. Marion Sims was an illustrious example, in exactly the same class of cases, all but ignored stricture of the os internum, and divided the os externum, along with the cervix uteri, down to its vaginal attachments. Thus, the practice of one class of practitioners was negatived by that of the other. He himself still thought that they were both wrong—pathologically and surgically—in a very large proportion of the operations performed. Anatomically, the uterus presents two cavities—that of the body of the uterus, and that of the neck. The larger cavity—that of the body—was separated from that of the neck by a vital sphincter, formed by the circular fibres of the cervical structure. There was not a distinct demonstrable sphincter, like that of the anus, but the circular fibres of the cervix exercised the functions of a sphincter, vitally closing the uterine cavity. It was worthy of remark that all the large cavities had sphincters. This vital contraction of the os internum resisted the introduction of a sound in the healthy female, although it often yielded to the gentle pressure of a small wax bougie, previously warmed. Thus the non-passage of a sound, on examination, was the natural healthy state, and not the sign of a stricture requiring operation. An open patulous condition of the os internum, on the contrary, implied in most cases inflammatory disease, or morbid aggrandisement of the body of the uterus. Dividing the os internum in these cases was, generally speaking, mere interference with a healthy normal anatomical state, and not justifiable. This vitally closed os uteri relaxed evidently during menstruation, as it also probably did for conception. In some exceptional cases, however, of congenital or pathological dysmenorrhœa, or in pseudomembranous dysmenorrhœa, the os internum did require dilatation or division. The os externum, although less vitally contracted, was normally closed; and if a good-sized bougie could enter with ease, its division down to the vagina was not justifiable. He did not see how the surgical production of one of the accidents of labour—laceration of the cervix—could cure dysmenorrhœa, sterility, etc. He thought these anatomical points should be definitively settled, as a necessary guide to practice.

PUBLIC MEDICINE.

On the Downward Intermittent Filtration of Strained Sewage, as conducted at Merthyr Tydfil.

By T. J. Dyke, F.R.C.S. England, Medical Officer of Health.

Dr. Edward Frankland devised and conducted an extensive series of experiments, in order to determine—(1) the best material to be used as a filtering medium; (2) the best mode of conducting the filtration; and (3) the amount of sewage which can be effectually purified by each cubic yard of material. As to the first, the experiments conclusively demonstrated that "sewage, traversing a porous and finely divided soil, undergoes a process to some extent analogous to that experienced by blood in passing through the lungs in the act of breathing. . . . . The action of earth, as a means of filtration, must not be considered as merely mechanical—it is chemical; for the results of filtration, properly conducted, are the oxidation, and thereby the transformation, of the offensive organic matters in solution in the sewage stream, into fertilising matters which remain in the soil, and with certain harmless inorganic salts, which pass off in the effluent water." As to the second, it was shown, by passing sewage downwards through cylindrical tubes, six feet long, and ten and a half inches in diameter, filled with earth, during twelve hours, then allowing an interval of twelve hours to take place; at the expiration of this rest, the flow of sewage being recommenced for a like period, followed by a like intermission, and so on; that by this mode of downward intermittent filtration, a "very satisfactory clarification of the water from the sewage contained in solution therein was effected; and that the same earth might be used continuously for two years, without diminishing the purifying power of the soil." As to the third point, it was determined that "when the amount of sewage water did not exceed five and a half gallons per cubic yard of filtering material in every twenty-four hours, an efficient purification of the sewage stream took place; that it was efficient was shown by the absence of ammonia and organic matter, and by the presence of nitrates and nitrites in the effluent water, indicating the oxidation of the nitrogenous elements of the sewage. The organic matter in the sewage being to a large extent converted into carbonic acid, water, and nitric acid; hence the necessity for the continual aëration of the filtering medium, which is secured by downward intermittent filtration." The Commissioners laid down the following as the conditions necessary for the successful conduct of downward intermittent filtration of sewage:—1. The soil of the land to be used must be porous. 2. A main effluent drain must be provided; it should not be less than six feet from the surface. 3. The surface of the soil should be so inclined as to permit the sewage stream to flow over the whole land. 4. The filtering area should be divided into four equal parts, each part to be irrigated with the sewage for six hours, and then an interval of eighteen hours to elapse before second irrigation takes place. Each of the four parts would thus be used for six hours out of the twenty-four. "An acre of land so prepared would purify 100,000 gallons of sewage per day." But the Commissioners also said—"There are three formidable objections to the general adoption of this process: First, it is entirely unremunerative, the amount of sewage applied to any given area of land being probably in such a case too great to permit of the growth of any ordinary agricultural produce; second, the whole of the manure ingredients of the sewage would be absolutely wasted; and, third, the collection of the solid fæcal matters upon the surface of the soil, with no vegetation to make use of them, would probably give rise to a formidable nuisance, especially in hot weather. We also entertain doubts as to the process being equally successful under ordinary management on a large scale, since the sewage would be likely to pass through the land in an unequal manner." How the hopeful plan which the Commissioners devised for the clarification of sewage was executed, and how their "formidable" fears were proved to be groundless, it will be my duty now to show you. . . . The straining tanks are two in number; each is 200 feet long; the sides of stone walling, the bottoms paved; each is five feet wide and five feet deep; along the floor of each tank an eighteen-inch square drain of open work is formed; the tank is divided into three bays, by open brickwork; between the sides of the drain, and between the walls of the tank, and over the drain to a depth of twelve inches, over the whole length and width of the tank, the spaces are filled with broken furnace cinder. When these tanks were formed, early in 1869, the sewage stream, after passing through them, was allowed to run into the river Taff; and, in order to diminish as much as possible the amount of organic putrescible matter passing into the river, lime and alum, mixed with water, were added to the sewage stream at some 150 yards above the tank. A considerable precipitation of organic matter took place, the proportion of polluting material being reduced by two-thirds. However necessary this precipitation may have been under the circumstances named, it is nevertheless unnecessary, wasteful, and cumbering. . . . . The sewage, charged with lime, passes into the tank, percolates through the broken cinder, passes through the perforations in the walls of the under drain, and then flows onward to the conduit conveying it to the land. Upon the surface of the cinders all the gross and solid portions of the sewage are left. Each tank works four or five days, in that period arresting in transit from ten to twelve tons of sewage slush and refuse. This is taken off the surface, wheeled in barrows into a field close at hand, and mixed with fresh coal ashes, brought daily from the neighbouring village of Troedyrhiw. By this means everything offensive to the senses, or prejudicial to health, is prevented by the public scavenger. When a tank has been in use three or four days, there is found on the surface of the cinder an inch or more of sand. In the Merthyr district it is a custom to have "a nicely sanded floor." Doubtless, this deposit on the filter is largely derived from this source. Its presence greatly conduces to render the materials in the tanks efficient filters.

About twenty acres of the land, immediately adjoining the road in which the tanks are placed, have been arranged into filtering areas or beds on a plan devised by Mr. J. Bailey Denton. The land is a loamy soil, eighteen inches thick, overlying a bed of gravel. The whole of these twenty acres have been underdrained to a depth of from five to seven feet. The lateral drains are placed at regular distances from each other, and run towards the main or effluent drain; this is everywhere six feet deep. The surface of the land is formed into beds; these have been made to slope towards the main drain by a fall of 1 in 150. The surface is ploughed in ridges; on these vegetables are planted, or seeds sown; the line of the ridged furrow is in the direction of the under drain. Along the raised margin of each bed in each area delivering carriers are placed, one edge being slightly depressed. The strained sewage passes from the conduits into the delivering carriers; and, as it overflows the depressed edges, runs gently into and along the furrows down to the

lowest and most distant point of the plot. The sewage continues to be so delivered for six hours; then an interval of rest of eighteen hours takes place, and again the land is thoroughly charged with the fertilising stream. The water percolates through the six feet of earth, reaches the lateral drains, which convey it to the main effluent drain. The result of this plan of disposing of sewage, by downward intermittent filtration, is water which is bright, perfectly pellucid, free from smell, and tastes only of common salt. It is used by the workmen employed on the farm. During the process of irrigation no nuisance is caused, for the soil quickly absorbs all the fluids passed on to it. In fact, in two or three hours after the water has ceased to flow on the land, an observer would say that the ground had not been wetted for days. The workmen say that no unpleasant smell is noticed, nor has the health of the persons employed in any one instance been affected by any presumed poisonous exhalation. The only imperfection of the plan is that at the end of some of the furrows nearest the lowest corner of a plot a slight deposit of scum is found. This scum is formed by the fine insoluble precipitate, caused mainly, I believe, by the addition of lime to the sewage stream. On the ridges of this prepared soil cabbages, broccoli, carrots, turnips, parsnips, beans, peas, lettuces, onions, etc., are grown. . . . . Adjoining the filtration areas the town surveyor has laid out fifty-five acres to be used as irrigation lands. The whole has been drained by deep cuttings running towards the main effluent drain; the principle adopted in the filtration areas, of allowing the sewage stream flowing over each square yard of surface to percolate through two square yards of soil, and thence to pass into the efflux has been faithfully carried out, and the results, in every point of view, have been as satisfactory as those afforded by the filtration areas. . . . . The whole fertilising organic matters contained in the filthy sewage stream are eliminated therefrom, by percolation through the strata of earth, are retained by the soil, and that which passes off in the clear effluent water is composed almost wholly of harmless organic salts. In concluding this subject, I will read an extract from a letter I have received from Dr. Edward Frankland. In it he says—"Of the effluent water from these downward filtering areas the result is highly satisfactory, more so even than that which I had before obtained in the laboratory of the Rivers Commission. Indeed, on June 19, 1871, the water entering the Taff from the Merthyr intermittent filters was considerably purer than the Thames water, which we are often compelled to drink in London."

Upon ten acres of the land prepared according to Mr. Bailey Denton's plans cabbages were planted and mangolds sown in June, 1871. On August 30, seventy-seven days after the commencement of planting, etc., part of the crop was offered for sale by auction, and realised £17 15s. per acre. In the present year the whole of the twenty acres are under crops. I have been informed by our surveyor that from some of the divisions planted with cabbages the average gross return will be £27 an acre. A small plot, on which broad beans are being grown, has been sold for £40 an acre. On the fifty-five acres of irrigated land the crops are more productive. Italian ryegrass will yield five crops this season, averaging sixty tons an acre, and yielding a net profit of £24 an acre. A plot of cabbages (48 perches) planted in October has yielded a gross sum of £43 an acre. A plot of onions has lately been sold at the rate of £64 an acre. 3rd. General results: These may be summarised in the words of the Rivers' Pollution Commissioners, lately presented to Parliament:—"The experience of these filter beds at Merthyr has made plain what the experiments in our laboratory had previously established. Towns can cleanse their sewage within a much less quantity of land than any experience hitherto had might lead them to expect. Sewage irrigation (in which the quantity of land thus used bears a large proportion to the volume of the sewage cleansed) offers the great advantage of a remunerative return. Intermittent filtration (in which the quantity of land employed bears a very much smaller proportion to the volume of the sewage to be cleansed) may also now be confidently accepted as a sufficient remedy for the sewage nuisance. These two methods are essentially one, wherever thorough drainage accompanies—as it always should—the extensive form of irrigation, and they are the only methods which are perfectly trustworthy for the abatement of the sewage nuisance."

On Disinfection of Air.

By A. E. Sansom, M.D. Lond., etc.

In some infectious diseases it is scarcely possible to doubt that the air is in many cases the medium whereby the infection is transmitted. Disinfection here means the rendering inert of the *materies morbi* which, in these diseases, exists in the air. Modern science has shown with great probability in these cases that the "poisons" consist of particles of *living* matter; and it is almost impossible to conceive of them as merely dead organic material. Considering them as of the nature of living matter excessively minute, the possible mode of action upon them of the ordinarily employed air-disinfectants was traced. It was shown that no non-volatile agent could be efficacious, and that the "oxidising" disinfectants were nearly, if not quite, inert. Permanganate of potass and chloride of aluminium were useless if employed as direct air-disinfectants; whilst sulphurous acid, iodine, and carbolic acid were powerful and valuable. A series of experiments was detailed, and the results demonstrated, proving that (1) carbolic acid, when present in the air, kills the low forms of life; (2) that, even when present in the air in minute proportion, the manifestation of fungi, which, under normal circumstances, is abundant, is entirely prevented by carbolic acid; (3) that the presence of carbolic acid or of sulphurous acid in the air prevents putrefaction and the concurrent development of bacteria, while the non-volatile oxidising disinfectants in close relation with the air fail to prevent either. The best modes of air-disinfection were next discussed, and the action of the instruments for the continuous as well as the intermittent supply of carbolic acid to the air, made by Messrs. Savory and Moore, was explained and demonstrated.

On the Relative Contagiousness of the different forms of Small-pox.

By Dr. Britton.

The author expressed his conviction that that form of small-pox known as "modified," in which the pustules were conical, without any depression in the centre, was not of the same contagious character as the true form, with the depression. During the recent epidemic of small-pox the writer held the appointment of surgeon to a large district in Marylebone, and had every opportunity of testing the correctness of his opinion, with the following result:—1st. Every case of true small-pox was removed to the hospital generally on the second day of the eruption, where all the usual precautions were taken; but, in spite of this, within three weeks of the attack the disease in 40 per cent. of the cases appeared in some person who had previously been associated with the patient. 2nd. On the other hand, about fifty cases of modified small-pox (that characterised by conical pustules, without any depression) came under his notice. They were not taken into hospital, but were allowed, without restriction, to mix with the other members of their family, and in no one case did the disease appear in any person so exposed to its influence. He concluded, therefore, that modified small-pox was not contagious.

Drinking-Water and its Analysis.

By Dr. Alfred Hill.

Dr. Hill said the importance of the question of which he had to treat was now very universally admitted, and everywhere a connexion was traced between the impurity of water and the spread of disease. The old system of analysis was by no means to be relied upon; and indeed chemistry could now do no more than indicate whether the waters contained any animal matters; and the result of these matters upon health was not to be ascertained by it, except in a proximate degree. If they took the waters of Lock Katrine, far removed from centres of population, and analysed that water, they would find some little organic nitrogen in it, and if they looked for ammonia they would not find it, or only in infinitesimal quantities. Organic nitrogen could only exist from animal source. The effect of animal matter in water was not to be determined by analysis, which could do no more than detect its presence, and there were instances in which men for years drank water which was, according to all rule, most unwholesome, who were yet hale and well. Dr. Hill then proceeded to describe the various processes by which water was analysed, and to discuss their various merits.

The Use of Arsenical Colours.

By Dr. Hill.

The attention of the author had been called to this question during the last few months by a number of articles being submitted to him for analysis. Mineral green was an arsenite of copper, and was in great request on account of its brilliancy. It was this colour of which ladies were so fond for the artificial flowers they wore. It was this colour which was used for wall-

papers, and which, in connexion with gypsum, produced so large a number of light and pleasing colours. It was made in enormous quantities; in England alone 700 tons having been made in 1860. The men who made it were liable to be attacked by all the symptoms of arsenical poisoning; but this was rarely fatal. The speaker instanced the case of one man who suffered from arsenical poisoning from sleeping in a room hung with a paper of this colour. It was warranted not to contain arsenic, but was brought to Dr. Hill for analysis, and proved to do so. The patient was put under treatment, and for many months the symptoms remained. At length he had almost recovered, when he met with an accident which proved fatal. The colour was used by cooks and confectioners in ignorance of its deleterious properties, and by toy-makers for the purpose of colouring toys—a very dangerous practice, since the first place into which a child put a toy was generally its mouth. He had known of one case in which this dangerous material was positively employed to colour the walls of the children's room in a hospital. The material was submitted to an analysis, and on its nature being discovered it was, of course, at once removed.

Deranged Soil-Pipes as a Cause of Diphtheria, Typhoid, and other Diseases.

By Dr. Andrew Fergus, of Glasgow.

In illustration of his paper the author showed a number of sections of lead pipes, which had been pierced, corroded, and otherwise injured, and lithographed drawings of the same. He explained that the corrosion, of which he presented such striking specimens, was caused solely by the action of sewer gases, which, in the escape therefrom into dwellings and crowded neighbourhoods, were a fruitful cause of typhoid fever, and other kindred diseases. These were all leaden pipes connecting water-closets with sewers. The corrosion was not due at all to water, because the lower part which came into contact with it was not injured. The time which a leaden pipe would last varied, of course, according to its thickness; those unventilated about twelve years, those which were ventilated from twenty-one to twenty-three years. He quoted a number of instances in which he traced diseases such as those he had mentioned to decay of the sewage-pipes, and their deficient trapping.

[N.B.—This is at least the third occasion on which Dr. Fergus has trotted out this paper].

Provident Dispensaries or Independent Sick Clubs from a Practical Point of View.

By Dr. Toler Maunsell.

The author showed how, under the present system of gratuitous medical relief, the poor became pauperised, and urged the necessity of establishing a system of dispensaries under control similar to those which now existed in Ireland. In England and Wales there were about 1700 persons to each medical man. If each of these paid 4s. a year, or little more than a penny a week, they might form 1400 medical clubs, with an income of £350 a year. He estimated that about two-thirds of the whole population would avail themselves of these clubs. He showed that members of the profession themselves were the principal cause of such clubs not being established, as they squandered their advice upon the people, a considerable section of whom received gratuitous medical attendance rather as a right than as a privilege. While secretaries, collectors, matrons, nurses, and other officers at hospitals were paid, the medical staff alone gave their services gratuitously.

On the Progress of the Small-pox Epidemic at Taunton.

By Dr. Cawood.

After having given some details on the subject, the author concluded with some general remarks on the mitigated power of vaccination. He believed that revaccination was too freely undertaken, and was not a certain preventive against small-pox. He thought there ought to be a relaxation of the law with regard to the vaccination of unhealthy infants. He had seen tubercular disease follow vaccination in some subjects.

PSYCHOLOGY.

In the Psychological Section, a series of microscopical preparations, illustrating the structure of the cerebral convolutions in health, in general paralysis, and in brain-wasting, by Dr. Herbert C. Major, Assistant Medical Officer to the West Riding Asylum, Wakefield, were exhibited by Dr. Crichton Browne.

The Clerkenwell Vestry has declined to grant the use of their mortuary for the District Medical Officers of Holborn, on the application of the Holborn Guardians.

ARMY MEDICAL SERVICE.

List of Candidates for H.M.'s Indian Medical Service who were successful at the Competitive Examinations held at London in February, and at Netley in August, 1872, after having passed through a Course at the Army Medical School, Netley.

Order of Merit.	Names.	Studied at	Number of Marks.
1.	Crombie, A.	Edinburgh	(a) 6215
2.	Murphy, W. R.	Dublin	(b) 5825
3.	Joubert, C. H.	London	5540
4.	Russell, E. G.	London	5360
5.	Scully, J.	London	5325
6.	Branfoot, A. M.	London	5190
7.	Hall, G. C.	London	4985
8.	Roy, G. Ch.	Glasgow and Calcutta	4790
9.	Reid, A. S.	Edinburgh	4670
10.	Watson, G.	Edinburgh	4595
11.	Fasken, W. A. D.	London	4394
12.	Lawrie, E.	Edinburgh and Paris	4260
13.	Wilson, J.	Cork	4250
14.	McNally, C. J.	Dublin	4222
15.	Lang, J. A. T.	London	4196
16.	Mulvany, E.	Dublin	4195
17.	Zorab, J. M.	Calcutta & Edinburgh	4167
18.	Dutt, R. L.	Calcutta, London, and Aberdeen	4145
19.	Daphtary, G. R.	Bombay and Glasgow	4075
20.	Bookey, J. T. B.	Dublin	4036
21.	Butler, W. J.	London	4016
22.	McGregor, A.	London	4015
23.	Young, J.	Edinburgh	3955
24.	Duke, J.	London	3912
25.	Gupta, B.	Calcutta and Glasgow	3877
26.	McConaghey, J.	Galway, Belfast, and Dublin	3856
27.	Palmer, E.	Galway and Dublin	3840
28.	Williams, A. H.	Aberdeen and London	3715
29.	Holmes, R. A. K.	Dublin and Belfast	3650
30.	Ferris, J. E. C.	London	3613
31.	Lombard, D. E. T.	Dublin and Cork	3555
32.	Johnson, W. E.	Dublin and Belfast	3522
33.	Aylen, T. V.	London	3494
34.	Dobie, S. L.	London	3451
35.	Bevan, G. F.	Dublin	3372
36.	Lloyd, C.	Cork	3350
37.	Dobson, A. F.	Dublin	3345
38.	Little, C.	Belfast and Dublin	3221
39.	Mayne, T.	London	2939
40.	Lawrenson, D. E. T.	Dublin	2935

(a) Awarded the Herbert Prize, August, 1871.
(b) Awarded the Herbert Prize, August, 1872.

THE PUBLIC HEALTH ACT.

The following letter has been addressed by the Local Government Board to the several Boards of Guardians in the kingdom respecting their new powers and duties under the Public Health Act:—

"Local Government Board,
"Whitehall, London, S.W.,
"August 17, 1872.

"Sir,—I am directed by the Local Government Board to forward, for the information of the guardians, a copy of the Public Health Act, 1872, which received the Royal assent on August 10.

"The guardians will observe that the Act divides the whole of England into two classes of sanitary districts—namely, urban sanitary districts and rural sanitary districts.

"In the urban sanitary districts there are three kinds of sanitary authorities—town councils, improvement commissioners, and local boards—and the guardians will not act as the sanitary authority in any union which is coincident in area with an urban sanitary district, or which is wholly included in an urban sanitary district.

"In every other union the guardians will in future constitute the rural sanitary authority; but if in any such union there are any portions of its area which are included in urban sanitary districts, those portions will be excluded from the

sanitary jurisdiction of the guardians, and any individual guardians, elective or *ex officio*, who are connected with those portions in the manner pointed out by section 5 of the Act, will be restrained from acting or voting with the other guardians as the sanitary authority for the rest of the union. The word 'union,' as here used, includes any single parish which is under a separate board of guardians (see section 60).

"It is provided by section 6 that the first meeting of a sanitary authority under this Act shall be held within twenty-eight days after its passing, or at such other time as may be directed by order of the Local Government Board. As the meetings of boards of guardians occur at intervals not longer than a fortnight, probably the latter part of this section may have little, if any, practical application to rural sanitary authorities.

"The guardians are required by section 10 to appoint from time to time a medical officer or officers of health, an inspector or inspectors of nuisances, a clerk, a treasurer, and such other officers and servants as they may deem necessary for the efficient execution of the purposes of the Sanitary Acts.

"It is provided, however, by section 12, that the clerk and the treasurer of the union shall be the clerk and the treasurer of the guardians acting as the rural sanitary authority, with such remuneration for their additional duties as such authority may determine, with the approval of the Local Government Board.

"With respect to the medical officers of health, the Board desire me to direct the attention of the guardians to the provisions of section 10, and to state that the Board will shortly issue an order containing regulations with regard to the qualification, appointment, duties, salary, and tenure of office of the medical officers of health who are to be appointed by the sanitary authorities; and the Board recommend the guardians to wait until that order is issued before they proceed to make any such appointments.

"The Board, moreover, have instructed their inspectors, who, under section 15 of the Act, are empowered to attend the meetings of the rural sanitary authorities, to communicate with the guardians of the unions in their respective districts, and to afford the guardians such advice and assistance in carrying into execution the provisions of the Act as they may be able to render. As the inspectors are in possession of the views of the Board upon the subject, the Board do not propose, in the present communication, to enter more fully into any explanation of the provisions of the Act, or of the course of proceeding which it may be advisable for the guardians to adopt with the view of giving effect to those provisions. The guardians will perceive that, under section 8, they will in future exercise the powers of the sewer authority under the Sewage Utilisation Acts, as well as those of the local authority under certain other Acts, in addition to the powers which they have hitherto possessed under the Nuisances Removal Acts.

"The guardians will observe that refrence is made in section 10, not only to medical officers of health, but to 'other officers of a sanitary authority, any portion of whose salary is paid out of moneys voted by Parliament.' It is proposed that one-half of the remuneration of the medical officers of health, and also of the inspectors of nuisance, shall be repaid to the sanitary authorities, where the appointments are made in conformity with the regulations and with the approval of the Local Government Board.

"I am, Sir, your obedient servant,

"JOHN LAMBERT, Secretary.

"To the Clerk of the Guardians."

THE ACT TO AMEND THE LAW FOR THE PREVENTION OF ADULTERATION OF FOOD AND DRINK AND DRUGS.

THIS Act (35 and 36 Vict., c. 74) is now before us in its amended state. It remains to be seen whether the traditional coach-and-six of legal ingenuity can be driven through it so as to reduce or impair its efficiency. The attempt will most certainly be made, and a collision must be expected, but the probable damage, as the result, we think will be inappreciable. The first clause imposes a penalty not exceeding £50 and costs for the first offence, and imprisonment not exceeding six months with hard labour for the second offence, upon every person who shall wilfully admix, or order any other person to admix, with any article of food or drink, any injurious or poisonous ingredient or material to adulterate the same for sale; or who shall admix, or order to be admixed, any ingredient or material with any drug to adulterate the same for sale. Under this clause the ingredient admixed with any article of food or drink must be injurious or poisonous.

The second clause renders every person selling any article of food or drink with a *knowledge* that it contains any admixture injurious to health, or who shall sell as unadulterated any article of food or drink, or any drug which is adulterated, liable, upon summary conviction, to a penalty not exceeding £20 and costs for every such offence, and upon a second or subsequent conviction he shall have his name, place of abode, and offence published in a newspaper or otherwise. Now, it is obvious that the difficulty of convicting under the first head of this clause will arise from the necessity of proving guilty knowledge; but this difficulty, as we shall presently see, is practically confined to articles of food and drink.

The third clause defines what shall be deemed a sale of an adulterated article of food or drink, or drug. It consists of a knowledge of the admixture having been used with intent fraudulently to increase the weight or bulk of the article, and the not declaring to a purchaser such admixture before delivering it.

Under this clause even an admixture not injurious or poisonous, but in itself perfectly innocuous, would nevertheless fall within the meaning of an adulterated article, if admixed with the above intent. But here, again, a guilty knowledge on the part of the vendor would have to be proved, except in the case of a sale of drugs by persons registered under the Pharmacy Act.

The Pharmacy Act, 1868, and the 23 and 24 Vic., c. 84 (an Act for Preventing the Adulteration of Articles of Food and Drink), are incorporated in this Act, and by the Pharmacy Act any person registered under it who sells any adulterated article shall, unless the contrary be proved, be deemed to have knowledge of such adulteration. So that in the case of drugs sold by those registered under the Pharmacy Act the prosecution very properly is relieved from the onus of proving guilty knowledge.

In Ireland the 33 and 34 Vic., c. 26, "An Act to Regulate the Sale of Poisons in Ireland" is to be incorporated instead of the Pharmacy Act of 1868.

The appointment and removal of analysts, of competent medical, chemical, and microscopical knowledge, may be made compulsory upon the local authorities, as defined by the 5th section, by either the Local Government Board in England, by a Secretary of State in Scotland, or by the Lord Lieutenant or Chief Governor or Governors in Ireland.

The inspector of nuisances, or the inspector of weights and measures or of markets, one or all of them, as the case may be, *shall* procure and submit suspected articles of food or drink, and drugs, to be analysed, and *shall*, upon receiving a certificate that they are adulterated, cause the party selling such articles to be summoned before the local magistrates.

The analysts are required to report quarterly to the local authorities both the numbers of articles analysed by them, and the nature and kind of adulterations detected, and such reports shall be read at the respective boards.

Any purchaser may have any article analysed by the public analyser upon payment of not less than 2s. 6d. nor more than 10s. 6d., for which payment he shall be entitled to the certificate of the analyst, which certificate shall, in the absence before the court of evidence to the contrary, be deemed evidence of the facts contained in it, and the sum so paid for the certificate shall be deemed part of the costs, which may be ordered to be repaid by the party complained against.

All proper precautions are provided against any tampering with articles submitted for analysation.

The Act appears to us to be perfectly workable, without being unnecessarily inquisitorial. It reflects much credit upon those, in both houses of Parliament, who are thus endeavouring to preserve the people's health by assuring them of wholesome food, and in the day of sickness affording the means of restoration by the supply of pure, unadulterated, and innocuous drugs and medicines, without which the skill of the ablest physicians were in vain.

OFFICIAL notice is given that the Small-pox Hospital at Mounthooly, Aberdeen, has now been closed. The total number of persons received into the hospital since its opening, January 17 last, is 230; of that number 193 were discharged cured, and 37 died.

GENERAL CORRESPONDENCE.

OVARIOTOMY IN NELSON, NEW ZEALAND.

Letter from Mr. C. E. Cotterell.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to forward to you a few notes of a case of ovariotomy performed by me:—

Miss S., aged 40, schoolmistress, in June, 1869, complained of severe pain in the abdomen, which came on suddenly, and continued for about three days, during which time she was not able to keep about. The pain returned periodically till November, 1869, when she consulted Dr. Irvine, of Nelson, who diagnosed it a case of ovarian tumour. On Wednesday, September 20, 1871, with the assistance of Dr. Irvine, I tapped her, and removed about twenty pints of fluid from her. About ten days after the operation she was able to attend to her duties until March 1, 1872, and on the 2nd I tapped her a second time, and took away about the same quantity of fluid, which this time was much darker and thicker. On April 19 she measured forty-six inches round the abdomen at umbilicus and eleven inches from umbilicus to pubes. Removed cyst; assisted by Drs. Boore and Sealy; Dr. Irvine administered chloroform. Made an incision about four inches long, commencing about two inches below the umbilicus. The cyst soon protruded, and I pierced it with a trocar; removed a large bucketful of dark glutinous fluid; found a great number of adhesions, which were carefully separated. When the pedicle was drawn out I applied the clamp, and cut away the cyst about three inches above the clamp, closed the wound with long harelip pins, covered it over with lint soaked in carbolic oil (1 part of acid to 9 of oil), then oil-silk and cotton-wool, all being kept together by a four-tailed flannel bandage. The operation lasted about an hour—from 3 to 4 p.m. She was carried to bed still partially under the influence of chloroform. When she became conscious complained of feeling cold (temperature of room 70° F.); pulse weak; not much pain. 7 p.m.: Pulse 98; skin 95°. There was considerable pain; felt rather sick. At 9.30 p.m. injected liq. opii sed. ʒj. in some beef-tea. Was sick once during the night; got a little sleep.

April 20.—Dressed wound; removed a portion of pedicle, and passed catheter; little or no pain.

21st.—The wound above the pedicle healing by first intention. Complains of very severe pain on the right side of the wound. Passed a catheter, and gave an injection of warm water by rectum; bowels acted slightly.

22nd.—Removed the clamp.

24th.—Removed two of the pins.

25th.—Removed the remainder of the pins, and cut away bits of the pedicle.

To-day (May 14) wound looking well; able to sit up; sleeps and eats well, and, in fact, has not shown a bad symptom from the time of the operation.

Hoping that you will insert the above notes in your valuable paper, I am, &c., C. E. Cotterell, M.R.C.S.

MR. PEMBERTON ON LITHOTOMY.

Letter from Mr. W. F. Teevan.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Pemberton, in his address to the British Medical Association, published in your journal of August 17, at p. 173, states, in reference to the so-called dilatation of the prostate—"Now, I know that many believe that this dilatation means laceration. It has, indeed, not very long since been described as 'complete rupture and laceration' (Mr. Teevan, *Lancet*, vol. ii., 1870, p. 237), and as 'unsurgical and dangerous.' I answer this statement, which I venture to characterise as eminently reckless, by a positive contradiction as to facts."

Mr. Pemberton's reference is inaccurate, for the words are not to be found at p. 237, as stated by him, but they can be seen at p. 891, where they appear in a very short abstract of a paper on Lithotomy which I read before the Medical Society, and which was afterwards published in full in the *Lancet* for December, 1871, p. 882.

Now, Mr. Pemberton either has or has not read my paper. If he has not read it, he was not justified in characterising my statements as he has done without troubling to make himself acquainted with the facts upon which they are founded. But if Mr. Pemberton has read my paper, he was in honour bound to refer your readers, not to the abstract, as he has done, but to the paper itself, where they could have obtained a knowledge of the facts upon which my statements were based, and have judged for themselves which was the more entitled to be characterised as "eminently reckless"—Mr. Pemberton's assertion of what he does in the dark in lithotomy, unsupported as it is by one single jot of evidence; or my enunciation of facts which, so far as I know, admit of no contradiction.

I am, &c., W. F. Teevan.

10, Portman-square, August 17.

BALNAFORTH *v.* BUCKLEY AND FLETCHER.

Letter from Mr. John Broadbent.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Buckley, one of the defendants in the above action, being out of town, allow me, on his behalf, to correct one or two errors in the report of the trial in your issue of the 17th inst. The measurement Mr. Buckley made did not consist in "putting the tape on the trochanter and then passing it down the leg to the ankle," but in measuring from the anterior superior spinous process of the ilium to the external malleolus, and also from the former point to the trochanter major—the same measurements having been previously made by Dr. Maclagan, and subsequently by Dr. Fletcher. Instead of the witnesses for the prosecution having strongly advised that the case should be decided by arbitration, the enclosed letter (which is a copy of one sent last week by Mr. Buckley's attorneys to the editor of the *British Medical Journal*) shows that Mr. Southam only advised arbitration to be accepted if the defendants would, as a preliminary, admit their negligence. This, of course, they would not do. Had they done so, nothing would have remained for the arbitrators to do but assess the amount of damages. I am, &c., John Broadbent.

178, Great Ancoats-street, Manchester, August 19.

[copy.]

To the Editor of the British Medical Journal.

2, St. James's-square, Manchester, August 14.

Sir,—We have had our attention called to your notice, in your impression of the 10th inst., of the action by Mr. Balmforth against Dr. Fletcher and Mr. Buckley.

With the exception of an offer by Mr. Southam, before action commenced, to refer Mr. Buckley's case to arbitration, no offer of reference was ever made. As soon as the action was commenced, and the plaintiff showed signs of asserting his claim, the attorney of Dr. Fletcher, and writer, as the attorney of Mr. Buckley, proposed a reference, but the plaintiff's attorney declined, stating that he had just seen Mr. Southam, but that that gentleman did not advise a reference unless the defendants would, as a preliminary, admit their negligence, which, of course, was declined. No offer of reference was ever made to Dr. Fletcher, and to the best of our belief and opinion no reference was ever desired by the plaintiff or his advisers.

Yours, &c.,

(Signed) J. and E. Whitworth.

OBITUARY.

FREDERIC CARPENTER SKEY, C.B., F.R.S., etc.

The medical profession and the public generally will hear with regret that the above distinguished surgeon and most estimable gentleman died at his residence, Mount-street, Grosvenor-square, on Thursday, the 15th inst., in the 73rd year of his age. Having received an excellent preliminary education, the last year or two of which were spent at the University of Edinburgh, he returned to London, and became the pupil of the celebrated Abernethy, Surgeon to St. Bartholomew's Hospital, to whom he was articled by the Royal College of Surgeons on April 5, 1816, after payment of the usual premium of five hundred guineas, to board out of the house, the sum for *resident* pupils being double that amount. On the completion of his hospital studies he underwent his examination, and was admitted a Member of the College on April 5, 1822; and, as showing how highly Mr. Abernethy appreciated the skill and ability of his pupil, he allowed him to see and prescribe for many of his patients before obtaining his diploma, and for several years after his admission as a Member he permitted him to receive all the fees from those who consulted him.

About the year 1826 Mr. Abernethy appointed him Demon-

strator of Anatomy at the St. Bartholomew's Hospital, not, however, without creating considerable jealousy. On the death of Mr. Abernethy, the anatomical lectures fell into the hands of a successor, who claimed the profits of the lectures which Mr. Skey was giving, in consequence of which Mr. Skey resigned, and, associating himself with Drs. Todd, Hope, Marshall Hall, Pereira, and Mr. Kiernan (the now only survivor), established the Aldersgate-street School of Medicine, which soon became one of the largest schools in London. Here he lectured for ten years, his audience being largely increased by many of the Bartholomew's men, who preferred his lectures on Surgery to those of Lawrence. By these gentlemen he was presented with a gratifying expression of their feelings in an illuminated testimonial, accompanied by a massive gold snuff-box, and five years later of a large silver vase. With the public he was not less popular than with the students, and about this time was elected Consulting Surgeon to the Charter House, which office he retained until his death, as also to St. Bartholomew's and the Great Northern Hospitals. Of the latter institution he was fond of boasting that "We have in our medical staff as strong a team as belongs to any hospital in London."

Early in his career he was offered the double appointment of Surgeon and Professor at King's College, on condition that he would resign them in three years; this he declined, and the negotiations fell to the ground.

Mr. Skey's practice increasing rapidly, he removed to Grosvenor-street, where he had a large and aristocratic connexion. Having been elected to the Honorary Fellowship of the Royal College of Surgeons in 1843, he was nominated and returned by the Fellows to a seat in the Council of that institution in 1848; in 1850 he was appointed Hunterian Orator, when he delivered a most eloquent address, an abstract of which appeared in *The Medical Times and Gazette.*

Mr. Skey, who never "ate the bread of idleness," at once accepted the appointment offered by his colleagues in 1852 of Professor of Human Anatomy and Surgery, and three times a week lectured to a large and discriminating audience in the theatre of the institution. In 1855 he was elected a member of the Court of Examiners; and never was there a more upright, honest member of that board—perhaps a little dogmatic. The industrious student ever found a good and liberal friend in Mr. Skey, and there are now many in all parts of the world who will deeply regret the loss of their distinguished friend. In 1843 Mr. Skey was invited to return to St. Bartholomew's and accept the Chair of Anatomy, Mr. (afterwards *Sir*) William Lawrence retaining that of Surgery, Mr. (now Sir) James Paget, Bart., that of Physiology. In 1863 he was elected President of the College of Surgeons.

On the formation of a committee to inquire into the subject of the prevention of contagious diseases in the navy and army, appointed by the Government to meet at the Admiralty, and consisting of eight eminent members of both departments of the public service, Mr. Skey was appointed chairman, and Mr. Spencer Smith, Surgeon to St. Mary's Hospital, secretary. This committee held its sittings for about a year and a half, and the result was the passing of the "Contagious Diseases Act," a Bill of great value, and, though strongly opposed in some quarters, still doing great service throughout the land. For his great and valuable labours on this occasion he deservedly obtained the "C.B."

Mr. Skey was a valuable contributor to the advancement of chirurgical knowledge. A paper on "Muscular Fibre," published in the *Transactions of the Royal Society*, obtained for him the Fellowship of that learned institution. He was the author of works—"On the Treatment of Chronic Ulcers by Opium," "On the Venereal Disease," and "On Operative Surgery." Two lectures delivered at the Royal College of Surgeons on the "Prevalent Treatment of Disease"; also two lectures in 1854 on the "Relative Merits of the two Operations for Stone," lectures on "Hysteria"—which went through three editions—and many papers to the medical journals, and also several letters to the *Times* on athletics, especially in reference to excessive training for rowing, on alcoholic diseases, etc.

The immediate cause of death was ulceration of the intestine; and at the close, when the pain was excessive, he bore it with the greatest courage, supported by the presence of his two daughters (both married) and two sons, the third having left the previous evening to join his regiment, under the impression communicated by his sire that he was better.

Mr. Skey, to use the language of our old correspondent "Probe,"(a) was a "handsome, ruddy-complexioned, honest-countenanced, bald-headed man." There is a very good bust of him in the Crystal Palace, and a few years since Mr. Stone, of the College of Surgeons, published an admirable likeness of him, by Mr. T. H. Maguire, for his "Medical Portrait-Gallery." There are also several photographs of him.

If Mr. Skey cannot be placed on an equality with some of the great surgeons whose names are identified with St. Bartholomew's Hospital—Pott, Abernethy, and Lawrence—he was no ordinary surgeon: he was a profound anatomist, skilful in diagnosis, and an excellent operator. He had also imbued from his old master Abernethy strong and correct opinions respecting the constitutional treatment of local diseases. It is not derogatory to his memory to say that he was successful in his practice as a "physician," to which he devoted himself as part of his practice. He had great faith in stimulants in the treatment of consumption; and possibly sometimes carried his views a little too far. Mr. Skey, in regard to his success in life, might be said to be unfortunate. At the very outset of his career he was, we think, most unjustly treated by Abernethy. His lamentable quarrel with his old master will be, no doubt, in the recollection of many of his contemporaries. The result of that dispute was his being kept out of any office of emolument at St. Bartholomew's for many years. He was driven by circumstances into opposition with his Alma Mater, and became one of the most efficient members of a rival school founded by Tweedie and Lawrence in Aldersgate-street. He was a striking and painful example of the injustice of a system which even now to our disgrace exists. He was for upwards of a quarter of a century Assistant-Surgeon to St. Bartholomew's Hospital without receiving a single sixpence for his services. These services were laborious and onerous; but they were fulfilled with an earnestness, efficiency, and conscientiousness which reflect the highest credit upon him. When advanced in life it became his turn to occupy the office of Surgeon to the institution; even then his usual ill-luck attended him. Just previous to his election the governors of St. Bartholomew's had passed a resolution that a Surgeon of the Hospital should not be eligible to hold office after the age of 65. Skey was at the time of his election about 60 years of age, and he had the mortification of being shelved in three or four years, and was appointed "Consulting Surgeon." The office was honorary and unremunerative. In Skey's case this was undoubtedly a hardship, though we approve of the rule generally. But he, at this time, was in full possession of great physical and mental powers. He was never more capable of performing the duties of an active surgeon than at the time of his forced resignation. He was an old Fellow of the Royal Medical and Chirurgical Society; his turn came to be elected president of that important body. Without precedent, his election was opposed by one of his Hospital colleagues. Dr. West, in a speech characterised by remarkable ability and force, opposed Mr. Skey's advent to office. Cicero, in his great speech against Catiline, was scarcely less vehement or eloquent; but the "Catiline" now assailed was enabled to triumphantly repel the attacks of "Cicero"—it could not have been otherwise. Skey had every claim, on professional grounds, to the office to which he had been nominated; but he had other claims not to be slightly regarded in a controversy of this kind. He had rendered important services to the Society; he had endeared himself to the Fellows by his thoroughly genial temper, by his spirit of independence, and by his undoubted impartiality in all the transactions of that important body. We listened to Dr. West's address, on the occasion referred to, with painful admiration. It was impossible to deny the power of the speaker; but it was painful, in the last degree, to hear a good and just man so unwarrantably assailed. Well might Skey, at the termination of that memorable meeting, exclaim "Et tu Brute!" Skey, with all his great abilities and experience, never stooped to the position of a "mere tactician." He had not the worldly wisdom of Abernethy, nor the facile conscience of Lawrence. He was straightforward to the last, and never was guilty of self-seeking or tergiversation to attain his ends. It is remarkable that even with respect to publishing the records of his experience he was unfortunate. It was said that a great general must do something worthy of the name before the age of 40. This no doubt admits of exceptions, but Buonaparte achieved his greatest victories before that age. Wellington was famous long before that period of life. It is unnecessary to refer to other examples in ancient and modern history. Skey published his really excellent work on "Operative Surgery" when he was 60 years of age; but Liston was not 40 years old when he gave the world his

(a) See *Medical Times and Gazette*, vol. vi., p. 89.

great work on the same subject; and Fergusson was younger when his world-known work on "Surgery" appeared. In summing up the character, professional and social, of Mr. Skey, we are compelled to say that he never attained that position in the Profession which his great abilities and extensive acquirements entitled him to hold. In social life, those who knew him most intimately will admit the truth of the statement that he was generous, genuine, and straightforward. Had he been a truckler for office, a changeling influenced by circumstances, he might have died like Abernethy and Lawrence—a rich man; but he possessed that Roman fortitude which consists in a negation of self for the interests of others. Those who knew him best will always regard him and do justice to his memory as a thorough gentleman, an accomplished surgeon, a kind-hearted and generous friend.

His remains were interred in the family grave at Kensal-green, on Monday last, with those of his wife and his promising and talented son who died a few years ago. Of Mr. Skey it may be truly said—"*Multis ille bonis flebilis occidit.*"

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following is a list of the gentlemen who passed at the recent First M.B. Examination (Examination for Honours) :—

Anatomy.

FIRST CLASS.

Houghton, Walter Benoni, student of University College (Exhibition and Gold Medal).
Duncan, Peter Thomas, of University College (Gold Medal).

SECOND CLASS.

Gould, Alfred Pearce, of University College.

Physiology, Histology, and Comparative Anatomy.

SECOND CLASS.

Houghton, Walter Benoni, of University College.
Gould, Alfred Pearce, of University College.
Crocker, Henry Radcliffe, of University College.
Duncan, Peter Thomas, of University College.
Herman, George Ernest, of the London Hospital.

Organic Chemistry, and Materia Medica and Pharmaceutical Chemistry.

FIRST CLASS.

Houghton, Walter Benoni, of University College (Exhibition and Gold Medal).
Crocker, Henry Radcliffe, of University College (Gold Medal).
Duncan, Peter Thomas, of University College.

SECOND CLASS.

Gould, Alfred Pearce, of University College.
Herman, George Ernest, of the London Hospital.

UNIVERSITY OF ABERDEEN.—During the past year the following candidates, after the usual examinations, received degrees in Medicine and Surgery :—

The Degree of M.D.

Busfield, Harcourt M'Leod, Lonmay.
Clark, Thomas Edward, M.R.C.S., L.S.A., Clifton.
Pearson, Thomas Robert, M.R.C.S. Eng., L.R.C.P. Edin., Shotley Bridge, Durham.

At the same time the following gentlemen received promotion to the degree of M.D. :—

Anderson, Alexander Thomas, M.B., C.M., Wigan.
Beattie, George Watson, M.B., C.M., Ballater.
Blacklock, Arthur Woolsey, M.B., C.M., Brighton.
Blake, Edward Thomas, M.B., Reigate.
Catto, Robert, M.B., C.M., Portsoy.
Gillies, John, M.B., Milksham, Wilts.
Hutchison, George Wright, M.B., C.M., Belford Hospital, Fort William.
Lawrence, Alexander, M.B., C.M., County Asylum, Chester.
M'Rae, Alexander Edward, M.B., C.M., Fettercairn.
Maconachie, George Archibald, M.B., C.M., Grant Medical College, Bombay.
Manson, David, M.B., C.M., Amoy, China.
Milne, Thomas, M.B., C.M., New Deer.
Morison, George, M.B., C.M., Huntly.
Munro, Alexander Begg, M.B., C.M., St. Helen's, Melrose.
Newth, Alfred Henry, M.B., Hayward's Heath, Sussex.
Rosser, Walter, M.B., Trinity College, Glenalmond.
Thomson, George, M.B., C.M., Oldham, Lancashire.
Thomson, John William, M.B., C.M., Brechin.
Timmins, John A. J., M.B., C.M., Wellington.
Waterworth, Edward Allan, M.B., Newport, Isle of Wight.
Williams, Albert, M.B., C.M., Sydenham, Surrey.
Wilcock, Richmond Cotts, M.B., C.M., Aberdeen.
Yeats, William, M.B., C.M., Stafford.

The Degree of M.B.

Aldridge, Charles, L.R.C.S. Lond., West Riding Asylum, Wakefield.
Burrell, Alexander, Fort William.
Campbell, William, Kinellar.
Carless, William, Stroud, Gloucestershire.
Cushny, William Alexander, M.A., Fochabers.
Elliott, Frederick William, M.R.C.S. Lond., London.
Farquharson, Patrick Davidson, New Deer.
Footner, Edward, M.R.C.S. Lond., 91st Highlanders.
Forsyth, Alexander, Aberdeen.
Fowler, George William, Chalmer's Hospital, Banff.
Garden, Robert John, Aberdeen.
Gibb, Robert Shirra, Cults, Aberdeen.
Gibbes, Cuthbert Chapman, Plymouth.
Gibbons, John Stephen, Swallowvale, Lincolnshire.
Godson, Clement, M.R.C.S. Eng., and L.M., London.
Gosse, Charles, M.R.C.S. Lond., South Australia.
Inglis, James, Aberdeen.
Knowles, William Bisset, Aberdeenshire.
Laws, James, Aberdeen.
Lawrence, Alfred Edward Aust, Bristol.
Low, David, Skene.
Lyon, John, Peterculter.
Macdonald, John Davidson, M.A., Clatt, Aberdeenshire.
MacKenzie, Duncan John, Ross-shire.
M'Gregor, William, L.R.C.P. & L.F.P.S.G., Lunatic Asylum, Aberdeen.
Mickle, George, M.A., Ripon.
Mitchell, Andrew, New Deer, Aberdeenshire.
Parkinson, John Taylor, M.R.C.S. Edin., Yorkshire.
Pringle, John, Torwoodlee.
Reid, James, M.A., Ellon.
Reid, James Alexander, Kildrummy, Aberdeenshire.
Reid, Robert William, Auchindoir.
Rennie, Thomas, Inverurie.
Rigby-Hughes, John, M.R.C.S. Eng., Runcorn, Cheshire.
Robertson, George James, Daviot.
Smith, George Washington, Methlick.
Stephen, James, M.A., St. Cyrus, Kincardineshire.
Swaine, Frederick Robert, Bengal.
Tytler, Peter, Midmar.
Welford, George Edward, Sunderland.
Wright, Francis James, L.S.A., Preston, Lancashire.
Wyness, James Davidson, Aberdeen.

The Degree of C.M.

Aldridge, Charles.	Lyon, John.
Burrell, Alexander.	Macdonald, John D.
Busfield, Harcourt M'Leod.	Mackenzie, Duncan J.
Campbell, William.	Mickle, George.
Carless, William.	Mitchell, Andrew.
Clark, Thomas Ed.	Parkinson, John Taylor.
Cushny, William Alex.	Pearson, Thomas Rt.
Farquharson, Patrick D.	Pringle, John.
Forsyth, Alexander.	Reid, James.
Fowler, George W.	Reid, James Alexander.
Garden, Robert John.	Reid, Robt. W.
Gibb, Robert Shirra.	Rennie, Thomas.
Gibbes, Cuthbert C.	Rigby-Hughes, John.
Gibbons, John S.	Robertson, George James.
Godson, Clement.	Smith, George Washington.
Gosse, Charles.	Stephen, James.
Inglis, James.	Swaine, Fred. R.
Knowles, William B.	Tytler, Peter.
Law, James.	Welford, George Edward.
Lawrence, Alfred Ed. A.	Wright, Francis James.
Low, David.	Wyness, James Davidson.

Of the above-mentioned candidates, Alexander Forsyth, Robert John Garden, David Low, James Reid, Thomas Rennie, John Rigby-Hughes, and Peter Tytler received their degrees in Medicine and Surgery with highest academical honours; Charles Aldridge and George James Robertson, their degrees in Medicine with academical honours; George William Fowler and Robert William Reid, their Degrees in Surgery with academical honours. "A series of Illustrations of Pathological Histology," by William M'Gregor, was considered deserving of high commendation.

At the same time, Walter Gawen King, Francis Ogston, David Aikman Patterson, and Alex. Reid Urquhart were certified as having passed all the examinations, but did not graduate.

At the late graduation term, the following were declared to have passed part of their examinations :—

Adams, James.	M'Combie, John.
Alexander, John.	M'Ewen, Finlay A.
Baldock, Alfred.	Milne, Irvine K.
Benson, Percy Hugh.	Moir, John Hay.
Butler, Anthony.	Morice, Robert James.
Councell, George B.	Napier, Alex. D. L.
Craig, John S.	Nicholls, Henry A. A.
Craigmile, Alexander.	Poignaud, Malcolm.
Craven, John.	Richardson, Andrew.
Dempsey, Meldon J.	Roberts, William.
Downes, Arthur H.	Robbins, Henry John.
Fehrsen, James M'Call.	Scott, John.
Ferguson, John Ed.	Sheppard, William T.
Fraser, Alex. D.	Sinclair, Wm. Japp.
Gray, John Roubel.	Skinner, Chas. G. L.
Greig, Charles C.	Smith, Robert Gordon.
Hardwicke, Frederick S.	Spencer, Francis H.
Hart, Philip N.	Strickland, Henry G. T.
Hay, Francis.	Trail, James W. H.
Holland, Lucius.	Triggs, John B. B.
Imlay, George A.	Venn, Albert John.
Innes, John C.	Webb, Wm. Edward.
Jackson, Francis E.	Weir, Patrick A.
Laing, James.	Wharry, Robert.
Leftwich, Ralph W.	Wilcox, Henry.
Lloyd, Edward J.	Williamson, Wm. H.
Macandrew, Colin M.	Yule, Robert M.
MacGregor, George R.	

UNIVERSITY OF EDINBURGH.—The following gentlemen received their degrees in Medicine and Surgery on August 1 :—

Doctor of Medicine (under the New Statutes).

Bookless, James Pitcairn, Scotland, M.B. and C.M., 1870.
Brierley, James Brassey, England, M.B. and C.M., 1870.
Fleming, John Nicholson, England, M.B. and C.M., 1870.
Lorimer, George (M.A. Edin.), Scotland, M.B. and C.M., 1869.
Munro, Æneas, Scotland, M.B. and C.M., 1869.
Naismith, William John, India, M.B. and C.M., 1869.
Nicholson, Thomas Dickinson, England, M.B. and C.M., 1870.
Rabagliati, Andrea Carlo Francisco (M.A. Edin.), Scotland, M.B., 1869.
Salt, Henry, England, M.B. and C.M., 1870.
Sinclair, Alexander James, Scotland, M.B. and C.M., 1868.
Suttie, David, Scotland, M.B. and C.M., 1867.
Wilson, George (M.A. Aberd.), Scotland, M.B. and C.M., 1863.
Wotherspoon, Thomas Allan, Scotland, M.B. and C.M., 1870.
Wylie, William, Scotland, M.B. and C.M., 1870.

Doctor of Medicine (under the Old Statutes).

Dougall, Joseph, Scotland.
Scott, William Benjamin Archibald, Scotland.

Bachelor of Medicine and Master in Surgery.

Adey, Henry, England.
Aitchison, George Heron (M.A. Edin.), Scotland.
Archer, Francis Bonfield, Barbadoes.
Bain, David Beattie, Scotland.
Barbour, James, Scotland.
Beckingsale, Daniel Loftus, Isle of Wight.
Bevan, John Iron, Ireland.
Birtwhistle, Frederick, England.
Black, John Robert, Scotland.
Blackshaw, Thomas Wilkinson, England.
Cameron, John, Scotland.
Campbell, William, Scotland.
Church, Henry Macdonald (B.Sc. Edin.), Scotland.
Colbourne, Louis, England.
Craig, James, Scotland.
Sanctis, Luigi De, Geneva.
Dixon, John, England.
Donald, James Smart, Scotland.
Douglas, Thomas Kennedy, Scotland.
Edwards, William John, Wales.
Forrest, William, Scotland.
Foulis, James, Australia.
Frew, William, Scotland.
Gardener, Robert Henry, India.
Hall, Edgar Atheling, Australia.
Hoggan, George, Scotland.
Hutchinson, Charles Frederic, England.
James, Alexander, Scotland.
Loftus, Thomas Richford Edwin, Ceylon.
Macdonald, Duncan, Scotland.
M'Intyre, Andrew James, Scotland.
Mansell-Macculloch, W., Guernsey.
Meredith, W. Appleton, America.
Murchison, Finlay, Scotland.
Murdoch, Patrick Alexander, Scotland.
Murray, John, Scotland.
Neild, Frederick, England.
Norris, Henry Lee, America.
Pairman, Robert, Scotland.
Palin, Henry Venables, England.
Pratt, William Simson, India.
Ritchie, James, Scotland.
Robertson, Alexander, Scotland.
Robertson, Edward Bruce (M.A. Edin.), Scotland.
Robinson, Edmund, England.
Roux, Johan Paul Werndley, Cape of Good Hope.
Sawdon, Frederic John, England.
Shaw, John Edward, England.
Steell, Graham, Scotland.
Stirling, William (D.Sc. Edin.), Scotland.
Taylor, Herbert Owen, England.
Watson, Thomas Boswall, China.
Williamson, James Mann, England.
Wright, Frederick William, England.
Young, Henry, Monte Video.

Bachelor of Medicine.

Adams, George Norris, England.
Harris, Alfred Charles Edward, India.
Hutson, Charles, Barbadoes.
Imlach, Francis, England.
Law, William Thomas, England.
Madden, Edward Monson, England.
Masterton, John, Scotland.
Monteith, James Mitchell, Scotland.
Playfair, John, Scotland.
Sanderson, Thomas Drummond, Scotland.
Warne, William Colston, England.

The Ettles Prize was awarded to William Stirling, M.B., C.M., D.Sc.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At special examination meetings of the College held on August 3, 5, 6, and 8, the Licence to practise Medicine was granted to—

Boyd, Henry Walter Butler.
Byrne, Joseph.
Daly, Richard Augustus Shelton.
Gamble, Baptist.
Ryan, Charles Edward.
Thomsett, Richard Gilham.
Waddell, Alexander.
Warren, William.

The following received the Midwifery Diploma :—

Boyd, Henry Walter Butler.
Daly, R. A. S.
Gamble, Baptist.
Ross, Richard Edmond.
Ryan, Charles E.
Thomsett, Richard G.
Waddell, Alexander.
Warren, William.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 15, 1872:—

Harnett, Alfred, Bittern, Southampton.
Little, Robert, Dublin.
Wagstaffe, Thomas Henry, Camberwell.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Bond, George Weddale, Guy's Hospital.
Coates, William Harrison, St. Thomas's Hospital.
Cole, Henry Cornelius, University College.
Hales, Robert Turner, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ARMSTRONG, JOHN, M.A., M.B., C.M.—Medical Officer to the Parish of Tarbolton, Ayrshire.

BURTON, JAMES EDWARD, M.R.C.S. Eng.—House-Surgeon to the Westminster Hospital, *vice* R. Strickland Hannay, M.R.C.S. Eng., resigned.

COOK, WILLIAM, Mem. Phar. Soc.—Dispenser to the Shoreditch Dispensary.

HACKNEY, ALFRED H., M.R.C.S. Eng. and L.S.A.—Medical Officer for District No. 4, Battle Union, Sussex.

HUNTER, GEORGE YEATES—Surgeon to Sir Jamsetjee Jejeebhoy's Hospital at Bombay, Professor of Anatomy in the Grant Medical Schools, and Curator of the Museum.

LITTLE, WILLIAM, M.R.C.S. Eng., A.K.C.—Surgeon to the Toxteth-park Girls' Industrial School, Liverpool, *vice* Barnabas Barrett, M.D., deceased.

LUSH, W. G. V., M.D., F.R.C.S.—Physician to the Dorset County Hospital, *vice* W. Williams, M.D., resigned.

MURCHISON, FINLAY, M.A., M.B., C.M.—Parochial and District Surgeon to the Parish of Harris, Inverness-shire.

NUNAN, FRANCIS, M.D. Queen's Univ. Ire., L.R.C.S. Edin., L.M., L.A.H. Ire.—Medical Officer to the Blarney Dispensary District of the Cork Union.

PERCY, GEO., M.R.C.S.E., L.K. & Q.C.P.I., L.M. Dub.—Medical Officer for the Ballybay Dispensary District of the Castleblayney Union.

PRATT, WILLIAM, M.D., L.R.C.P.L.—Medical Officer for the Newtown and Llandidloes Union.

ROBINSON, HAYNES S., M.R.C.S.L.—Assistant-Surgeon to the Norfolk Eye Infirmary, Norwich.

WADDY, H. E., L.R.C.P. Lond., M.R.C.S. Eng.—Assistant-Surgeon to the Gloucester Infirmary, *vice* W. F. Keddell, resigned.

BIRTHS.

ARGLES.—On August 14, at 8, Radnor-place, Hyde-park, the wife of Robert Argles, L.R.C.P. Edin., L.M., M.R.C.S. Eng., L.S.A., of a son.

CROFT.—On August 10, at Bicester, Oxon, the wife of J. H. Croft, M.R.C.S.E., of a son, stillborn.

DUNSTAN.—On July 28, at Citta Vecchia, Malta, the wife of John Dunstan, Staff Assistant-Surgeon, of a daughter.

EASTWOOD.—On August 18, at Dinsdale-park, Darlington, the wife of J. W. Eastwood, M.D., M.R.C.P.L., of a son.

GALTON.—On August 18, at Thicket-road, Anerley, the wife of John H. Galton, M.D. Lond., of a daughter.

HEAD.—On August 14, at East Grinstead, Sussex, the wife of Robert T. Head, M.R.C.S. Eng., L.S.A., of a daughter.

WAGHORN.—On August 15, at Anerley, the wife of Surgeon A. R. Waghorn, H.M.'s Bengal Army, of a son.

MARRIAGES.

BLUNT—BAIRD.—On August 15, at 10, Bellevue-terrace, Edinburgh, George Henry Blunt, Esq., solicitor, Leicester, son of the late Thomas Edward Blunt, surgeon, of Wigston Magna, to Isabella, daughter of Robert Bruce Baird, Esq., of Courance, Dumfriesshire.

HEWITT—WHITMORE.—On August 15, at the parish church, Marylebone, Stanley Hughes, youngest son of Frederick Hewitt, Esq., of Clapham, Surrey, to Louisa, younger daughter of John Whitmore, M.D., of 15, Wimpole-street, Cavendish-square.

HOWARD—OGILVY.—On August 15, at St. Luke's Church, Paddington, Sydney Howard, Esq., of Notting-hill, to Alexina Sarah, widow of the late James Ogilvy, M.D., of Park Conon, Forfarshire, and only child of the late Dr. Ross, Montrose.

LEFROY—MCCLINTOCK.—On August 14, at St. Steven's Church, Dublin, Charles James Maxwell Lefroy, Esq., of Itchell Manor, Hampshire, late Captain 14th Hussars, to Elizabeth Catherine, daughter of Alfred H. McClintock, M.D., of 21, Merrion-square North, Dublin.

MATHIAS—WHARTON.—On August 14, at Letherhead, V. Lewis Mathias, Esq., Madras Staff Corps, second son of the late Colonel Vincent Mathias, Madras Army, to Kate Anne, youngest daughter of George Wharton, M.D., Physician to the Bedford General and Fever Hospitals.

ODLING—SMEE.—On August 20, at St. Mary's Church, Beddington, Surrey, William Odling, M.B., F.R.C.P., F.R.S., Professor of Chemistry at Oxford, to Elizabeth Mary, only daughter of Alfred Smee, F.R.C.S. Eng., F.R.S.

SECCOMBE—BATES.—On August 14, at Terrington St. Clement, Norfolk, John T. Seccombe, M.D., of Terrington, to Ellen, daughter of Henry Bates, Esq., of Terrington.

STEEL—BANISTER.—On August 14, at Stokeinteignhead, near Teignmouth, James Nisbet Steel, Captain 25th Punjaub Regiment, only son of James Steel, M.D., late Bengal Medical Service, to Annie Emma, eldest daughter of Henry Banister, Esq., Brookvale House, near Teignmouth.

TOMKINS—GILLHAM.—On August 15, at the Congregational Church, Stratford, Edward, youngest son of John Tomkins, Esq., formerly of the Admiralty, Somerset House, to Emma Margaret Terrell, only surviving daughter of the late Thomas Gillham, M.D., Funchal, Madeira.

DEATHS.

BRAID, NESSIE HELENA, infant daughter of James Braid, M.D., at the Grove, Burgess-hill, Sussex, on August 18, aged 14 weeks.

COURTENAY, HENRY BISSHOPP, M.D., younger son of the late Henry Courtenay, R.N., at the residence of his brother-in-law, 13, Globe-street, Wapping, on August 21, aged 43.

GIBBS, WILLIAM, M.R.C.S. Eng., L.S.A., for many years at Heckington, Lincolnshire, at 15, Colebrooke-row, Islington, on August 17, aged 71.

HICKS, LAURA THEODOCIA, fourth daughter of the late Robert Hicks, M.D., on August 5, aged 37.

HUMBLE, —, infant son of the Rev. G. A. Humble, M.D., M.R.C.P., at Patagones, South America, on May 19, aged nearly 1 year.

HUMPAGE, MARIA, widow of Edward Humpage, surgeon, late of Cotham-road, at Bellevue Villa, Redland, Bristol, on August 10.

JEYES, S., M.D., late of the 15th (King's) Hussars, at Weston Lodge, Adelaide-road, Leamington, on August 15.

PULLEN, ISABELLA JANE, widow of the late Samuel George Pullen, Lieutenant R.N., and second daughter of the late Henry Duncan, M.D., at Longton Villa, Longton-grove, Sydenham, on August 12.

SIMS, ANN, last surviving daughter of the late John Sims, M.D., at St. Catherine's Niton, Isle of Wight, on August 16, aged 78.

SKEY, FREDERIC CARPENTER, C.B., F.R.S., F.R.C.S., late President of the Royal College of Surgeons, at 24, Mount-street, W., on August 15, aged 73.

SMITH, CHARLES HENRY HERRIES, second son of Thomas Smith, M.D., at the residence of his father, Portland House, Cheltenham, on August 13, aged 29.

STANLEY, LUCRETIA, widow of Edward Stanley, M.D., fifth daughter of the Rev. J. S. Casborne, of Pakenham, Suffolk, at The Cottage, Troston, Suffolk, on August 7.

TURNER, E. FULHAM, M.B. Lond., L.R.C.P., M.R.C.S. Eng., late of Market Bosworth, Leicestershire, at Lower Sydenham, Kent, on August 15, aged 30.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD.—House-Surgeon and Junior Resident Medical Officer. Both must be qualified to practise. Applications to the Secretary, Mr. George Reid, 46, Great Coram-street, W.C., on or before August 26.

LISKEARD UNION.—Medical Officer for the Callington District. Candidates must be duly qualified. Applications, with testimonials, to Albert C. L. Glubb, Clerk to the Guardians, on or before August 24.

NORTHAMPTON GENERAL INFIRMARY.—Dispenser. Applications, with testimonials, to S. P. Bennett, Secretary, on or before August 30.

PROVIDENT MEDICAL INSTITUTION AND LYING-IN CHARITY, 20, PIMLICO-ROAD, PIMLICO, S.W.—Attending Medical Officer. Must be duly qualified to practise. A gentleman residing in Chelsea or Brompton preferred. Applications to the Committee on or before September 3.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WARNEFORD LUNATIC ASYLUM.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

WESTMINSTER GENERAL DISPENSARY.—Honorary Physician. Must be a Doctor or Bachelor of Medicine, and be registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

WESTMINSTER GENERAL DISPENSARY.—Resident Medical Officer. Must be duly qualified and registered. Applications to the Secretary, at the Dispensary, Gerrard-street, Soho, on or before August 24.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Anglesey Union.—The Llangefin District is vacant; area 14,805; population 4252; salary £50 per annum.

Daventry Union.—Mr. Joseph T. Jones has resigned the Fifth District; area 10,690; population 1793; salary £30 per annum.

APPOINTMENTS.

Boston Union.—Nathaniel P. Betts, M.R.C.S.E., L.S.A., to the Sutterton District. Edward Lane, M.R.C.S.E., L.S.A., to the Kirton District.

Epping Union.—Andrew Macgill, M.D., M.F.P. & S. Glasg., to the Roydon District.

Leek Union.—Edgar Gailey, L.R.C.P. Edin., M.R.C.S., to the Leekfrith District.

Portsea Island Union.—Thomas Diver, M.D., M.R.C.S., L.S.A., to the Workhouse.

Sudbury Union.—Henry D. Palmer, M.R.C.S.E., L.S.A., to the Sixth District.

Sunderland Union.—James Wm. Horsfield, B.M. Glasg., L.S.A., to the Ford and North Hylton District.

Thingoe Union.—Fred. Edward Aldrich, M.R.C.S., L.S.A., to the Second District.

Uxbridge Union.—Andrew Hamilton, L.R.C.P., L.S.A., to the West Drayton District.

MR. W. COOK has been appointed Dispenser to the new Infirmary at Shoreditch, at a salary of £120 per annum. There were seventy-six applications for the appointment.

MR. ROBERT H. LLOYD, who was connected with the ambulance corps in the Franco-Prussian war, has been elected Resident Medical Officer of Lambeth Workhouse, vacant by the resignation of Dr. Power.

An influential meeting has been held at the Town-hall, Bideford, presided over by the Mayor, at which it was resolved to convert the Dispensary into an infirmary, with from six to eight beds, and a subscription was opened for providing the necessary funds.

IN recognition of the manner in which the public vaccination has been carried out by Dr. Eugene Goddard, of 27, Pentonville-road, public vaccinator for the northern division of Clerkenwell, the Local Government Board has awarded him a gratuity of £29 17s.

PRESENTATION.—Mr. John Brennen was on Saturday last presented with an address and a magnificent gold watch bearing the following inscription:—"Presented to John Brennen, Esq., Registrar R.C.S.I., by the President, Vice-Presidents, Members of the Court of Examiners, and some of the Fellows of the College of Surgeons in Ireland, as a slight token of the esteem in which they hold his public and private character." Mrs. Brennen was at the same time presented with a valuable service of plate.

DR. J. R. EDE, lately Medical Officer of the Islington Workhouse, has been granted by the guardians a superannuation allowance of £120 per annum.

A GOOD EXAMPLE.—A beautiful playground, on the site of a market garden in Ebury-square, Pimlico, was thrown open at an early hour on Monday, for the use of the children of Belgravia, at the expense of the Marquis of Westminster, and the Dowager Marchioness of Westminster has further provided for the youngsters a drinking-fountain.

THE Guardians of St. George's, Hanover-square, have passed a resolution expressing distrust and alarm at the increase in the number of pauper lunatics, and urging upon the Lunacy Commissioners the necessity for a searching investigation.

THE Governors of the Hereford Infirmary have resolved —"That it is desirable to institute a 'hospital Sunday' in the county of Hereford, for the benefit of the Hereford General Infirmary." The Bishop has issued an address to the clergy in his diocese, and the day fixed is December 1 next.

SMALL-POX in a very virulent form has appeared in Much Wenlock.

THE MAHARAJAH OF CASHMERE has just given a sum of money for the founding of a medical college at Serinagar. Baboo Gopal Chund, sub-assistant-surgeon, and a native hakim are in charge of it, and give lectures and demonstrations.

AT Sir Patrick Dun's Hospital, Dublin, a class is about to be formed for the instruction in midwifery of the wives of soldiers of the corps serving in Ireland.

THE Prussian Ministry of the Interior have ordered the enforcement of the precautionary measures against cholera decreed in 1866, with additional safeguards against the propagation of the disease in factories and private residences.

ST. MARY'S HOSPITAL will be cleared of in-patients in a few days, to make alterations in the building.

HEALTH IN FOREIGN CITIES.—In Brussels eighty deaths occurred in the week ending the 3rd inst., and the annual death-rate was 22 per 1000.——In Berlin, during the week ending Thursday, August 15, 633 deaths were recorded, showing an annual rate of 40 per 1000. 213 deaths were referred to infantile diarrhœa, and 28 to enteric fever.——In Vienna the 360 deaths in the week ending the 3rd inst. gave an annual rate of 30 per 1000.——In Rome 218 deaths were registered in the week ending the 28th ult., and the annual death-rate was 47 per 1000.——In Paris 854 deaths were returned in the week ending Friday, August 16, and the annual death-rate was equal to 24 per 1000 of the estimated population.——In the city of New York 918 deaths were registered in the week ending July 20, and the equivalent annual rate of mortality was 51 per 1000. 438 deaths were referred to diarrhœal diseases, against 639 and 487 in the two preceding weeks, 21 to cerebro-spinal fever, and 12 to the direct effects of solar heat.

THE "ECOLE LIBRE DE MÉDECINE DE STRASBOURG."—This, the remnant of the French Faculty of Medicine, which attempted, by the aid of M. Schützenberger and some other professors, to keep up a French school in that city, has been obliged to succumb. The number of students amounted to only about seventy, which is of course quite insufficient to form a complete medical school with a full staff of professors, even if these could be obtained. The decision of the German Government that in future all university teaching must be in the German language has brought the experiment to an abrupt close.

THE BRITISH WORKMAN.—The Committee of Management of the South London Working Men's Institute having applied to Professor Flower, F.R.S., the Conservator of the Museum of the Royal College of Surgeons, for permission to visit that institution, the request was at once complied with, and a Saturday half-holiday devoted by him to explaining the great treasures confided to his able care. The party (about fifty in number) assembled round the fine statue of John Hunter by Mr. Weekes, R.A., when Professor Flower gave an eloquent address on the life and great labours of the founder of the Museum, mentioning that, though at one period of his life he was no better furnished with money than most of those present, he was enabled to achieve such great results simply by the force of his immense industry and perseverance. It was not a question with him of working nine or ten hours, but nearly twice that number of hours; and so he continued, whilst engaged in the arduous and responsible professional work which enabled him to obtain the means for carrying out his researches, to form a museum unsurpassed by that ever made by any private individual. The collection after his death was purchased by Government for £15,000 (probably not more than a fourth of what it had cost), and had ever since been maintained by the College, without any expense to the nation, and was now freely open to all who wished to profit by it. Professor Flower then proceeded to explain the general nature of the contents of the Museum, and their arrangements, and to give examples of the lessons that might be derived from an examination of them. Among other objects he called their attention to the skeleton of the great Greenland whale lately suspended in front of Hunter's statue, and which, he said, would have gladdened Hunter's eyes could he have beheld it, and explained the habits and structure of the animal, and compared and contrasted the several parts of its bony frame with those of the human skeleton, exemplified for the occasion by that of the celebrated Irish giant, O'Bryan. The visitors were then invited to look round for themselves at various objects in the Museum, and to ask any questions that might occur to them. At the conclusion of the visit, which occupied two hours, a cordial vote of thanks was accorded to the authorities of the College, and especially to Professor Flower for the valuable information he had so kindly given them. It is not the first time this gentleman has devoted a half-holiday to his humble but appreciative friends.

BEEF-TEA.—Dr. H. C. Wood adds yet another to the hundred modes of making beef-tea:—"Take a thin rump-steak, lay it upon a board, and with a case-knife scrape it. In this way a red pulp will be obtained, which contains pretty much everything in the steak except the fibrous tissue. Mix this pulp thoroughly with three times its bulk of cold water, stirring until the pulp is completely diffused. Put the whole on a moderate fire, and allow it to come slowly to the boil, stirring all the time to prevent caking. As soon as it has boiled, remove it and season to taste. It is not to be strained, but the settlings are to be stirred thoroughly into the fluid. One to three ounces may be given at a time."—*New York Record*, July 15.

INDIAN DRUGS.—At the recent meeting of the British Medical Association a collection of the officinal drugs of the Pharmacopœia of India, which are not contained in the British Pharmacopœia, 1867, was shown by Messrs. Southall, Son, and Dymond, manufacturing pharmaceutical chemists, Birmingham. These drugs were exhibited in glass jars, to which were affixed printed labels, conveying the botanical names; the habitat of the plant; the officinal part employed, and the properties of the same, with its therapeutic uses, recognised preparations, and doses. The drugs were as follows:—Rusot (or Rasot), Huid., watery extract from the wood and bark of species of Berberis (non officinal); Azadirachta Indica (Nim or Margosa), bark and oil; Luffa amara (Bindaal), stalks of plant; Coptis Teeta (Coptis or Mishnu), the dried root; Datura Alba (Dhatura), the leaves and seeds; Aconitum Heterophyllum (Atis), the dried root; Aconitum ferox (Bikh or Bish), the dried root; Diospyros Embryoptera (Gab), the fruit; Narcotine (Alkaloid); Pharbitis Nil (Kaladina) the seeds; Andropogon (*Cymbopogon*), Nardus. Citronelle—the oil; Andropogon (*Cymbopogon*), Citratum, Lemon Grass—the oil; Mylabris cichorii (Telini fly), the dried insect; Carum (*Ptychotis*), Ajowan, Ajwain, or Omum—the fruit; Plantago Ispaghula (Ispaghúl), the seeds; Tinospora Cordifolia (Gulancha), the root and stems; Butea Frondosa—the seeds; Gynocardia Odorata (Chaulmugra), the seeds and oil; Hydrocotyle Asiatica (Indian pennywort), the leaves; Cæsalpina (*Guilandina*), Bonducella, Bonduc—the seeds; Citrus Bergamia (lime), the fruit; Dipterocarpus lævis (Gurjun), wood oil; Boswellia floribunda (Olibanum), the gum resin; Sinapis juncea (Rai, or Indian mustard), the seeds; Garcina Pictoria (Indian Gamboge), the gum resin; Soymida febrifuga (Rohun tree), the bark; Acacia Catechu (Catechu), the extract of heartwood; Alstonia scholaris (Alstonia), the bark; Anamirta Cocculus (cocculus), the dried fruit; Punica Granatum (pomegranate), the root bark, and the dried pericarp of fruit; Andrographis paniculata (Karijât), the dried stalks and roots; Mucuna pruriens (cowhage), the hairs of the pod; Oryza Sativa (rice), the husked seeds; Berberis (Indian barberry), the root bark; Gracilaria lichenoides, and G. confervoides (Ceylon moss), the dried plant; Calotropis gigantea (Mudar), the root bark.

PREDICTION OF THE SEX OF THE CHILD BY AUSCULTATION.—Dr. Hutton, of the Long Island College Hospital, states that, as far as his experience goes, the following rule may be relied upon:—"Fœtal pulsations heard below a horizontal line dividing the uterus into two equal parts denote vertex presentation, and above it breach presentation. Below this line and to the left denotes the first position, to the right the second position. When the pulsations number 144 per minute it is a female, and when 124 it is a male. A variation of six beats per minute from 124 upward, or from 144 downward, will not endanger the diagnosis, provided auscultation be practised in the ninth month of pregnancy."—*New York Journal*, July.

MOVEMENT OF POPULATION IN VIENNA DURING 1871.—During 1871 there died of the civil population 22,600 persons, while there were 25,922 births—13,348 male and 12,574 female. There was, therefore, an increase of births over deaths of 3322. Among the deaths 462 were the result of violence, and about a third part (6582) took place during the first year—clearly exhibiting the sad condition of young infants in this city.—*Wien. Méd. Zeit.*, July 30.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

S. D. C.—Dr. Livingstone, the African explorer, is a Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

Mr. John Forster, Kadina.—Letter and enclosure to hand: thanks for same. Copies sent, as requested.

M. Marais' "Guide Pratique à l'Usage du Médecins, pour l'Analyse des Urines" shall receive due attention.

Catalepsy.—Yes; we believe the custom is still kept up in many parts of Germany of fastening a bell-pull to the hand of a corpse when laid in the public mortuary.

Two Students.—The first person who publicly reported the occurrence of scarlet fever in India was Assistant-Surgeon Thos. Maunsell, R.H.A. (See *Indian Medical Gazette*, December 1, 1870.) There are good grounds for believing that the disease was not unknown to Jackson, Murchison, and Morehead.

A. P., Wolverhampton.—It is in the possession of the Royal College of Physicians, Pall-mall.

Sunstroke.—Sir Charles Napier stated in a letter published in his life that out of forty-four cases of sunstroke which occurred at Nussurpoor on June 15, 1843, forty-three proved fatal. This is the highest mortality on record.

H. N. Sibley.—1. Not that we are aware of. 2. There is an article on the subject in *Dunglison's American Intelligencer* for May 1, 1840, by A. G. Walter, M.D., of Pittsburg.

Scarborough.—It is only due to this town, after the unwarrantable attacks made upon it last year, to state the following facts as recorded in the *Scarborough Express*:—

"At the meeting of the Board of Guardians, on Thursday week, Mr. Smailes, the relieving officer, stated that that was the second week he had no medical order to report, a fact which speaks very much for the present healthy condition of the town. The Registrar-General has just issued his quarterly return, which contains the special table applying to watering-places, on referring to which we find the mortality of Scarborough for the quarter ending June 30 last is little over half that recorded for Dover; 4 per 1000 below Margate; 6 per 1000 below Whitby; 2 per 1000 below Weston-super-Mare; 3 per 1000 below Llandudno; 3 per 1000 below Bath; 2 per 1000 below Malvern; 4 per 1000 below Herne Bay; 5 per 1000 below Southport; 6 per 1000 below Matlock; and 3 per 1000 below Rhyl."

B. C.—The Liverpool, London, and Globe Office.

Chertsey.—Dr. Prout recommended nitro-muriatic acid, infusion of wild carrot seed, and (as a daily beverage) weak hollands and water.

Felix.—The benefits of the Society for the Relief of Widows and Orphans of Medical Men are confined to members.

C. D.—Max Greger, Mincing-lane. Dry Ruszte, or Szamorodny.

Longevity.—The most authentic examples are the famous Parr, who married at the age of 120, retained his vigour till 140, and died at the age of 152 from a plethora brought on, it is said, by a change of diet. Harvey, the great discoverer of the circulation of the blood, who dissected him, detected no signs of decay in any organ. Henry Jenkins, who died in Yorkshire in 1670, attained 169 years; he is most likely the oldest man on genuine record in modern times.

Mr. Darwin and the French Academy.—Les Mondes treats the result of the candidature of Mr. Darwin, and his rejection by the French Academy by a large majority, as a definite relegation of the renowned naturalist to the second rank among scientific men, justifiable on purely scientific reasons; remarking further that Mr. Darwin has forfeited his claim to rank among the first *savans* of the age, by having too much sacrificed reason to the imagination, and pure science to notoricty and sensation.

A.—Mr. Upton, at Apothecaries' Hall.

Studens Phthisicus.—Dr. Moses Griffith practised at Colchester in the last century. He gave iron because of its astringency to check the perspiration; he added some salt of potash (nitrate or carbonate) to allay febrile heat; and a bitter—viz., myrrh—to improve the tone of the stomach. This is the origin of the famous "Griffith's Mixture," so much used in phthisis thirty years ago. All that is said of the philosophical combination of protoxide of iron with myrrh to preserve it from the atmosphere, etc., are afterthoughts and fables. The combination was a lucky accident. We are unable to say whether its virtues exceed those of the tincture of steel.

A Sufferer.—Take every morning sixty grains of sulphate of magnesia, one grain of sulphate of quinine, and twenty minims of dilute sulphuric acid dissolved in a large wineglass of water. Use Calvert's carbolic soap, or Wright's sapo carbonis detergens, locally; wash in quite hot water. If you can afford it, send a guinea to the Medical Benevolent Fund.

Brighton.—Some people cannot mind their own business. Don't be put out; such misdeeds lead to their own punishment. Old Mr. Coutts was asked by a young lady how he had made his fortune. He answered that he had made half of it by minding his own business. "La! then, Mr. Coutts," said she, "you must say how you made the other half." "By leaving other people's business alone," was the answer. The young lady could not see the force of it any more than our correspondent's busy neighbour.

H. P.- We decide in favour of No. 1; there can be no doubt about it. What is called the *nominative* case of a Latin or Greek noun substantive, is usually a cut down and stunted form, and does not show the real root of the word. In this instance the root is *albumin*, and the derivatives are *albuminous* and *albuminised*, not *albumenous*. If we were to follow the rule of No. 2, and take the nominative case as the root from which derived words are to be formed, how should we get at the word *virgin*, *virgineal*, etc.? The nominative case is *virgo*, and from this we should get such a horrible word as *virgoeal* instead of virginal. The same with the words *original*, *marginal*, *gigantic*, etc., none of which are formed from the nominative, but from the root, which underlies the other cases, and is stunted in the nominative.

The Appointment of Medical Officers of Health.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A medical officer of a district of a union having applied for the appointment of Medical Officer of Health under the Public Health Bill, of said district in which there is a village that has a local board, allow me to ask whether the appointment by the Poor-law Guardians would include said village, or whether the Local Board of the village have the power of appointing a separate officer? A reply in your "Notes and Queries" in next issue would oblige. I am, &c.,

August 20. J. B.

*** The guardians, as the rural sanitary authority, have no power to appoint a Medical Officer of Health for a place in which there is an urban sanitary authority, as there must be in the village referred to, if it be, or if it form part of, a borough, an Improvement Act District, or a Local Government District. The same person may, however, with the sanction of the Local Government Board, be appointed, by the joint or several appointment of the two sanitary authorities, Medical Officer of Health for the rural district and for the place under the Local Board.

The "International."—We are much obliged for the copy of the paper which has been sent us, for we regard it part of our duty as medical journalists to keep an eye on the opinions which prevail in various sections of society. Opinions, as is well known, are but the reflex of moral and material conditions. There is considerable scope for the *International* amongst members of the medical profession, many of whom complain bitterly of the unequal distribution of the good things of this life. There are some amongst ourselves whose favourite formula is—"The Profession, sir, is going to the devil! If I had fifty sons, sir, I would not breed up one to such an infernal beggarly profession. 'Tis only humbug that pays. Look at that fool, tearing along in his carriage and pair, whilst I tramp along in the mud. I am as good as he—quite as willing to treat patients as he; then why should he be rich, and I be poor?" We would suggest to our international contemporary that the first thing towards the desired end must be the entire abolition of all privileges. We must begin with the artificial privileges. No one citizen must enjoy or possess more of the earth's surface than another; all plans of living upon others' industry, in the shape of funds, stocks, shares, capital, etc., must be abolished, and the surplus remaining, after individual wants have been supplied, must be cast into a common fund, to be administered by the most virtuous citizens amongst the working men. But such a reform as this would go but half way; all true citizens of a democratic and social republic should clamour, not merely for the abolition of the hateful artificial privileges, rank, titles, wealth, landed estates, and the other gewgaws which are so galling to those who do not get them, but the *natural privileges which alone enable men to overtop and overreach their less fortunate fellow-citizens*, must be abolished likewise. Why should one man be taller than another? Why should a tall shapely fellow be preferred by his fellow-citizenesses to a stumpy rival? What right has one man to a long clear sight, whilst I am obliged to peer through spectacles? Why should one citizen be forced to bawl himself hoarse singing ballads in the streets for a few coppers, whilst another gets thousands of pounds for singing at an opera-house? Why should one fiddler, one actor, one orator, one lawyer, one cook, one actress, one doctor, have better eyes, tongue, ears, legs, and jaws than another? Why are some citizenesses decked with hair that flows down to their waists, whilst others are compelled to buy false hair at seven and sixpence the ounce? We must redress these natural inequalities by some severe and wholesome law before we can hinder the naturally privileged from absorbing more than their share of the fruit of the people's toil. There are moral inequalities also. Why should one man be able to keep his lips from a pot of beer, and so hoard his coppers and put them into a savings bank, when another does but obey his instincts and drink his beer? Why should his hand shake and the other's be steady? So it is clear that the reform promised by the *International* must be a thorough one and go a long way back if it is to produce that perfect "equality" desired amongst citizens. If society is to be levelled we must begin with individuals.

Mr. Postgate.—The *Birmingham Daily Gazette* has a long article on the history of the Adulteration Act, and of the early struggles for the recognition of the principle of purity *versus* freedom of swindling, in which struggles Mr. Postgate took an important share, whilst the Birmingham M.P.'s have taken a large share in the conduct of the Bill.

"Mr. Muntz was for some time in favour of the 'may' instead of 'shall'—the permissive instead of the compulsory; but throughout the last session the subject was taken up by Lord Eustace Cecil, who chivalrously backed up the measure, insisting on its being made compulsory, and in the form it now assumes, aided Mr. Muntz in carrying it successfully through the House of Commons. Even here its sponsors did not desert it. Its author was untiringly vigilant to the end. Lord Eustace Cecil's elder and very distinguished brother, Lord Salisbury, took charge of it in the House of Lords, and it is now, happily, a part of the law of the land. Mr. Postgate's labours in this particular direction are now brought to a satisfactory termination. He has seen the successful result of labours to which he has devoted half a lifetime, upon which he has spent thought, energy, and money, and displayed a vigour and pertinacity which few men have the courage and endurance to bring to bear upon any one subject. He saw his fellow-creatures being cheated, poisoned, and corrupted; he saw a deterioration of national morality, and the honest trader being punished for his integrity and suffering from the unscrupulous cupidity of his neighbour. How the persevering efforts of the author of this beneficent measure had fought; the snubs and awry-glances, and cold shoulders he has has to submit to even from professional brethren and men in authority, would make a very protracted tale. He has the satisfaction of having endured to the end, and his reward will be a substantial one on the part of a grateful people, who have now a fair chance of eating, drinking, and being prescribed for without fear of positive and protracted injury."

Mr. Edward Arber's Reprint of Rare Old Books.—A correspondent begs us to notice this very cheap and interesting series of reprints, for the most part *fac-simile*. He says, "It is astonishing how much of our erudition is second-hand, and how ready people are to quote from books they never saw, but which they speak boldly of on the strength of some quotation or notice in a popular author. Hence, quotations in the most absurd and mutilated form are propagated from one to another. . . . It is astonishing what freshness and vigour and truthfulness there are in the views got by the perusal of original works; but original works are often dear and inaccessible. But Mr. Arber comes to the rescue, and gives us a *fac-simile* series at the most trifling cost. I have before me Bishop Latimer's 'Sermon on the Plowers' for sixpence, half a dozen other sermons by Latimer for eighteenpence. The English is wonderfully forcible and good, but there is nothing saintly about them—violence, faction, and cringing to the Court are too palpable. Among the works reprinted are two often quoted by medical writers—Sir Thomas More's 'Utopia,' translated by Ralphe Robynson, 1556, and King James's 'Counterblaste to Tobacco,' each for one shilling. In 'Utopia' we are told that 'Thoughe there be almost no nation vnder heauen that hath lesse nede of Phisicke then they, yet this notwithstandyng Phisicke is nowhere in greater honour.' Speaking of marriage, he says of the Utopians—'In chuesinge wyfes and husbandes they obserue earnestly and straytelye a custome which semed to vs uery fonde and folyshe. For a sad and honest matrone showeth the woman, be she mayde or widdowe, naked to the wower; and lykewyse a sage and discrete man exhybiteth the wower naked to the woman. . . . They doo greatlye wonder at the follye of al other nations, whyche in byinge a colte be so charye and circumspecte that thoughe he be almoste al bare yet they wyll not bye him onelcs the saddel and all the harnies be taken off, leaste vnder those couerynges be hydde som galle or soare; and yet, in chuesinge a wife, ...' etc. etc. The rest of the argument may be imagined." Mr. Arber's office is at 5, Queen's-square, W.C.

Bowdlerism.

AU REDACTEUR DU MEDICAL TIMES AND GAZETTE.

Monsieur,—J'ai lu dans le *Times* que notre honorable confrère le Docteur Burdon-Sanderson, dans son discours à Brighton, a parlé d'une "physiology" qu'on a "Bowdlerised" pour convenir à certaines personnes. Je vous prie, Monsieur, de vouloir bien m'expliquer cette phrase, qui m'est nouvelle et que je n'ai pas trouver dans aucune dictionnaire de votre langue. Se peut il que le Bowdlerisme se trouve parmi les nombreuses sectes philosophiques ou réligieuses de votre honorable pays? Agréez, Monsieur, mes complimens les plus impressés. Je suis, &c., D. M.

*** The Rev. Mr. Bowdler was a clergyman, who published an edition of Shakespeare (the "Divine Williams," as a French academician called him) for the use of children and girls, out of which he cut all words and passages that he chose to consider coarse or indelicate. Hence, any work which is similarly treated is said to be Bowdlerised, and Bowdlerism has become diffused and practised as by a sect. One eminent branch of it occupies itself with clothing the few nude statues that exist in England; and, if they can do nothing else, they content themselves by affixing enormous fig-leaves, which, however, make certain features more conspicuous than before. Bowdlerism was once said to prevail in the United States so that it was voted indelicate to speak of the legs even of tables and chairs; but we believe the good sense of the people has banished it, and American women as patients speak with the simplicity of real modesty—not sham. We have seen a prize drawing of the human figure with the muscles dissected, done by a young lady at the South Kensington School of Art, but she had Bowdlerised the masculine figure in a way which would entail great privation on her sex if the reality were like the drawing. Better leave physiology alone than Bowdlerise it.

COMMUNICATIONS have been received from—

Messrs. Southall, Son, and Dymond; Dr. Bruce; Dr. Morell-Mackenzie; Mr. Erichsen; Dr. Boggs; Professor Flower; Dr. Copeman; Mr. J. Chatto; Dr. Campbell Black; Mr. Keary; Mr. W. H. Archer; Mr. Baker; Mr. G. T. Hunter; Mr. Pike; Mr. C. Roberts; Mr. Evans; Mr. Teevan; Mr. Lush; Mr. Head; M. le Dr. Henry Marais: Mr. Coales; Mr. E. Field; J. B.; Mr. Frank Foster; Mr. Kemp; S. D. C.; Mr. Henry Harris; Dr. Arnison.

BOOKS RECEIVED—

Report of the Glasgow Royal Infirmary—Abstracts of Specifications of Patents applied for from 1854 to 1866, Victoria, Australia—Inman's Preservation of Health, third edition—Fothergill on the Heart and its Diseases—Inman on the Restoration of Health, second edition—Salt and Son's Catalogue of Surgical Instruments—Army Medical Report for 1870—Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris, tome viii.—The Income-tax: a Review of its History, and Reasons for its Appeal—Guide Pratique pour l'Analyse des Urines, par le Dr. Henry Marais—De la Pneumonie Caséeuse, par le Dr. R. Lépine—A Nomenclature of Diseases, with the Reports of the Majority and of the Minority of the Committee thereon, presented to the American Medical Association, at the meeting held in Philadelphia, May, 1872—Case of Excessive Hypodermic Use of Morphia, by Judson B. Andrews, M.D.—Observations in Myology, by G. M. Humphry, M.D., F.R.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—Eastern Daily Express—Irish Times—Western Lancet, No. 6—Canada Medical and Surgical Journal—Australian Medical Journal—Melbourne Argus—Melbourne Daily Telegraph—Scarborough Gazette—Brighton Daily News—Journal of the Gynæcological Society of Boston, vol. vii., No. 1—Western Daily Mercury.

APPOINTMENTS FOR THE WEEK.

August 24. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

26. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

27. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

28. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

29. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

30. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 17, 1872.

BIRTHS.

Births of Boys, 1196; Girls, 1212; Total, 2408.
Average of 10 corresponding weeks, 1862-71, 1964·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	779	666	1445
Average of the ten years 1862-71	744·6	702·7	1447·3
Average corrected to increased population	...	...	1592
Deaths of people aged 80 and upwards	...	...	43

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	4	...	...	4	...	3	1	43
North ...	751668	5	7	4	1	10	2	3	1	64
Central ...	333887	...	4	1	...	1	...	4	2	23
East	638928	5	7	6	...	8	2	2	1	49
South	966132	6	4	4	3	13	1	4	1	91
Total	3251804	16	26	15	4	36	5	16	6	270

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·956 in.
Mean temperature	60·6°
Highest point of thermometer	81·7°
Lowest point of thermometer	45·8°
Mean dew-point temperature	51·1°
General direction of wind	Variable.
Whole amount of rain in the week	0·01 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 17, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Aug. 17.	Deaths Registered during the week ending Aug. 17.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2408	1445	81·7	45·8	60·6	15·89	0·01	0·03
Portsmouth ...	115455	12·1	90	61	76·8	44·4	58·4	14·66	0·01	0·03
Norwich	81105	10·9	48	25	75·5	46·0	57·4	14·11	0·18	0·46
Bristol	186428	39·8	149	78	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	50	19	80·2	46·1	58·1	14·50	0·11	0·28
Birmingham ...	350164	44·7	281	181	80·0	49·3	58·8	14·89	0·12	0·30
Leicester	99143	31·0	73	75	...	...	...	...	...	...
Nottingham ...	88225	44·2	46	41	70·8	47·5	57·9	14·39	0·24	0·61
Liverpool	499897	97·9	339	299	78·5	52·5	58·7	14·83	0·30	0·76
Manchester ...	352759	78·6	265	185	82·8	53·0	59·7	15·39	0·47	1·19
Salford	127923	24·7	114	65	80·8	50·0	57·9	14·39	0·50	1·27
Oldham	84004	20·2	73	51	...	...	...	...	...	...
Bradford	151720	23·0	119	72	70·6	52·6	58·9	14·94	0·68	1·73
Leeds	266564	12·4	182	135	69·0	49·0	57·5	14·16	0·95	2·41
Sheffield	247847	10·9	187	115	79·0	51·5	58·7	14·83	0·26	0·66
Hull	124976	35·1	88	77	...	...	...	...	...	...
Sunderland ...	100665	30·4	109	45	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	88	55	...	...	...	...	...	...
Edinburgh	205146	46·3	119	81	65·0	52·7	58·5	14·72	1·55	3·94
Glasgow	489136	94·8	368	247	66·5	41·8	56·7	13·72	0·93	2·36
Dublin	310565	31·9	166	123	71·4	39·5	58·5	14·72	0·61	1·55
Total of 21 Towns in United Kingd'm	7393052	34·0	5362	3475	82·8	39·5	58·4	14·66	0·46	1·17

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·96 in. The highest was 30·10 in. on Wednesday morning, and the lowest 29·48 in. at the beginning of the week.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture IX.

The great majority of the animals constituting the large and important order of Ungulata, or hoofed mammals, are purely herbivorous, though, as among the rodents, some few are more or less omnivorous. Their digestive organs present, therefore, the most strongly characteristic conditions related to this diet, the alimentary canal being greatly developed, and provided either with a cæcum of considerable capacity or a large and complex stomach.

The animals composing the order naturally range themselves into two principal groups, characterised *inter alia* by the structure of their feet—the *Perissodactyla*, or "odd-toed," and the *Artiodactyla*, or "even-toed," ungulates. The former are only represented at the present epoch by the various species of horse, rhinoceros, and tapir. The horse may be taken most conveniently as the representative of the group, as its constant association with man in so many of his daily occupations cannot fail to make everything concerning this useful animal a subject of interest.

In the structure of the jaws and teeth of the horse, as of most other ungulates, there is a certain general resemblance to the rodents, especially those purely herbivorous forms represented by the rabbit and hare, the mouth being long and narrow, and provided with cutting incisors in front, and complex grinding molars behind, separated by a toothless interval. The gape is comparatively small, not extending so far back as the first premolar. The lips are flexible, and somewhat prehensile, not tied to the gum by a distinct frænum either above or below. The lining membrane of the cheeks and lips is quite smooth. The palate is long and narrow; its mucous surface is rather soft, with seventeen pairs of not very sharply defined oblique ridges, extending as far back as the last molar tooth, beyond which the velum palati extends for about three inches, having a soft corrugated surface, and ending posteriorly in an arched border, without uvula. This embraces the base of the epiglottis, and, except during deglutition, shuts off all communication between the cavity of the mouth and the pharynx, respiration being under ordinary circumstances exclusively nasal. Between the mucous membrane and the bone of the hard palate is a dense vascular and nervous plexus. The membrane lining the fauces is soft and corrugated. An elongated raised glandular mass, three inches long and one inch from above downwards, extending backwards from the root of the tongue along the side of the fauces, with openings on the surface leading into crypts with glandular walls, represents the tonsil.

The tongue, corresponding to the general form of the mouth, is long and narrow. It consists, as in so many of the rodents, of a compressed intermolar portion, with a flat upper surface, broad behind, and becoming narrower in front, and of a depressed anterior part, rather shorter than the former, and which is narrow behind, and widens towards the evenly-rounded apex. A tongue, thirteen inches in length, narrows near the middle to one inch and a quarter in breadth, and expands again near the front to two inches and a quarter. The frænum is attached four inches behind the apex, the under surface in front having a strong median ridge, but no trace of a sublingua. The dorsal surface generally is very soft and smooth. There are two large circumvallate papillæ near the base, rather irregular in form, and with the surface broken up by fissures; about a quarter of an inch in diameter, and half an inch apart. The conical papillæ are very small and close set, though longer and more filamentous on the intermolar portion. There are no fungiform papillæ on the dorsum, but a few not very conspicuous ones scattered along the sides of the organ.

Of the salivary glands the parotid is by far the largest, and in form and situation much resembles that of the rabbit, being elongated in the vertical direction, and narrower in the middle than at either upper or lower extremity. Its length from above downwards in an ordinary sized horse is ten inches, its breadth from before backwards at the upper end, three inches; at the narrowest part, rather below the middle, two inches; its greatest thickness, half an inch. Its upper extremity embraces the lower surface of the cartilaginous ear-conch; its lower end reaches to the level of the inferior margin of the mandible, along the posterior margin of which it is placed. Its duct leaves quite the inferior anterior angle, and instead of passing directly across the masseter, as in all the animals hitherto spoken of, it first descends a little, and runs forward under cover of the rounded inferior margin of the mandibular ramus, then curves up along the anterior margin of the masseter muscle, becoming superficial, and enters the mouth by a simple aperture, opposite the middle of the crown of the third premolar tooth. It is not quite so thick as a goose-quill when distended, and nearly a foot in length.

The submaxillary gland is of very similar texture to the last, but much smaller; it is placed deeper, and lies with its main axis nearly horizontal, crossing beneath it rather below its middle. It is elongated and slender, nine inches in length, and scarcely more than one and a quarter inches in greatest depth, and flattened from within outwards. Its posterior end rests against the anterior surface of the transverse process of the atlas, from whence it extends forwards and downwards, slightly curved, to beneath the ramus of the jaw. Its anterior narrowest end is broken up into distinct lobules. The duct which runs along its upper and internal border passes forwards in the usual course, lying on the inner side of the sublingual gland, to open on the outer surface of a distinct papilla, situated on the floor of the mouth half an inch from the middle line, and midway between the lower incisor teeth and the attachment of the frænum linguæ, running, after it leaves the gland, a course of ten inches. The sublingual is represented by a mass of glands five inches in extent from before backwards, lying just beneath the mucous membrane of the floor of the mouth on the side of the tongue, causing a distinct ridge, extending from the frænum backwards, the numerous ducts opening separately along the summit of the ridge. The buccal glands are arranged in two rows parallel with the molar teeth. The upper ones are the largest, and are continuous anteriorly with the labial glands, the ducts of which open on the mucous membrane of the upper lip. There is no distinct zygomatic or infraorbital gland.

The stomach of the horse is simple in its external form, with a largely developed right *cul de sac*, and is a good deal curved on itself, so that the cardiac and pyloric orifices are brought near together. The antrum pylorieum is small and not very distinctly marked off. It thus somewhat resembles the stomach of the rat externally, but the interior does still more, being divided by the characters of the lining membrane into two distinct portions, right and left. Over the latter the dense white smooth epithelial lining of the œsophagus is continued, terminating abruptly by a raised crenelated border. Over the right part (rather more than half) the mucous membrane is of a greyish red colour, a velvety appearance, and contains very numerous peptic glands, which are wanting in the cardiac portion. The œsophageal orifice is very small, and is guarded by a strong crescentic, or rather horseshoe-like, band of muscular fibres, which is supposed to be the cause of the difficulty of vomiting in the horse. The small intestine is of great length (eighty to ninety feet), its mucous surface being covered with numerous fine villi. The cæcum is of conical form, about two feet long, and nearly a foot in diameter; its walls sacculated, especially near the base, having four longitudinal muscular bands; and its capacity is about twice that of the stomach. It lies with its base near the lower part of the abdomen and its apex directed towards the thorax. The colon is about one-third the length of the small intestine, and very capacious in the greater part of its course. As usual, it may be divided into an ascending, transverse, and descending portion; but the middle or transverse portion is folded into a great loop, which descends as low as the pubis, so that the colon forms altogether four folds, generally parallel to the long axis of the body. The descending colon is much narrower than the rest, and not sacculated; and, being considerably longer than the distance it has to traverse, is thrown into numerous folds.

The liver (Fig. 30) is tolerably symmetrical in its general arrangement, being divided nearly equally into segments by a well-marked umbilical fissure. Each segment is again divided by lateral fissures, which do not extend quite to the posterior border of the organ. Of the central lobes thus cut off, the right (*re*) is rather the larger, and has two fissures in its free border subdividing it into lobules. The extent of these varies,

however, in different individuals, being not usually so marked as in the figure, which is from a fœtal specimen. The two

Fig. 30.

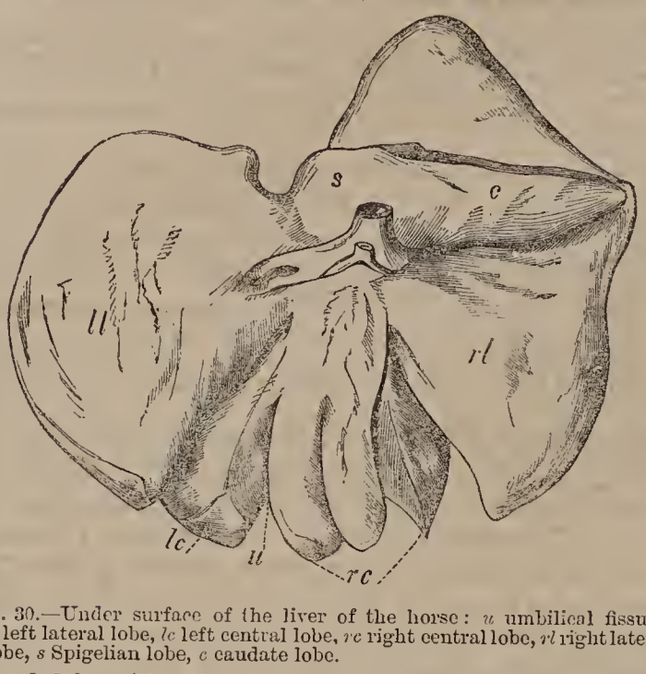


Fig. 30.—Under surface of the liver of the horse: *u* umbilical fissure, *ll* left lateral lobe, *lc* left central lobe, *rc* right central lobe, *rl* right lateral lobe, *s* Spigelian lobe, *c* caudate lobe.

lateral lobes (*ll* and *rl*) are subtriangular in form. The Spigelian lobe (*s*) is represented by a flat surface between the portal fissure and the posterior border, not distinctly marked off from the left lateral by a fissure of the ductus venosus, as this vessel is buried deep in the hepatic substance; but the caudate (*c*) is distinct and tongue-shaped, its free apex reaching nearly to the border of the right lateral lobe. In most works on the anatomy of the horse (as those of Gurlt and Leisering)(a) this has been confounded with the Spigelian lobe of man. There is no gall-bladder, and the biliary duct enters the duodenum about six inches from the pylorus. The pancreas, as in all ungulates, is more simple and compact than in the rodentia. It has two lobes or branches, the longest passing to the left and reaching the spleen, and a shorter right lobe. The principal duct enters the duodenum with the bile-duct, and there is a second small duct which opens separately near to this.

It is scarcely necessary to mention that the other members of the genus *Equus*—the various species of asses, zebras, and quaggas—closely resemble the horse in anatomical structure.

Our knowledge of the visceral anatomy of the rhinoceros is limited to one species—the Indian—and for that we are indebted chiefly to Professor Owen's memoir.(b) In the form and structure of the stomach and general disposition of the intestinal canal it much resembles the horse; but the small intestine presents a remarkable peculiarity, first pointed out and figured by H. L. Thomas,(c) in having its villous absorbing surface from six inches below the pylorus to the end of the ileum enormously increased by the development of numerous close-set papillæ, at the upper part flattened and triangular, but gradually becoming cylindrical, and in the lower part more elongated, "like tags of worsted from two-thirds of an inch to an inch in length." Peyer's glands are scattered here and here among these. Professor Owen found the length of the small intestine in a female rhinoceros he dissected to be fifty feet, in a male sixty-five feet, the large intestine being nineteen and twenty-five feet respectively. The cæcum was three feet long in the male and two in the female. The liver is apparently formed on the same principle as that of the horse, and is not provided with a gall-bladder. The biliary duct opens into the duodenum six inches from the pylorus. The principal duct of the pancreas enters close to that of the liver, and the second two inches from it, but the same distance from the pylorus.

The anatomy of several of the species of tapir has been more or less completely described,(d) and the museum contains preparations illustrating the principal points of interest. The stomach is rather more regularly oval or subglobular in form than that of the horse or rhinoceros, and differs from them in having the epithelial lining of the œsophagus only continued for a short distance over the upper surface (or lesser curvature) of the stomach, extending more to the right than to the left, instead of lining the entire left half of the cavity. The mucous membrane of the small intestine is not smooth, as in the horse, or papillated, as in the rhinoceros, but it has at certain parts imperfect transverse folds or valvulæ conniventes. These are confined to the duodenum in the American tapir, but reappear towards the cæcum in the Malayan species. The mucous membrane lining the colon also has a honeycombed appearance, formed by intersecting ridges on the surface. The cæcum is relatively smaller and simpler than in the horse, having but two longitudinal bands. The liver is formed as in other perissodactyles, and, as in them, there is no gall-bladder.

It will be convenient to speak now of the anatomy of a genus in some respects the most remarkable and anomalous of all mammals, and about the systematic position of which there is still considerable doubt. I refer to *Hyrax*. It is composed of several species of small creatures scarcely larger than rabbits found in various parts of Africa and South-West Asia, mostly inhabitants of rocky places, and very rodent-like in their general appearance and habits. In their organisation they present some points of apparent affinity to the rodents, far more to the perissodactyle ungulates, especially the rhinoceros, and other characters which do not link them to either of those orders. It has consequently been found convenient to treat them as forming an order apart, under the name of *Hyracoidea*, though I am not sure but that the older view that they are aberrant ungulates will not ultimately prevail.(e)

The remarkable resemblance of the dentition of the hyrax to that of rhinoceros was strongly insisted on by Cuvier. Although the position and large size of the upper incisors give at first sight something of the character of a rodent to the mouth, the formation of the lips has nothing in common with that group. The opening of the mouth is wider, and the hair does not extend inwards upon the cheeks, which are covered with very fine papillæ, seen only on close examination. The palate has twelve pairs of transverse folds. The tongue is thick and fleshy, gradually tapering towards the obtuse apex, with a deep transverse crescentic depression rather behind the middle of the dorsum, marking the anterior boundary of the intermolar eminence. Its surface is pretty evenly covered with small soft conical papillæ. Large round fungiform papillæ are scattered along the lateral surfaces only, and the circumvallate papillæ can scarcely be distinguished.

The parotid gland is rather large and four-sided; its duct does not follow the course it usually takes in the ungulates, but passes directly, and at a high level, across the masseter, opening into the mouth opposite the penultimate molar. The submaxillary gland is considerably smaller than the parotid; its duct opens near the frænum linguæ, and there is a small sublingual gland with several ducts.

The stomach is formed much on the same principle as that of the horse and rhinoceros, but is more elongated transversely, and divided by a constriction into two cavities—a large left *cul de sac*, lined by very dense white epithelium, which terminates a short distance to the right of the œsophageal entrance in a raised, thickened, free margin, and a right pyloric cavity, with a very thick, soft, vascular lining. The intestinal canal is about six times the length of the animal; the small intestine and the colon being nearly equal in length. The lining membrane of the small intestine is provided with large villi. The ilcum opens by a small circular valvular orifice into a short but very capacious sacculated cæcum (Fig. 31, *cm*), which lies very loosely suspended superficially to the other intestines in the middle of the lower (or pelvic) end of the abdomen, and rather to the left than the right side, and with its rounded apex towards the pubes. The colon, commencing in this dilated cæcum, soon contracts rather suddenly to little more than the calibre of the small intestine, and after a course of about two feet (or nearly a fourth of the whole intestinal canal) in which it is thrown into windings which lie mostly behind the first cæcum, it opens without any valve into a wider part of the intestine, between the mouths of a pair of large, conical, pointed cæca (*c*), placed

(a) Leisering, "Atlas der Anatomie des Pferdes, etc." Leipzic. 1861. A beautifully illustrated work.

(b) "On the Anatomy of the Indian Rhinoceros (*R. unicornis*)." *Transactions of the Zoological Society*, vol. iv., p. 31. 1850.

(c) "An Anatomical Description of a Male Rhinoceros." *Philosophical Transactions*, 1801, p. 145.

(d) See especially Home (*Phil. Trans*, 1821), Owen (*Proc. Zool. Soc.*, 1831, p. 161), Poelman (*Mem. Acad. Roy. Belg.*, xxviii., 1853), and Murie (*Journal of Anatomy and Physiology*, November, 1871, p. 129).

(e) For the visceral anatomy of *Hyrax*, see Pallas, *Spicilegia* and *Miscellanea Zoologica* (where it is described under the name of *Cavia capensis*); Owen, *Proc. Zool. Soc.*, 1832, p. 202; Martin, *Proc. Zool. Soc.*, 1835, p. 14; and especially the exhaustive memoir of Brandt, Mem. Acad. Soc., St. Petersburg, series vii., vol. xiv., No. 2, 1869.

with their apices towards the pelvis, deep in the right iliac fossa. From this point the colon, gradually contracting, ascends to the under surface of the stomach, behind which it passes across the abdomen to the left, and thrown into several

FIG. 31.

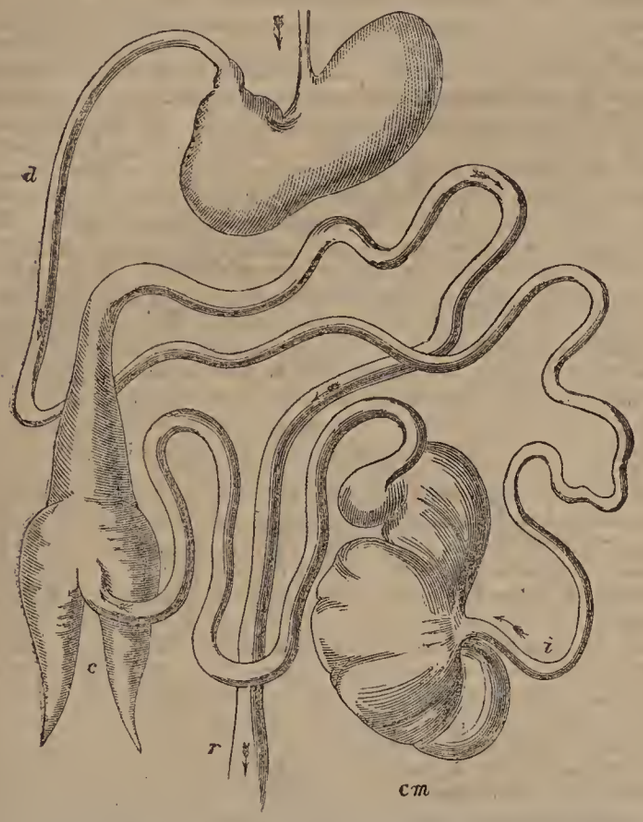


FIG. 31.—Diagramatic view of the alimentary canal of the Hyrax (*H. capensis*), the intestines being somewhat abbreviated: *d* duodenum, *i* ileum, *cm* true cæcum, *c* supplementary colic cæca, *r* rectum.

irregular folds, descends behind the other intestines into the pelvis to form the rectum. It will be observed that the presence of a pair of supplementary cæca, placed upon the middle of the colon, is an arrangement perfectly unique among mammals, or indeed among vertebrates, for they do not appear to be the homologues of the double cæca of the manati, some edentates, and many birds.

The discrepancies in the descriptions which have been given of the liver of hyrax show clearly the necessity for a uniform and intelligible system of classification and nomenclature of the lobes of this organ; for Cuvier says it has two principal lobes, each being further divided; Pallas gives the number of lobes as seven; Owen, six; Meckel, six to seven; Martin, four principal lobes and a Spigelian; and Brandt, eight lobes in all. In reality, the principle upon which it is divided is precisely the same as in the larger number of mammals, and as given in the diagram in the second lecture. An umbilical fissure, extending more than halfway from the free to the attached border, divides it into two segments, and deep lateral fissures divide these organs into the four principal lobes. The right central lobe is about twice the size of the left central, and is deeply notched at its free border. The left lateral is larger, flatter, and more expanded and circular in outline than the right lateral. The caudate lobe is moderately developed, pointed, and connected only by a narrow neck with the rest of the liver; and there is a distinct tongue-shaped prolongation from the Spigelian lobe not found in the horse or in most ungulates. There is no gall-bladder; but in some specimens the common bile-duct has been found dilated to a great size. It opens with the principal pancreatic duct by a large circular orifice with raised edges in the duodenum, rather less than an inch from the pylorus, the two ducts being divided to their ends by a flap of membrane. The pancreas is, unlike that of the rodents, small, compact, and flat; its second duct enters the duodenum three-quarters of an inch lower than the other.

(*To be continued.*)

A TEST OF DRUNKENNESS.—The Islington Guardians last week sanctioned the plan of the master of the district workhouse to require any over-festive pauper to say "Truly rural," and if he cannot the master pronounces him to be drunk.

A LECTURE ON CROUP.

By ROBERT C. R. JORDAN, M.D. Lond.,
Acting Physician to the Children's Hospital, and Professor of Diseases of Children at Queen's College, Birmingham.

GENTLEMEN,—I wish to-day to call your attention to the subject of croup, by which I mean those cases of acute disease characterised by laryngeal cough accompanied with stridulous and difficult breathing, which are met with so commonly in infants and young children, and which are so frequent a cause of mortality amongst them. Now, in all my own early teaching it was so strongly impressed upon me that this "croup" was always a membranous exudation in the larynx or trachea, that it became to my mind a great difficulty to throw off the trammels of this old belief, and it was long before I could feel fully persuaded of what I now know to be the truth—namely, that the majority of the cases usually called by this name have no false membrane formed at all, but that their essential nature is an inflammation of the mucous membrane of the larynx and trachea, accompanied with secretion of tenacious mucus, and also considerable swelling caused by effusion into their submucous areolar tissue. They are, in fact, catarrhal inflammation of the larynx and trachea. All other cases where exudation is really present are diphtheria; and it is in this sense, and with this definition only, that we can regard croup and diphtheria as two distinct diseases. To make my meaning clear, let me follow out the course of the two, and lay before you in general terms the broad distinctions between them, beginning with the disease which in my younger years was most familiar to me, because during times of cold or east wind it occurs sporadically in country practice all over the kingdom, and to which I was taught to give the name of croup. The early symptoms are very similar to those of an approaching attack of measles, save that there is no superabundant secretion from the lachrymal glands, and consequently no running from the eyes and nose, but there is fever, and dry barking cough of that peculiar character which of necessity occurs when the rima glottidis is narrowed. This cough is indeed the crucial symptom, and yet it has probably existed for two or three days before its nature has been marked enough to alarm the mother. On questioning her you are likely enough to find that the child "has had a cold for a few days, but that she has thought nothing of it." To trained ears, however, the peculiar cough is very manifest almost from the commencement, and if the child be asked to draw a deep breath the stridulous sound completes the diagnosis. The cough and the inspiration are both pathognomonic of croup, but of croup in its abstract sense only; they tell you that there is narrowing of the passage which allows the entrance and exit of air to the lungs—that is, of larynx or trachea. The history of the case supplies the other evidence. It is acute, and this eliminates all the chronic forms of laryngeal disease to which children are prone, such as, for example, warty or other growths. A careful examination shows no exudation on the throat or fauces, and the history is not that of sore throat but of cough; this makes diphtheria at least improbable. The symptoms have been those which would naturally take place in an attack of bronchitis and tracheitis, with a tendency to spread still further upwards and involve the larynx in the mischief; and it is the swelling of its mucous membrane, and the consequent narrowing of the chink at the outlet of the larynx, and the swelling of the lining of the vocal cords, that gives the more decided "croupy" character to the cough, to the inspiration, and to the voice, this last being often almost absent. It is these also that give the danger to the attack; the same amount of congestion, the same amount of effusion into the sub-mucous areolar tissue elsewhere would be of no serious import. Hence the mother until closely questioned dates the attack from the commencement of the danger, and says that it came on "quite suddenly"; and in truth, when the laryngeal symptoms do begin, they increase very rapidly, and every hour makes the danger greater—almost every breath is more and more difficult, respiration becomes more and more diaphragmatic, the sternum is drawn in with every breath, and in spite of the increased labour less and less air passes through the laryngeal opening; the lips and face become more purple, the lungs become congested, this further increases the dyspnœa, and the child dies suffocated. Such is the natural unchecked end of the disease—a termination which it is difficult to avoid in the cottages of the poor, where, from the very nature of the case, the child cannot get proper treatment, where there is no

skilled nurse to follow out the doctor's advice, and where the temperature of the room varies with every opening door. Now, what are the post-mortem appearances? There is no false membrane in either larynx or trachea, but simply a swollen and congested state of their mucous membrane, which is generally spread over with a tenacious mucus nearly as viscid as pneumonic sputa. These changes extend more or less into the bronchi, and, with a congested condition of the lungs, are the only signs visible to account for death. I have many carefully noted records of such post-mortem appearances written in old days, when the influence of what Bacon would call the "idol of the theatre" was so strong upon me that it is always stated, "false membrane in a perfectly diffluent state spread over the mucous surface." Now, this "diffluent false membrane" is, in reality, only a synonym for tenacious mucus. This is the disease which occurs sporadically in town and country alike, and which is commonly called "croup." The cause is generally exposure to cold, though some children are more predisposed to it than others; and I have known many who have had several well-marked attacks, which for the most part decrease in violence as the child becomes older. It is also a decided fact that there is a clear predisposition to it in some families, though when a child is said to be "subject to croup" it is laryngismus that is most often meant. The essence of this disease is therefore laryngitis and tracheitis of a catarrhal character, and the danger is because the entrance and exit of air to and from the lungs is impeded; the object of treatment is therefore to make a decided and quick impression on the disease. Time does not admit of the least delay. You must at once place your patient in the best possible state for recovery —that is, let him be in a warm room with no draughts, and a uniform temperature of at least 70° Fahr., and let the air which he breathes be thoroughly saturated with moisture; a boiling kettle pouring out its steam into the room often manages this very efficiently. The plan which is adopted in the Children's Hospital here is to boil a large iron kettle, to the spout of which is affixed a long tube ending in a rose like a watering-pot, from which the steam pours out copiously; but as this cannot always be at hand, your ingenuity must be taxed to find a substitute—but remember that the soft moist vapour acting locally on the swollen mucous surface is as important an agent in the treatment as any other therapeutic means. A linseed poultice to the throat helps also in this, and has certainly a soothing power. These external appliances being completed, then give at once an emetic of ipecacuanha, and repeat this every twenty minutes or half-hour, until not only copious vomiting but copious perspiration is induced. As a result of this the secretion of the air-passages also becomes thinner and more easily got rid of, and it will be borne in mind that the cough becoming looser is an excellent symptom. Increased mucous râle, without the power of cough, has of course a different meaning, but a looser cough always bespeaks a lessened danger. In addition to the ipecacuanha, a very good prescription is a powder with calomel gr. $\frac{1}{4}$, compound ipecacuanha powder gr. $\frac{1}{4}$, and chlorate of potash gr. iij., every half-hour or hour according to the severity of the symptoms. Of course the dose must be modified slightly according to the age of the patient. If the disease does not abate, next comes the question of tracheotomy; and in this case I would leave it as long as can be done consistently with safety. So frequent is the recovery, even when the case is seemingly hopeless, that tracheotomy may be fairly called a last resort. These attacks of laryngeal catarrh can fortunately be pointed out as marked examples of the efficacy of medicine in acute disease. They are amongst the few cases where the effects of remedies can be seen, and where we can say that, if left to nature, the tendency is rather to death than to recovery. It is not meant to undervalue tracheotomy in these cases; no patient should be allowed to die without the chance which it affords. Yet so marked are the effects of curative agents that time should always be allowed for a full and decided trial of their power before resorting to the operation.

The following case illustrates this catarrhal croup forcibly: —Early in the morning of August 14, 1867, I was called to Arthur B., a little boy aged 2 years 11 months. I found him breathing a hundred times in the minute, the croupal sound very loud, the distress and agitation very great; the pulse could not be counted, the face was commencing to bo dusky, the skin was hot, dry, and burning. The operation of tracheotomy was proposed, but it was decided to try other means first. The room was therefore made warm with the steam of boiling water, the throat painted with liquor epispasticus, and a linseed poultice applied over it. A teaspoonful of ipecacuanha wine was ordered to be taken every twenty minutes, and half a grain of calomel every hour. A little before midday a slight improvement was noted, although there had been very frequent sickness, yet the pulse was stronger, the distress less, and the labour of breathing also lessened; but by the early evening the improvement was much more decided—the respirations were reduced to twenty-five, and though a loud croupal sound was audible with every inspiration, yet there were moist râles also heard, and the skin was warm, damp, and freely perspiring. The pulse was only 90, and from this time the process of recovery went on steadily. It is seldom that a case presents such a decided improvement as this in so brief a time, yet the period of extreme danger is always short. To the treatment used I would now make one exception—viz., the blister. Had tracheotomy been necessary, as indeed at first seemed most probable, the blister would have complicated the operation, and rendered its after treatment more difficult. The linseed poultice alone seems to me, therefore, a safer remedy.

Now let us turn to the other form of disease. Where a false membrane is really present the whole category of symptoms is very different from those last described. This illness is not dangerous only from its position; it is not a mere catarrhal state of a mucous membrane, but it is a disease in itself, and the production of the false membrane is merely a phase in it. The patient, if he be old enough to complain at all, speaks of feeling ill, and of some soreness about the throat; but although there has been premonitory fever, there has not been, as in the last disease, premonitory cough. It is not, however, impossible that the croupal breathing or croupal cough (for cough is then present) may be the first stage in the disease for which the mother requests the advice of her doctor, but the history will show that these have not been the first symptoms. On examining the throat, the uvula or tonsils are generally found more or less coated with the well-known diphtheritic membrane, which has caused the "croup" by extending into the larynx. The history of this case shows that the child has been depressed and feverish for a time varying from a few hours to as many days, and that this has been followed at first by symptoms of sore throat rather than of cough. The last was a chest disease, proceeding upwards to the larynx; this is, as far as its external signs show, a throat disease passing downwards, and the difference in symptoms is to be looked for accordingly. All know that an elongated uvula does give cough; that a swollen epiglottis does the same; that the swelling of larynx would equally produce it, and that even before the invasion of a diphtheritic membrane; so that there may be a certain kind of cough history; but that has not been the special symptom—not, as in the cases of laryngitis before mentioned, the only symptom in a child otherwise well. Sometimes, however, the little patient is not seen until urgent laryngeal symptoms are well set in, and then, if there be no history, and also, from the urgency of suffocation, much difficulty in examining the throat, the diagnosis is one of real difficulty; but it is not then of vital importance, since in such a case the immediate performance of tracheotomy is certainly necessary. It is my decided opinion that sometimes cases of diphtheria occur in which no false membrane is visible from the mouth; yet it must be confessed that I have never made any notes with a view to the investigation of this special point, and there is some difficulty in getting a thorough look at the throat of a living child when suffering from laryngeal dyspnœa. Moreover, post-mortem examinations are apt to slur over the mouth, uvula, tonsils, and pharynx; yet I have notes of several cases where no throat diphtherite is mentioned, and where my firm impression is that none was present; and there certainly is no known reason why such should always be the case. There would, of course, be rather more difficulty in distinguishing these from catarrhal croup, yet this is in most cases rather an imaginary than a real difficulty. Albuminuria is a frequent symptom in diphtheria, but by no means constant enough to form a ground for diagnosis. If present in a doubtful case it might certainly clear it up; but, on the contrary, its absence would prove nothing. It is therefore the early symptoms, and the presence or absence of exudation in the throat, on which we mainly rely. If the child has had shivering and fever with sore throat before the laryngeal symptoms began, if there is a history even of general malaise before the croup commenced, we have a right to expect the presence of exudation, and when present it will most frequently be easily seen.

The next question which arises is, Do the two diseases require any difference in treatment so as to make a clear diagnosis of importance? Such is most decidedly the case. Catarrhal laryngitis is dangerous only from its position, and we have to subdue it by prompt and active measures; but in diphtheria we have a depressing blood-poison, dangerous

in itself, quite independently of its position, and our lowering treatment is useless, or worse—positively injurious. Emetics are even to my mind doubtful. Cases are on record, certainly, where tubes of false membrane have been said to be brought up by their action, yet these must have been in a very different state from that in which we generally see them, as they do not usually adhere so loosely as to be got rid of in this manner, and we have no right to expect any such result. Still, one or two full emetics may be tried; but, these failing, do not steam the child as in laryngitis. Do not add to the depression by mercury, but give him some supporting mixture, such as the tinctura ferri muriatis with liquor ammoniæ acetatis; and if laryngeal symptoms have set in and there is real dyspnœa, if the breathing be laboured and the sternum drawn in with every breath, do not wait for symptoms of impending suffocation, but operate at once—the earlier the better. The false membrane in the larynx will probably spread further downwards; moreover, the blood-poisoning continues, and to wait for blue lips means to wait for pneumonia also. When the larynx or trachea is thoroughly invaded you cannot operate too early; delay means death. It must be remembered that the operation does not check the disease; but as we have no specific treatment that can stop it, perhaps simple support after the immediate risk of suffocation is over is as good as any other.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE RELATION OF SYPHILIS TO CHRONIC DISEASE.

By METCALFE JOHNSON, M.R.C.S.E., L.S.A.

Accustomed as we are to the aid of our senses, and using them generally by secondary automasis, we often fail to perceive, not only their *modus operandi* on the general framework of the body, but we are unconscious of the real meaning and value of their teachings. This may be explained by a familiar experiment with the eye: By holding the hand between the eye and a more distant object upon which it is focussed, the hand appears diaphanous, whereas in reality one eye receives the impression of the distant object direct, while the line of vision of the other, focussed still on the distant object, is obstructed by the intervening hand. This may be proved by closing first one eye and then the other, when the distant object will be seen by one eye, and the intervening hand by the other. In this way one of our most reliable senses deceives us; and doubtless, when we come to reflect upon the philosophy of vision, we shall see much reason to be cautious in receiving testimony from one sense alone. This is exemplified by the late controversy on the shape of the markings of diatoms, facetiously termed "diato-mania." If, then, we find such difficulties arise in the world of simple sense, we shall be fully alive to expect still greater marvels in the region of composite sense—the world of reason. It is within the scope and direction of this latter that we embrace some of the more recondite forms of disease, especially of the chronic form; and since such forms as scrofula, glandular enlargement, tubercle of lung and other organs, come under our mental eye every day, we fail to see many things concerning them which closer observation will reveal to us. At first sight many a good sound-judging practitioner would start at the suggestion that phthisis and malignant disease of any other organ (say the uterus or breast) were merely modified forms of one and the same *cysti-pharmakeia* or cell-poisoning, and yet a little examination of the case shows an approach to probability more distinct than might be expected from first consideration.

The history of syphilis, like the dim distance of nature, fades into a mist as we trace it backwards to its original source.(a) As we approach nearer to the source in this as in all other subjects, we find two or more sections of it blend into one, like the streamlets to a river. Still, what we have of reliable history of this syphilis resolves itself in reality into the records of experience of later days, since in the vista of the past the cloak of prejudice and religious fanaticism was thrown over every subject that needed light, and the cloud of error and superstition prevented the boldest and most far-seeing from attempting its remedy, fearing the blind fury of an infatuated mob guided by ignorance and superstition. Alas! this dragon of Prudery is not yet prevented from prowling amongst us even in this our day.

"We have scotched the snake—not killed it."

So long as this unfeminine opposition to the Contagious Diseases Acts stands in the way of progress, so long will the dragon have a lurking cave to which he may flee when we are on the point of driving him to death. This very cavern guarded and concealed from discovery by the gentle forms of laughing girls stationed there by loving but misguided mothers, and under the mock name of modesty, all the efforts to free our mothers from conveying the stain of hereditary disease to their offspring are rendered useless by the misdirected efforts of those whose aim should be to assist rather than hinder the philanthropic energies of their medical advisers.

The object of the present remarks is to indicate points of resemblance, if not evidence of identity, between syphilis as we know it in its Protean forms and those more generally recognised states now collected under other classes, and called cancer, phthisis, scrofula, periostitis, with caries and other names.

In investigating the cause of the various forms of degenerate cell-formation known under these names, this at least is certain, that their slow degradation has an origin which points to some influence which is at least analogous to that of syphilis in its tertiary forms.

If we examine the medical history of Englishmen in general, after excepting those who fall victims to habits of abuse of the generative function, together with those to whom nature has denied from birth the grand pure impulse of venereal desire, the number of those who (under the present *régime* as to prostitution) escape from all forms of venereal disease is remarkably few, and the number of those under the opposite class equally numerous; and when we consider that this syphilitic taint extends long after its apparent cure, and that fathers of families who have considered themselves perfectly safe from the effects of their "youthful indiscretions," as they are called, are not unfrequently reminded of them by their medical advisers seeking to discover the cause of frequent abortions in their early marriage life, or of the children born to them—healthy at first, but in a few short weeks developing signs unmistakable of their past errors, passing through a more or less protracted illness, attended with disease of the anus and genitals, and wasting of limbs, to a premature grave, or even, after a narrow escape, passing through rickets and bandy legs, ulcerated tonsils and trachea, to a youth of feebleness and delicate health—with these evidences before us, who shall wonder that on the side of either male or female progenitors some degradation of tissue manifests itself in their second or third generation? And what more likely cause for these widespread evils than the hastily contracted and often ill-cured syphilis of either near or remote ancestors? The details of a few cases in which some of the forms of this disease were manifestly traceable to the syphilis of the father will not be uninteresting. It may here be remarked how much more difficult to trace is the disease conveyed through the mother; though, if we had more evidence, it is manifest that we should be able to distinguish the effects when the disease arises in the mother's system, and is there conveyed to the child, from that when arising solely from the father's taint.

In some of these cases it is impossible to give a detailed history of the state of the mother, while in others it is distinctly known that the child is generated under the influence of primary disease in the father, which is also conveyed in the same primary form through the mother.

The following case is one in which the symptoms strongly resembled those of cancer, and in which the syphilitic history can only be inferred from the result, as no personal history of either father's or mother's disease can be obtained:—

A. B., aged 35, the mother of several very healthy children, consulted me about ten years ago concerning a disease of an apparently cancerous nature in which the glands of the neck, together with the surrounding tissue, were destroyed over a surface extending to perhaps six inches by four, thus revealing an eroding and creeping ulceration which laid bare the whole neck (with its vessels pulsating) from the ear to the clavicle. The woman was pregnant at the time, and at the full period was delivered of a living

(a) It may not be entirely uninteresting to some to know that the street in which I live—St. Leonard's-gate (street Lancas.)—in the "good old town" of Lancaster, owes its name to the former Hospital of St. Leonard, devoted to the seclusion if not the cure of leprous persons. The medical history would lead us to a chronic syphilitic hospital, and perchance to the ignorant superstitions out of which that charity arose. Whether St Leonard had any special charity for such afflictions I know not, as old Bailey only gives the name as derived from *leon* (Saxon) a lion, and *acrd* (Teutonic) nature. Any way, it seems as though it requires another Leonard to arise to meet the superstition of the present age.

child, which after a short illness dwindled away and died. About six months after delivery this wound in the neck began to heal, and eventually became entirely closed; but after the lapse of another year the disease reappeared in the left foot, in which part it lingered, creeping about from one part of the foot to another with the round ragged eroding edges so similar to cancer. I was never able to distinguish the so-called characteristic cancer-cell under the microscope, but (since I have often failed in other cases in which the true cancerous nature of the disease was evident) I did not place much reliance on the fact. After the lapse of two or three years the foot became gangrenous, and as there seemed no other chance of prolonging life I decided to remove the leg above the knee. The wound of the knife healed with rapidity and success, and she was enabled to return to her family, and for more than twelve months to get about on crutches. But the disease reappeared on the stump and in several circular patches upon the buttock above it, and during the last two years attacked the other foot, at first in circular patches between the toes, and lately she has lost two of the phalangeal extremities by gangrene and spontaneous amputation. The disease still lingers, and will doubtless continue until death closes the history. In this case the physical resemblance to cancer in its outward forms has been so remarkable as to induce the opinion that there is possibly more alliance in the two forms of disease than is usually allowed.

In the following case the result in phthisis from tubercular degeneration of both lungs at the age of 17 shows a probable connexion between syphilis and tubercle of the pulmonary structures:—

C. D., aged 15, has been for some time suffering from periostitis, with caries of the right tibia (whether preceded by a distinct node or not I am unable to state). The whole length of the shaft of the tibia was affected with chronic periostitis, and carious bone underneath. From this she suffered for some time, until the ordinary symptoms of phthisis tuberculosa made their appearance, and in six or eight months wore out the long flickering life. The history of this child's male parent was that of a man having spent his whole life in one continued state of debauchery of every kind. A distinct history of syphilis was traceable, and his life ended as the result of a deep drunkard's career at about 50 years of age.

A sister, E. F., was also the victim of syphilis of a more decided character, having ulceration of the tonsils and uvula, which, extending to the Eustachian tube, has left her permanently deaf, with a husky voice and a tendency to scrofula, only arrested by the most generous diet which the workhouse in which she resides will allow. She is now, however, in good general health, but the nasal bones having participated in the general destruction, leaves her at once the unmistakable aspect of a victim of the syphilitic poison.

The mother of these children led also a very dissolute life, so that the question of how far the disease was due to primary syphilis in the father alone must remain unsolved.

In the case of G. H., now aged 16, the history of primary disease in both parents during his intra-uterine life is distinctly traccable. In infancy he developed all the unmistakable evidences of a syphilitic baby, the genitals and anus presenting the usual appearance in such cases. Mercury and its concomitant remedies, however, were successful in rescuing him from an early grave, but the disease left him rickety in childhood, and now deformed in face as to the nose, and the husky voice from tracheal disease makes a strange parody of the adolescent *rancedo* of puberty. Glandular enlargements were very frequent in the neck during his early years, and only good living has enabled him to resist the tendency to scrofulous development. In the event of this patient becoming a father what result could we expect but the tendency to phthisis in the offspring?

In the case of J. K., aged 65, we have the characteristic circular ulcer of syphilis—contracted, it is said, from the husband now thirty or forty years since. Mercury relieves it for a time, when by the influence of diet and bad living she is reduced to hospital treatment; but the taint remains there in its old and virulent form. I have often tried to trace in the circular ulcer the origin in syphilis, and am inclined to the opinion that frequent drawings of these crural ulcers would show us a perfect means of diagnosis from the varicose ulcers of ordinary daily experience. But the time required for making these coloured illustrations not only requires a little manual dexterity as an artist, but more time than is at the disposal of an ordinary overworked country doctor. Nevertheless, I am induced to make the remark that it would be well if all our students were to be educated in the art of pathological drawing in water-colours. I have myself, in my own humble way, profited so much from experience obtained in this way that I cannot but strongly commend it to the practice of my younger professional brethren. It is an art soon learned, and might be simplified by practice so as to consume but comparatively little time.

A few months since I saw a case of tubercular phthisis in a young child so unmistakably the heirloom of a syphilitic mother that I am certain that some forms of the former disease are the direct consequences of the latter. I have, however, no notes of this case, and can only record the fact as it occurs to my memory.

In all cases of this disease the reluctance to unveil the history of past life on the part of either male or female renders the subject very difficult to handle; but as a case which tends to show that syphilis may remain many years undeveloped, I find the following in my note-book made about seventeen years ago:—

L. M., aged 40, has a dark, tuberculoid eruption on the forehead and arms, pain in trachea, and loss of voice. The appearance decidedly syphilitic. She gives no history of primary disease, but the husband states that he had primary disease seven years since, and secondary eruption three years after.

I have on several occasions seen phthisis terminate the lives of persons who have been for many years syphilitic; but not being able to trace the distinct connexion of the disease, they cannot be brought forward as evidence.

But if we reflect upon the general history of mankind, and the apparent similarity of these several forms of chronic disease—cancer, phthisis, scrofula, caries, etc.—we cannot fail to recogniso at least a probability that there is more connexion than has been hitherto allowed; and supposing the disease to have passed through several generations before its final development in the cancerous, the phthisical, or the carious—longer in the former and shorter in the latter—we are led to see more or less reason in the suggestion. Moreover, reviewing the chronic and the acute forms of disease, may we not see in syphilis some explanation of the former, and atmospheric causes of the latter, always excluding such as have a traumatic origin, such as lung disease from dust of granite, stonemasons' asthma, etc.? Moreover, it is more or less manifest that many diseases are the result of the combined influence of parental heritage—in some cases distinctly traceable to one parent, in others to the other. But, in addition, do we not find, as Sir Wm. Gull has ably pointed out, that a man may inherit natural deformity from increased development of some slightly abnormal arrest of development on the part of the parent. Surely, then, it is not too much to expect from this "first disobedience," as Milton calls it, "the fruit of that forbidden tree." And here it may be remarked that this is not a mere fanciful rendering of that "old, old story," but the description bears us out—"they knew that they were naked." Naked! Where? As to their faces? No. As to their bodies? No; but as to their genitals—"for they sewed fig-leaves together" and covered their nakedness—their organs of reproduction. Whence the history of this shame at one of God's most marvellous works we know not; but the story tells its own tale; and do we not here in the narration of this primal story see shadowed an outline of syphilis, for we are told that God "visits the sins of the fathers upon the children"? And true enough, sadly too true, it is so. What, then, are those who hinder the good work of the medical Samaritan thinking about when they oppose the sanitary efforts of the Contagious Diseases Acts? Not that it is to be argued that these Acts are perfect in their present form—but surely the effort to diminish the influence of this terrible scourge upon the nations deserves at least the support of all who are interested in the cause of morality; but most of all should it elicit the sympathy of mothers of families—mothers of those diviner spirits who are to preside over our hearths, and from whose loins are to proceed the future sons of Albion. If we would be great it must be through our women, for it cannot be denied that from the mother greatly springs the intellectual greatness of the son; and if only our present protection is to be afforded us, then must continue that long list of evils which medical history at present reveals. A speculation as to the relation of depressed ganglionic influence to the development in greater or less perfection of cellular organism might be not uninteresting; but it would be premature, and therefore profitless, as we have not the facts to base our theory upon. It must, however, be noticed that every cell in its development from nutrient plasma, whether owing its origin to blood or not, must partake of the influence of nervous energy; and since it is the duty of ganglionic nerves to regulate the supply of blood through the augmented or diminished calibre of the capillary vessels,

we cannot but suppose that causes which influence the activity or otherwise of the great nerve of organic life must have some modifying effect upon the normal or abnormal formation of the cells of organs. And as in the simple cells, so in the composite aggregation of cells called an organ, we have temporary or permanent perfection or imperfection, so also we must have the same influences at work throughout the entire mechanism. And, supposing such a mighty and inscrutable influence as syphilis at work within the body, must we not look for some such results as have been indicated by the foregoing remarks? Perchance there are those to whose minds another view of the case suggests itself, but to the mind of the present writer there is something in the entirety of the idea that renders it one to be cherished; and the hope that ere long some more effectual means will be devised to disarm this hydra-headed enemy from inflicting the poison of its fangs upon the whole human race, induces also the belief that an open and free discussion of this important topic by the Profession at large, without the fear of being charged with charlatanism on the one hand or indelicacy on the other, will shortly develope itself into a practical method of dealing with the matter, which will commend itself to the approval of the Profession and afterwards of the general public. And while, on the one hand, we are stimulated by our recent fears for the safety of our Royal Heir to investigate epidemic disease, we may, on the other, so examine our experience and be stimulated to new exertions as to remove in great measure from our community the ravages of syphilis, and with it (the hope arises) cancer, scrofula, phthisis, caries, *et id genus omne malorum*.

MIDWIFERY NOTES FROM BRITISH KAFFRARIA, SOUTH AFRICA.

By CHARLES JAMES EGAN, A.B., M.R.C.S.E.,
Assistant-Surgeon to Guy's Hospital, and District Surgeon, King William Town, Kaffraria.

In continuation of my former communication (see *Medical Times and Gazette* for November 25, 1871), and before I enter on the subject of labour among the native population of this colony, I will give notes of a few cases I attended among Europeans, as I think they have some points of interest connected with them.

Case 1.—*Puerperal Convulsions, arising from Tight Lacing.*

F. B., aged 20, a small woman, but naturally proportioned; first labour. First stage lasted about four hours; second stage, half an hour; vertex presentation; male child, small, but healthy. Placenta expelled naturally in about ten minutes; discharge not excessive. Apparently went on well until about two hours after the birth of the child, when convulsions set in. This woman was attended by an experienced midwife, who gave me the above details of the case. I was called to see her about two hours after the convulsions had commenced.

When I arrived, her state was as follows:—The head and face were intensely congested, the jugular veins distended, the jaws firmly locked, the head thrown back, and at intervals of two or three minutes violent convulsions came on, affecting the trunk, arms, and legs—the convulsions being similar to what are seen in cases of uræmia. The pulse was 110 per minute, small and hard. Nothing could be administered by the mouth. I opened a vein in the arm, but at first nothing but bloody serum mixed with air-bubbles came from the vein. After a short time, by friction on the arm, thick black blood came, and then it began to flow very slowly. I allowed about fourteen ounces to flow, the pulse becoming much fuller and softer, and falling about ten beats per minute; the convulsive attacks also became less frequent. I ordered an enema containing forty minims of tincture of opium, and a mixture of chloral hydrate (to be administered if possible); also fomentations of turpentine to the abdomen, as a great deal of tympanitis was present. However, the convulsions soon came on as violently as before, continuing without intermission for three hours, in spite of all treatment, when the case terminated in death.

The convulsions in this case appear to me to have been uræmic. I found that the feet and legs were œdematous, and on inquiry was informed that for some time previously she had complained of the swelling of her feet and legs. I could not obtain any of the urine to examine, as all that was passed was mixed with the discharge from the vagina.

In my opinion, the uræmia in this case was caused by pressure on the renal veins, a result of over-tight lacing. This woman became pregnant before she was married, the birth succeeding the wedding-day by only one month. She did all in her power to conceal her pregnancy by tight lacing. I myself saw her a few days before her confinement, and had not the least idea of her condition.

Case 2.—*Permanent Injury to the Child from Abnormal Presentation.*

Mrs. C., aged 24; first child, male; the membranes ruptured with the first pains. I was called to see her after she had been seven hours in labour, the midwife attending not being able to make out the presentation. I found the os uteri dilated to about the size of a half-crown, the face presenting, my finger passing into the child's mouth, and its back being turned to the mother's pubis. Thinking that the case would proceed all right, the pains being strong, and the os soft and dilating, I left her in charge of the midwife, having myself to attend to another case. The first stage lasted fifteen hours, the second one hour. I returned just before the child was born. The placenta was expelled naturally, but there was great difficulty in inducing respiration in the child. Its face was livid and much swollen, the head falling about as if it had no bony connexion with the trunk. The swelling of the face subsided after a few days, under the use of a lotion of acetate of lead, but the head always remained as if it were loose on the trunk. The child lived, and its body and limbs were well formed and well nourished, but it never could hold up its head. The head always fell over to one or other side or backwards, unless supported by the hand; and even now, when it is seven years of age, the head continues in the same state, and the child is almost an idiot, and has no use of its limbs.

In this case it appears to me that the child must have received some injury of the spine in the birth, from the manner in which its neck was twisted backwards—the chin and mouth presenting first at the vulva, the head being completely doubled back. From a consideration of this case, I think that the proper method to pursue, in cases of face-presentation, when the chin of the child is turned towards the sacrum, would be to deliver by turning as soon as ever the os is sufficiently dilated. Whenever I see this child, I regret that I had not done so; and should I ever meet with a similar case, I shall certainly deliver by turning.

Case 3.—*Protracted Labour from Prolapse of the Bladder.*

Mrs. J., aged about 30; third child. I was summoned to the country (twenty miles from town) to see this woman, when she had been in labour for three days. The labour pains had almost completely gone away when I arrived at her house. On examination, I found the vagina filled with a tumour formed by the bladder, which was prolapsed and distended with urine. The child's head presented at the brim of the pelvis, with the vertex, but could not enter on account of the state of the bladder. I emptied the bladder, and managed to get it above the brim of the pelvis.

As I could not remain, to allow the case to be terminated naturally, and not liking to leave it to the care of an inexperienced woman, I thought it better to deliver at once by turning, especially as the membranes were not as yet ruptured. I performed the operation easily with my left hand, delivering a live male child. The placenta was quickly expelled, and no hæmorrhage of any account occurred.

This woman recovered well, but suffered from slight prolapse of the anterior wall of the vagina for some time after, for which she was treated with astringent injections, rest in bed, and tincture of the muriate of iron.

I consider that immediate delivery, under the circumstances detailed, was my best proceeding in this case. If I had left it to proceed naturally (as perhaps I should have done if I could have personally attended to it) I fear that the bladder would again have prolapsed, and the woman attending had not experience enough to guard against its occurrence.

The diseases of childbed actually arising from the parturient state are very rare here. I have had a few cases of pelvic cellulitis, but only one terminating in pelvic abscess. This occurred in a case that was delivered by forceps, and in which there occurred some rupture of the perineum, but not extending into the rectum. In this case I had to operate on a woman with a very small pelvis, but naturally shaped in all other respects, and I had a very inexperienced nurse to assist me. This abscess opened through the abdominal walls, but was very slow in progress, it being nearly four months before the matter escaped. The patient recovered perfectly, and has since borne another child, without any necessity for the use of instruments.

I have also had to attend a good many cases of phlegmasia dolens. These I have always treated by rubbing the whole of

the affected limb with an ointment composed of equal parts of lard and unguentum hydrargyri, to which is added ten grains of extract of belladonna to the ounce. This ointment I order to be well rubbed into the whole of the affected limb, and then have it bandaged with a flannel roller, exhibiting at the same time a mixture of carbonate of ammonia, chlorate of potash, and decoction of bark; and I have had no reason to be dissatisfied with this treatment.

In colonial practice there is a great want felt which is not known to practitioners at home (at least, if it is, it must be their own fault), and that is—the want of consultation, and the absence of persons to talk over cases with, and get their opinion on your practice, and learn from them what they would do in similar cases; at least, I feel such a want, and I often envy the opportunities that practitioners at home have in the medical journals, libraries, societies, and converse with professional brethren on medical subjects. A practitioner here must always be ready for cases of Medicine, Surgery, midwifery, and diseases of children, and cannot get consultations with men who have devoted themselves specially to these different branches of the Profession; and I find that books do not give one the same insight into a case as one consultation with an experienced practitioner who has devoted himself specially to a particular branch of the Profession would give.

The diseases met with among new-born infants do not differ much from what are seen at home. I have met with a few cases of trismus, but could not account for their origin; the umbilicus appearing perfectly healthy, and the ventilation of the room being good.

Icterus neonatorum is a much more common thing to be met with, and any unbeliever in this disease could see many cases of it out here. There is no doubt about it being true icterus, for not only is the whole skin of the child tinged with bile-pigment, but the conjunctiva is perfectly yellow, and the urine stains the napkins worn by the child. In these cases the child is usually very costive. I treat them with a grain of calomel, followed by a dose of castor oil.

In many cases where this icterus has occurred I have remarked that the mothers for some time previous to their confinement have suffered from pain in the right side and slight enlargement of the liver, apparently from congestion. Small doses of calomel with quinine and nitrate of potash I have found very useful in these cases.

Another remedy which also acts very well in this form of congestion of the liver, as well as in ordinary cases of the affection, is scruple doses of muriate of ammonia with half a drachm of tincture of rhubarb and an ounce of decoction of taraxicum two or three times a day.

ON YACHTING AS A RESORT FOR INVALIDS.

By CHARLES ROBERTS, F.R.C.S.,
Assistant-Surgeon to the Victoria Hospital.

Yachting is becoming every year more popular as a resort for overworked and invalid patients, and as it possesses many advantages over ordinary railway and steamboat travelling, or a mere residence at the seaside, a few notes on the subject may be useful to those members of the Profession who have not the advantage of a personal acquaintance with it.

Yachts are of all sizes, from eight or ten tons to three or four hundred, and are, according to their capacity, furnished with every convenience and luxury; but the smaller ones, say below thirty tons, do not admit of arrangements suitable for the residence of invalids who have not the free use of their limbs, and cannot bear the almost constant exposure on deck.

For my present purpose I may divide yachtsmen into three great classes:—1st. *Dilettante* yachtsmen, who reside on shore at one of the favourite yachting stations and keep a yacht as they keep a carriage, and take short cruises now and then as their own humour and the wind and tide dictate; or those who, reversing this order of things, live on board, but spend a great deal of their time on shore at the clubs, the hotels, or amongst their friends. This kind of yachting has few advantages over a mere residence at a seaside town; but it may be suitable for rheumatic and gouty patients, and for old and confirmed invalids. 2nd. True yachtsmen, who make their boat their home and the sea their highway, and cruise about from port to port—the occupation most suitable for invalids and convalescents. 3rd. Yacht-sailors, who enter into the higher and more exciting occupations of racing and making long voyages: but fit only for the strong and healthy.

The climatology of yachting on our favourite cruising ground on the south and west coasts does not vary much from that of the adjoining land, but there are differences which it is desirable to note. From numerous observations I find that the temperature of the sea in deep water is uniformly the same in all kinds of weather, and at all periods of the twenty-four hours—namely, 62° Fahr. In-shore it is sometimes 2° or 3° higher, and in the Solent and Southampton Water it has sometimes been as high as 66°. The uniform temperature of the water no doubt materially influences the internal temperature of a yacht, and explains its very limited range below deck. An attached thermometer, in a roomy, well-ventilated sleeping cabin, only ranged 5°—from 65° to 70°—during several weeks of changeable weather, and the variations between day and night frequently did not exceed 2° or 3°.

The ventilation below deck is necessarily imperfect from the limited space, and the fact that the floor of the cabin is considerably below the water-line, and there is no means of admitting air except through the skylights and staircase. In the larger vessels lights are placed in the sides of the cabin, but they are closed while under canvas. There is the further disadvantage that the cooking takes place in the forepart of the ship, and the crew live there also, and when the vessel is under weigh the air is swept from the fore to the after part of it. Although this faulty ventilation is little felt by the yachtsman, who can spend the greater part of the day on deck, it would be very injurious to an invalid confined to the sofa, and who could not bear exposure on deck.

The temperature on deck is more uniform than on land. On comparing a number of observations taken at sea with those published in the *Times* for the same date at the nearest ports, I find that the maxima are not so high and the minima not so low—that is to say, it is cooler by day and warmer by night at sea than on land. The thermometer, however, does not indicate the *feeling* of heat on board a yacht. On a bright day, with a fresh breeze blowing, and the thermometer at 70° in the shade, the sensation was cool and pleasant, and with a dull sky and ten degrees lower it was decidedly cold. As there is very little protection from the direct rays of the sun (awnings, of course, being inadmissible under canvas), the hands, face, and neck are often severely blistered, but the excessive stuffiness of a hot day on land is never experienced at sea. The yachtsman is exposed to a considerable amount of moisture. The atmosphere contains the maximum of vapour, and to this is added the spray from the waves and the damp from the deck, cordage, etc., and his skin and clothes feel constantly damp and sticky, but no other ill-consequences arise from it. On clear still nights the condensation of dew is excessive, and probably it is increased by the hydroscopic properties of the salt covering everything on board. Smoke, tar, grease, and dirt of every kind are altogether unknown on board of a properly managed sailing yacht, and the air is as pure as it is free.

The cooler and damper atmosphere will suggest important points in the selection of the dress of the invalid yachtsman. The conventional "blue jacket" is by no means the best adapted for this purpose; an ordinary sailor's hat, with a suit of thick light-coloured tweed, and a long Irish frieze coat, reaching from the ears to the ankles, for squally weather and cold evenings, and for underclothing woollen jerseys and coloured cotton shirts, will form the most fitting wardrobe. The usual canvas shoes with indiarubber soles are, of course, indispensable.

Apart from the romance of yachting—the delicious feeling of liberty and independence, and the mental exhilaration of the rapid motion and the beauty of the yacht and its surroundings, there are the free exposure to the sun's rays, the pure atmosphere and fresh breezes, the sea-bathing, and the constant occupation of the mind by innumerable transitory and trivial incidents, and the freedom from all terrene worry, which render yachting in every way a most desirable resort for a large class of invalids, especially those who are convalescent from surgical operations, or suffering from chronic strumous affections and the secondary consequences of venereal diseases, and, above all, from overworked brain and nerves. On the other hand, the indifferent ventilation below deck, and the dampness above, and the necessarily irregular mode of living, as well as the limited space for exercise, render it undesirable for persons labouring under diseases of the heart, lungs, and abdominal viscera; indeed, it is the surgeon, and not the physician, who should send his patients yachting.

2, Bolton-row, Mayfair.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

PERIOSTEOMA OF THE TIBIA—AMPUTATION AT KNEE-JOINT.

(Under the care of Sir WILLIAM FERGUSSON.)

The following case, which we lately had the opportunity of seeing in the practice of Sir W. Fergusson, is one of a large and rapidly growing tumour of the tibia in a young adult male of good general health. He had been under the observation of Sir W. Fergusson for many months—from the time the tumour was of very small size, and limited to the front aspect of the bone. Lately it has increased considerably—to the extent of three inches in a month. At the time of the operation it measured eighteen inches in circumference. The following is an account of the operation, and Sir W. Fergusson's remarks. A description of the tumour by Dr. Goodhart, Pathological Assistant at the Royal College of Surgeons, is also added:—

Operation.—The patient having been placed in the necessary position, and the femoral artery controlled in the groin by the fingers of an assistant, Sir W. Fergusson removed the limb at the knee-joint by making a short vertical incision through the skin on each side, from two and a half to four and a half inches below the knee, in a direction downwards and backwards, and then connecting the lower ends of these in front by a nearly transverse incision. Another nearly transverse incision was made through the skin on the posterior aspect, and then skin-flaps were dissected upwards nearly to a level with the joint. In front the reflexion of the skin was not made quite so high as the upper portion of the joint; but by flexing the knee the knife was passed between the condyles of the femur and the head of the tibia without interfering with the patella or exposing the front portion of the articulating end of the femur. The knife was then made to cut its way out in an oblique direction through the tissues behind.

Sir W. Fergusson drew attention to the appearance of the limb after its removal, which looked as if it had been removed by the circular-flap method.

Although it is often supposed that for the shaping of flaps it is necessary to transfix, this is not at all the case, as flaps can be made as well by cutting from without as from within. To insure a proper length of anterior flap, a part of the skin covering the upper end of the tumour had to be utilised; but this was evidently and clearly unaffected by the disease.

When the patient had first come under notice the tumour (which was at the front of the tibia and near the junction of the middle and upper-thirds) was too small to allow of a positive opinion being pronounced upon its nature; but experience teaches that if a solid tumour forms in the tibia, and is not venereal, it will go on increasing and ultimately require to be removed. Even at the very last, one cannot be sure whether the growth is benign or malignant, but we know by increasing in its size it will in time cause very great physical and mental disability, and at last fungate and result in death.

For removal in the present case *amputation* was the only resource; had it been a growth of the fibula, excision of the bone might have sufficed, but here the whole thickness of the tibia itself was so undoubtedly implicated that amputation was the only operation that could be at all entertained. Then came the question whether the amputation should be performed in the extreme upper part of the leg or at the knee-joint. Prior to twenty years ago this latter operation, though it was a recognised one, had no proper standing in surgical practice, but of late years it has attained a position, chiefly through the advocacy and practice of Mr. Carden, of Worcester. It remains to be proved whether the operation possesses any very definite or special advantage.

Although several and weighty authorities think it necessary to remove the whole of a bone affected with tumours of a malignant and semi-malignant nature, Sir W. Fergusson has elsewhere entered his protest against this practice; but in this particular case there was no doubt that entire removal would be the most prudent course, as the growth reached much too high up to leave room for any section through the tibia which could be safe.

The flaps came well together, and were amply long enough to cover the end of the bone without removing the condyles of the femur, but the appearance on the operation-table is no fair criterion of the kind of stump which will result. Three or four months at least are necessary before any inference can be drawn as to its satisfactoriness. A question connected with amputation through the knee-joint is whether the condyles should or should not be removed. In one of the first cases which occurred in London, Mr. Lane left them, and the result was very good. In the greater number of the many amputations of this sort which have been performed by Sir W. Fergusson himself the condyles have been removed; these, however, were cases of amputation for disease of the joint, where there was erosion of cartilage if not disease of bone-tissue. There is less fear of danger from absorption by the bone of purulent or obnoxious material if the condyles are left untouched; but perhaps when removed the danger is greater from injury to and inflammation of the fine tissues of the bone than from absorption of morbid material by them.

Description of the Parts.—Externally the limb is nearly evenly distended over its entire circumference from two inches below the head of the tibia downwards beyond halfway. The tumour is elastic, and apparently cystic. The soft parts are unconnected with the growth, and were dissected away easily, leaving an elongated nodular mass on the tibia, commencing one inch and a half below its head, and measuring seven inches and a half vertically downwards. The tumour surrounds the bone, but unequally so; the greater part of it is on the anterior aspect. It is encapsuled in a fibrous capsule, which is continuous with the periosteum. A vertical antero-posterior section of the tibia with the new growth shows that the bone is practically healthy, except that it is considerably more dense than normal; still the bone as such is of good quality. On its surface, with a periosteal layer still distinguishable as an external limiting membrane, is a lobulated growth of tough consistence, yet gelatinous in places, and of a yellowish hue. It has lines of fibre radiating on the section from the bone to the periosteal layer, and numerous small cysts are seen about the section. Numerous specks of opaque white grit are dotted throughout it, which are more thickly placed close to the bone than at the circumferential parts; indeed, in two places the deposition of this matter on the surface of the bone has formed solid masses, having the appearance of small exostoses. The grit is laid down in radiating lines from the centre to the circumference and in the course of the fibrous septa. Microscopically the tumour is mainly composed of fibro-cartilage—that is to say, of cartilage-cells embedded in a matrix of connective-tissue-like fibre. The cells are large and round, with a circular nucleus, the nucleus being composed largely of oil globules held together by some basic substance, which still in most places bands them together as a single nucleus. In some places the nucleus had broken up into a number of isolated fat-granules. The intervening matrix was also extensively fatty, so much so that there was difficulty in seeing the fibre that composed it. The gritty parts all over the tumour, even those close to the bone, were not true bone, but only irregularly deposited calcareous matter. Here and there it seemed that the calcareous change had begun in a cartilago cell, but generally such a commencement could not be determined. The gelatinous parts showed that the cartilage gradually merged into pure spindle-cell myxoma tissue: long bipolar cells, with elongated central nucleus, ramified about, forming a network enclosing the large, round, fatty granulation-mass-like cells seen often in myxomas, and which here could not be distinguished from the cartilage nuclei adjacent to them, save that the latter were centrally placed in a circular area of hyaline substance, while the myxoma cells lay free in meshes of the network. The two (?) tissues were however directly continuous, and the one became the other apparently by a mere modification in the arrangement of common elements. Calcareous matter was deposited in the myxoma tissue as well as in the cartilaginous.

Bone or calcareous matter, as is well known, is common in these periosteal tumours, but, though not a rare specimen, this growth is an interesting one, in that it shows how closely related is a degeneration to active growth, and how the former sometimes takes on the aspect of the latter. The tumour is said to have been rapidly growing, and yet it is in a condition of general decay. This decay was evidenced by the extremely granular and fatty condition of all the sections examined, both those near the bone and those at the circumference—those from the one part coextensively with the other, but not more so. The origin of the calcareous material is also perhaps worthy of remark. It may of course be ascribed to the tendency which all bone tumours have

towards petrifaction; and in favour of this, as is usually the case, the calcareous change was much more extensive on the surface of the tibia in the deep parts of the tumour than elsewhere. If so, the bone tendencies have fallen short of bone formation, and have produced no more than the amorphous constituents. On the other hand, it may be said, and, as I think, with some probability in this case, that fat degenerations are prone also to pass on into a calcareous state; and in that case, while the whole growth should show signs of the change, as here, we might still expect that the parts at the surface of the bone should show the more extensive change, in that the new material would be laid down upon a large surface of a like material, and the process would perhaps be analogous to crystallisation. Myxoma tissue in tumours about bones is, I believe, though not often mentioned, not uncommon. The change from myxoma to cartilage was in this instance well seen.

CHARING-CROSS HOSPITAL.

PARALYSIS OF THE LIMBS—TENDERNESS OF NERVE-TRUNKS—INTELLECTUAL DERANGEMENT—AUTOPSY.

(Under the care of Dr. POLLOCK.)

J. C., AGED 34, groom, was admitted into Charing-cross Hospital on June 3, 1872, suffering from obscure paralytic symptoms. Healthy until 18, when he contracted gonorrhœa and syphilis, followed by secondary symptoms. Some eight years ago his pelvis was fractured by a fall under a horse, but neither his bladder nor legs were paralysed. Three years ago a horse fell on his left ankle, and the spur passed through the tarsus. Mr. Canton excised the astragalus with the best result. Thereafter the patient continued to follow a light occupation until his present illness. Family history good. The patient states that about three months ago he began to find his right hand and arm weak; this condition became gradually worse, while it spread to the other limbs, up to his admission. Has had occasional slight headache; he has never been convulsed. In the Hospital the patient was quite confined to bed. Tolerably nourished, but anæmic. Expression dull. Considerable loss of motor power, both of flexion and extension, in the muscles of the forearms, which, as well as those of the hands, are evidently wasted and flabby. Movements at elbow- and shoulder-joints not apparently impaired. The lower limbs can be moved readily in bed, but the patient cannot walk unless supported, and then in a shuffling manner, and with the greatest reluctance and evident dread, accompanied with a complaint of severe "cramps" in the calves. His limbs neither tremble nor twitch. Electrical irritability of muscles of forearms and hands considerably and equally diminished on the two sides. No response of muscles of either lower limb to the full power of the induced current of a two-celled Stöhrer's machine. Movements of the tongue normal; articulation perfect. The patient suffers from no pain in his limbs, but he has a constant feeling of numbness in his fingers. Tactile sensibility is slightly if at all deficient. No pain is caused by pinching the skin slightly; but deep pressure induces marked and sudden expressions of distress when exerted over certain parts of the body. These parts are found to correspond accurately with the course of the various large nerve-trunks of the arms, legs, and neck—for example, if the finger is placed heavily over the median nerve in any part of its course, or over the brachial plexus, there is tenderness at the point of pressure, and a shooting feeling as far as the finger-tips; also, when the pressure is removed, there remains a sensation of "pins and needles." The same phenomena are elicited by touching heavily certain spots in the thoracic and abdominal walls; they are not discoverable in the head. No headache. Higher senses unimpaired. No squint; irides normal. Electrical sensibility of skin of upper limbs diminished; almost lost in that of the legs. The eyes were not examined ophthalmoscopically. The patient, who formerly had the reputation of being an unusually smart fellow, is now quiet and dull. He evinces almost no interest in what is passing about him, and when questioned he replies slowly, hesitatingly, and often inaccurately, the last, he confesses, because his "head is wandering a bit," and because his memory is undoubtedly bad. He declares that he is in good spirits. No abnormal respiratory or circulatory symptoms or signs. His appetite is fair; his bowels move twice a day. He does not vomit. Urine passed voluntarily only; no albumen. ℞. Potassii iodidi. gr. iv., misturæ cinchonæ co. ℥j., m., t. d. s.

June 15.—The dose of iodide increased to ten grains, three times a day.

19th.—Condition unaltered. The dose of iodide increased to twenty grains three times a day.

23rd.—Condition of the patient altered in several respects. His bowels to-day moved involuntarily for the first time. He is subject to occasional shivers, which, if slight, seem referable to cold only, but which may be severe—threatening to pass into "a regular fit" as the nurse expresses it. There is now distinct intellectual aberration, which has been gradually developed since his admission. He cannot remember the day of the week, nor what happened yesterday. He is also the subject of hallucinations; in a cheerful talkative way he describes how he spent the morning in going out to be shaved, taking breakfast at the barber's house, walking up the Strand, and returning to the Hospital to bed. ℞. Mist. strychniæ ℥j., t. d. s.

July 3.—Had a shaking fit while passing water; bowels and urine incontinent. He complains of pain in the head and back. Hallucinations about fighting with the French, being at a fire at Westminster, etc.; there is neither exaltation nor depression.

9th.—Several shivers, almost amounting to fits.

11th.—Appearance "changed"; he looks pale and half-collapsed, and complains of most excessive headache, which he refers to the right brow. He has had no fit, no shaking, no sickness. His left elbow is somewhat rigid at semiflexion. ℞. Potassæ nitratis gr. xx., acid. hydrocyan. dil. ♏v., aquæ camp. ad ℥j., m., t. d. s.

12th: Morning.—Worse. Much less ready to reply to questions. At 4 p.m. he had a fit, and for the rest of the evening a recurrence of the same at intervals of six to eight minutes. The fits, as observed and described by Mr. Delamotte, House-Physician, are usually unilateral, and three times out of four on the right side; rarely general. Eyes directed constantly to the left, except during a right hemispasm, when they are turned to the right. Tongue sometimes bitten. Total loss of consciousness.

13th.—Fits during the whole night and to-day. The limbs after each convulsion are quite powerless. Respiration very frequent, but neither deep nor laboured.

14th.—Died this morning at three o'clock, the convulsions having continued, though less severe, almost to the time of death.

Sectio Cadaveris.—Cerebral arachnoid generally opaque; pia mater swollen, hyperæmic, and very readily separable from the subjacent grey matter, which, both on the upper surface and base, was hyperæmic and soft. No disease of central ganglia. Spinal meninges generally healthy. Cord softened to different degrees at several places—viz., perfectly diffluent in the lumbar region and in the lower part of the dorsal region, less severely destroyed at several points in the upper dorsal region and in the lower cervical region. Posterior roots of spinal nerves apparently healthy. No disease of nerve-trunks (right ulnar examined). Heart not enlarged; tissue pale and soft; no valvular disease. Slight secondary pneumonia of both sides. Liver somewhat fatty. Kidneys slightly contracted and indurated. Splenic capsule thickened and adherent; tissue soft. The left foot was removed for special examination. The nervous centres have not yet been examined microscopically.

HOSPITAL FOR DISEASES OF THE THROAT.

ABOUT three years ago we gave an account of the construction and working of this Hospital (vol. ii. 1869, p. 98). Since that time, in consequence of the daily increasing number of patients, the Committee have taken another house, which has been incorporated with the previous building. The accommodation for the out-patients has been thus largely increased, there being now a second waiting-hall, a much larger and more convenient dispensary, and a separate room for the examination of those patients whose cases require auscultation. In addition to all this, new features have been introduced, more particularly an inhaling-room, and a pathological museum. It is to these two departments that we would now more especially refer.

Inhalations have from the commencement of this Hospital been very largely employed in the treatment of laryngeal diseases, and, where they have consisted of medicated steam, it has been easy for patients to carry out the treatment at their own houses; but it has always been found difficult to employ atomised inhalations on an extensive scale, not only on account of the expense of the necessary apparatus, but also because of the

great liability of the inhalers to get out of order when entrusted to ignorant people. The inhaling-room of this Hospital has, therefore, been especially fitted up with a view to the employment of atomised inhalations, and affords accommodation for as many as twelve persons at once. Patients are allowed, in the signature of their physician, to attend daily if necessary, and about fifty or sixty patients are thus treated each day.

The principle employed is that of Siegle. Steam is conveyed from a boiler in the basement to a pipe fixed horizontally round three sides of the inhaling-room, and from this horizontal pipe there project at regular intervals, and at right angles, secondary tubes corresponding to the horizontal tube of a Siegle's inhaler. These secondary pipes terminate with two fine platinum tubes on the well-known model. The perpendicular terminal pipe dips into a glass vessel containing an ounce of the solution to be inhaled. The orifice is protected by one of Dr. Beigel's screens.

A different solution can be placed in each glass vessel, so that twelve patients inhaling at the same time could, if it were desired, inhale each a different medicament. The boiler contains about a gallon of water, and is self-supplying. It is heated by a Bunsen's circular gas-burner, and there is a gauge in the inhaling-room showing the exact pressure of steam employed. Solutions of mineral salts are most largely employed as atomised inhalations—viz., chloride of aluminium, 5 grains to the fluid ounce of water; alum, 8 grains; aluminate of iron, 3 grains; perchloride of iron, 3 grains; sulphate of iron, 2 to 4 grains; chloride of sodium, 5 grains; chloride of zinc, 2 to 5 grains; sulphate of zinc, 5 grains. In addition, sulphurous acid, 5 grains, and tannin, 5 grains, are used. Solutions of tannin, 20 grains to the ounce, are found to arrest hæmoptysis almost instantaneously. Permanganate of potash, 5 grains, and carbolic acid, 3 grains, are found of great service in curing ozæna, and in relieving the fetor arising from carcinomatous and syphilitic ulcers. Lactic acid, mxx. to the ounce, has been employed with great success in cases of diphtheria. The inhaling-room may be seen in working order daily between two and four o'clock.

The Museum contains nearly one hundred specimens illustrating diseases of the throat; laryngeal phthisis and cancer of the larynx and œsophagus are particularly well illustrated. The medical staff justly pride themselves on the absence of morbid specimens of polypi of the larynx *in situ*, the only two examples being one of a very young child in whom tracheotomy had been performed on account of growths in the larynx, and another of similar disease in the larynx of a dog. There are, however, a large number of small bottles containing polypi and fragments of growths which have been removed during life. A very interesting specimen is that of an everted ventricle, which has indeed all the appearance of a typical polypus. There are several interesting cases of aneurism of the aorta, and other growths, involving the recurrent nerve and causing atrophy of the muscles of the affected side. There is one very excellent example of a very rare disease—circumscribed abscess of the larynx—and several illustrations of post-pharyngeal abscess. There are many interesting specimens of disease of the thyroid gland where death has resulted from pressure on the trachea. These specimens well illustrate the pathological varieties of disease in this region. Though this collection is actually a small one, enough has been said to show that it is large as a *special* museum, and that it completely illustrates nearly all the fatal diseases of the throat.

The Diarrhœa of Hot Weather.—Speaking of the diarrhœa observed in adults during the recent hot weather, Dr. Révillout observes that regimen is the great thing in treating it. Above all things attention must be paid to the choice of drinks used by the patient in allaying thirst. It is a constant observation that the more refreshing the drinks are the more harm do they do. As little as possible should be drunk. Albuminised water, formed by the whites of fresh eggs beaten under water and scarcely sweetened, does not increase the diarrhœa. Good Bordeaux wine, rather new and not sweet, largely diluted with boiling water and drunk as hot as possible, is also of service. But the best of all is champagne, taken in small mouthfuls, as the only drink, whether at meals or in the intervals. As food, nothing is better than fresh eggs, scarcely cooked, and drunk from the shell without either bread or salt, and in quantity conformable to the appetite. Dr. Révillout has often found this regimen speedily arrest the diarrhœa, and in all cases it has singularly assisted the action of remedies such as the subnitrate of bismuth and small doses of opiates. —*Gaz. des Hôp.*, July 30.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
,, ,,	*Six* ,,	0 14 0
The Colonies and the United States	*Twelve* ,,	1 10 0
,, ,,	*Six* ,,	0 15 0
India	*Twelve* ,,	1 15 0
,,	*Six* ,,	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, AUGUST 31, 1872.

THE SEWAGE QUESTION.

As life involves the conversion of food into sewage, so science must convert sewage into food, and deal with it so as to make the earth fertile, the air pure, and the water sweet. If sewage be so applied as to make the earth fertile, the other desired ends are attained at the same time. The early sanitarians were for the most part obliged to be content, in their treatment of sewage, with the purification of the air of human dwellings Hence they very properly denounced all cesspools and collections of filth under and near houses, but partly from theory, partly from necessity, purified the air at the expense of water, and merely directed the sewage into the nearest river. The more enlightened of the body protested against this, except as a means of temporary and exceptional necessity; nevertheless it unhappily became stereotyped, in the form of those huge tunnels which get rid of the manure of the three millions of Londoners by letting it flow into the lower reaches of the Thames. Whatever the good effects on air, the earth is impoverished, and the water polluted.(a)

Meanwhile, the practice of ages in other countries, the irresistible arguments of Liebig, and the successful attempts made by Mechi and other enlightened agriculturists, showed that by properly utilising sewage, the earth, air, and water were alike benefited. But then cropped up a multitude of difficulties of detail, some of which are noticed in the report of the Sewage Committee of the British Association. And here we must just recall the distinction we have often had to make—between schemes for the *treatment* of sewage merely in order to get rid of it without nuisance, and the *utilisation* of sewage.

Of means for getting rid of sewage, we may refer, first, to the intermittent downward filtration, which was amply described by Dr. Dyke as practised at Merthyr Tydfil.(b) This employs the earth as a huge filter and oxidating machine—as a kind of lung—for aërating and oxidating the sewage matters. Luckily it can be utilised as well for the rapid growth of green crops, so that the land used may be a garden as well as a filter.

(a) The reader may turn to Admiral Ommany's observations at the British Association at the Brighton meeting, (*Times* of August 22), and Victor Hugo's chapter on the matter in "Les Misérables."

(b) See *Medical Times and Gazette*, August 24, 1872, page 207.

The antithesis to this is a sewage farm, where the prime object is the growth of ryegrass and other vegetables, for which purpose the sewage is used economically, not wastefully. Not a drop ought to be allowed to soak through without yielding up its fertilising elements.

For both these purposes thorough deep drainage is essential, so that the sewage may run *through*, not merely over, the cultivated surface. But it happens in practice that sewage contains much slimy matter in suspension, which is undergoing decomposition, gives off most offensive gases, is most unsightly, and is apt to collect on the surface of irrigated land, covering it with a varnish which fills up its pores and delays the process of filtration.

Here, supposing the land properly manipulated, there arises the necessity for processes of filtration, precipitation, or other "treatment," for the use of these ends:—1st, to allow irrigation to be performed more easily and agreeably; 2nd, to allow the so-called "purified" sewage to be cast into rivers; or 3rd, to extract from it its valuable parts in the shape of portable manure.

Several processes for these ends were reported on at the Brighton meeting. Weare's process, as carried on at Stoke-upon-Trent, seems to be mere filtration. The sludge is utilised; the liquid which runs off is merely cleansed sewage, and, if not applied to land, is wasted. General Scott's, or the Ealing plan, employs means to precipitate and deodorise the sludge, which is dried and used as fuel for burning cement. The "effluent water is too valuable to be wasted, and too foul to be discharged into a river." A method described as "Whitthread's patent" was described by Professor Corfield, in which various phosphates of lime were added to the sewage, with the effect of rapid subsidence and clearance, with a valuable deposit of phosphate of lime and some ammonia. But of this, as of the A B C and of a thousand other processes for precipitation, we may express our belief that they are radically wrong and delusive, if considered as means for extracting manure from sewage, or for effecting "purification" of the sewage and its conversion into potable water. The ingredients used are costly, the solid manure of little worth, and the effluent water offensive. The earth is robbed, and the air and water not sweetened.

There is the case of towns whose sewage cannot easily be dealt with by irrigation without pumping, and in which the sea or nearest river is resorted to. For such towns some dry system ought to be imperative, unless they incur the expense of pumping. All mere discharges into the sea, harbours, estuaries, or rivers should be abolished.

ARMY MEDICAL BLUE-BOOK, 1870.—SYPHILIS IN THE ARMY.

In a notice of the cases we encountered in Netley Hospital some years ago, we mentioned one of fracture from a very inadequate cause. Several cases of the kind are referred to in Professor Longmore's report. In one instance the patient, who was suffering from necrosis of the jaw, was standing in the corridor leaning mainly on one limb. He attempted to turn round suddenly, and in so doing the bone gave way and he fell, snapping both tibia and fibula, the sharp point of the tibia nearly piercing the skin. There was no history of syphilis.

In another patient, also the subject of necrosis of the lower jaw, a fracture of the right humerus near the middle occurred as the patient was throwing a stone. Here, too, there was no history of syphilis, but a history of repeated attacks of intermittent fever. His constitution, too, was strumous. In a third instance the humerus snapped as the patient was helping a comrade to fasten on his knapsack. In this case there was a syphilitic history, and the cachexia was strongly marked.

Such cases are exceedingly interesting, if not perhaps the most instructive in the world; but we must next turn to Surgeon-Major Mackinnon's addendum to the report. This includes a list of all the operations performed at Netley during the years 1867, 1868, and 1869, a considerable proportion being the work of Mr. Mackinnon himself.

During that period 116 cases of stricture of the urethra were treated at Netley. Of these, seventy-eight were operated on, and the patient sent back to duty, but twenty-seven of the patients had to be dismissed. Of the seventy-eight, twenty were operated on by Holt's method, with very satisfactory results; eleven were treated by dilatation with Thompson's instrument, and in eight internal division was performed with Trélat's instrument. In these last instances the strictures were annular, and situated anterior to the scrotum. It is Mr. Mackinnon's opinion that such strictures—those, that is, which are situated in front of the scrotum—are best treated by internal section.

The next paper in the appendix consists of a "Tabulation of Cases from the Necrological Register of the Royal Victoria Hospital, Netley," by Staff Assistant-Surgeon Welch. From this we learn that the main cause of death in the Hospital is phthisis, from which a mortality of 49 per cent., or nearly one-half of the whole number of deaths, results. Next follow diseases of the heart and vascular system, accounting for 17 per cent. of the mortality; syphilis accounts for 16 per cent. of the whole, and chronic dysentery for 5·4; the remainder being made up of, comparatively speaking, unimportant maladies.

In this paper the post-mortem appearances in forty-one cases of syphilis are recorded—one primary, forty secondary; the syphilitic cachexia being strongly marked in the latter. There was but little relation, apparently, between the period of the disease and the kind of lesion found, but in most there was more than one lesion encountered. The most common changes seen on the post-mortem table were lardaceous and fibroid degenerations, especially the former—the kidneys, liver, and spleen being the organs chiefly affected. The fatal case of primary sore occurred in a man of intemperate habits; he became the subject of a soft sore on the prepuce, which was followed by a sloughing bubo. This formed a communication beneath Poupart's ligament with the bladder, and the femoral vessels and subjacent muscles were laid bare. The vein was occluded by pressure from without. Death resulted from hectic and exhaustion. The post-mortem appearances showed that the sore was a truly syphilitic one.

The most frequent lesion occasioned by syphilis, according to this report, is the so-called atheromatous degeneration of the aorta. This, in its turn, doubtless helps at all events to increase the amount of aneurism in the army. Out of the whole number of cases here recorded this lesion occurred in 57 per cent. Next in frequency occur ulcerations of the tonsils, tongue, pharynx, and larynx, with gummata, especially in the liver and lungs. These tabulated cases we most cordially recommend to syphilographers, as being of the very highest value, and as giving us exactly the information lacking in civil practice. In the army each man's medical history is on record, and if these histories are well kept they furnish such an account as is awanting entirely in our civil reports.

The succeeding papers give the medical history of the Red River Expedition, by Surgeon-Major Young, of the 60th Rifles. The history of this expedition has been recorded elsewhere in a popular form, but the information herein conveyed is of a sounder description, and may be of great service to those engaged in subsequent expeditions of the kind. The main feature that strikes us was the substitution of tea for spirits, and the results were most satisfactory; but Surgeon-Major Young most wisely points out that this must not be taken absolutely as a guide on future occasions. Under different conditions the results might have been different. Nevertheless, Dr. Young is decidedly to be congratulated on his arrangements, both sanitary and medical.

An account of the Wellington Convalescent Depôt in the Neilgherries, by Dr. Davidson, of the Royal Horse Artillery, comes next.

Finally, our space forbids us to do more than allude to two exceedingly interesting papers—the one "On Beu-beri as seen at Labuan in the Ceylon Rifles," by Dr. Barry; and another "On the Endemic Hæmaturia of the Cape," by Staff Assistant-Surgeon Batho. Both are exceedingly good, and will well repay perusal.

We cannot leave this subject without saying in a word that we are always pleased to welcome, and to praise wherever praise is due, the work of our army surgeons. Their temptations to idleness are many, and some succumb to them; but there are others who, notwithstanding all inducements to the contrary, do work as valuable as any done in the country.

INDIAN VENOMOUS SNAKES.(a)

The why and the wherefore of poisonous snakes is a puzzle which defies philosophy. A generation of Lamarcks and Darwins might amuse themselves with hypotheses of how the first poisonous snake was evolved from the innocent, or *vice versâ*, and by what process of natural selection the deadly race was continued, without producing one theory which would satisfy the common sense of mankind on the subject, or would give any satisfactory reason for their existence. The oldest religious systems have held them as living incarnations of evil, either to be dreaded or to be worshipped; and against the more deadly forms the advanced science of the present day seems well-nigh as powerless as the incantations and spells of the savage.

The appearance of the magnificent work of Dr. Fayrer on the venomous snakes of the Indian peninsula will mark an era in our acquaintance with these unpleasant creatures. It is true that he has added no new species to the terrestrial Indian *Thanatophidia* (to use his own happy word), but he has called attention for the first time to the distinctions which are drawn by the natives who are most familiar with these snakes between the different varieties of the cobra—*Naja tripudians*—varieties, it would seem, distinguished not merely by colour and marking, but by habits and *habitat*. In the highly artistic, elaborate, and lifelike coloured plates, from drawings by native artists, which illustrate his work, he has figured the two principal native varieties, the Gokurrah and the Keautiah. He has also figured and given descriptions by Dr. Anderson, of the Indian Museum, of some new species of *Hydrophidæ* or poisonous sea-snakes which infest the Indian seas. These elegant creatures, that remind one of Coleridge's description of the water-snakes in the "Ancient Mariner," with their small heads and tiny jaws, will bite a man whilst bathing, inflicting an almost imperceptible wound, unnoticed at the time, but of which the luckless recipient will die within from a few hours to a day or two.

Dr. Fayrer's work is divided into five sections. The first treats of the zoological and anatomical characters and distribution of the Indian venomous snakes. In his preface he frankly asserts that he has followed Günther and other authors of repute in the zoological descriptions and definitions, but he has added much new information with regard to these snakes, especially in reference to the Cobra, Hamadryad (*Ophiophagus elaps*), a venomous monster that grows to twelve or fourteen feet long, the Krait or *Bungarus cæruleus*, the Sankni or *Bungarus fasciatus*, Russell's viper (*Daboia russellii*), the Afai, Kuppur, or *Echis carinata*, and the *Hydrophidæ*. Moreover, he has figured some beautiful original dissections of the jaws and poisonous apparatus of the Cobra and Russell's viper.

The second section is a statistical one, giving an account of the deaths which occurred in the Bengal Presidency from snake-bite in 1869. The frightful scourge which these reptiles are is shown by the fact that the recorded deaths in that year were 11,416. But it is more than probable, considering the imperfection of Indian records, that 20,000 was nearer the true mortality.

The third section treats of the treatment of snake-bite; the fourth is a record of cases obtained from the civil and military medical officers throughout the Presidency; and the fifth is Dr. Fayrer's account of his experiments on the influence of snake poison on the lower animals, and on the value of certain modes of treatment and reputed antidotes. Of these experiments, of which there are twenty-nine series, the large majority were performed by Dr. Fayrer himself in the presence of some of the most distinguished scientific men in Calcutta, and some were performed by his enterprising and sagacious coadjutors—Mr. Richards, of Bancoorah, and Mr. Stewart, of Pooree. It is our object to lay before our readers some of the results to which his experiments and observations have led him.

First, with regard to the treatment of snake-bite. Dr. Fayrer's cases and experiments prove beyond a doubt the utter inutility—nay, worse than inutility, because involving loss of time—of all the so-called antidotes against the bites of the more venomous Indian snakes, such as the Cobra and Russell's viper. We regret to state that even Professor Halford's treatment by the injection of liquor ammoniæ into the venous circulation, and Dr. Shortt's treatment by a similar use of liquor potassæ, must be relegated to the same category. Fayrer has experimented by injecting liquor ammoniæ immediately after the bite of the cobra; by mixing the ammonia with the cobra poison, and injecting them together; by administering the liquor ammoniæ by the mouth and by subcutaneous injection, with the same result in all—death. Take, for instance, the following experiment as an example:—

"The external jugular vein of a large and powerful dog having been exposed, ten drops of fresh cobra poison were injected into it at 4.24 with hypodermic syringe. 4.24½: The dog staggered, was convulsed, and fell over foaming at the mouth. 4.25: Violently convulsed, but with no outcry or sign of suffering. Sixty drops of liquor ammoniæ ·959 injected. Dead. Death occurred in seventy seconds.

This is only an example of the frightful destructiveness of the poison and the utter failure of the injection of liquor ammoniæ when a full dose of the virus has been received. Precisely the same result occurs when the poison and the liquor ammoniæ were mixed before injection. But it is not to be supposed that no treatment should be adopted in cases of snake-bite. Dr. Fayrer's experiments, no less than universal experience, bear testimony to the efficacy of the ligature if applied to the limb above the bite promptly and tightly, and then excision and the actual cautery be used. In the case of a finger or toe being the bitten part, amputation should undoubtedly be performed at the next joint. A fowl bitten on two occasions by cobras had amputation of the wing performed each time, and survived—the only animal probably living, as Dr. Fayrer remarks, which has survived after being bitten twice by an active cobra. Eau de luce, liquor ammoniæ, and carbonate of ammonia may be given, but Dr. Fayrer has not found that they do more good than spirits and water. Treatment to be efficacious must prevent the entrance of the poison. When the virus is once in the blood no known agent is capable of neutralising it.

Some of Dr. Fayrer's results are extremely interesting and of great practical value. These snakes have the greatest repugnance to carbolic acid, which acts as a powerful and fatal poison to them. The practical advantage of using carbolic acid freely in and about houses in India must be great. The practice of sucking a bite is not so absolutely safe as has been

(a) "The Thanatophidia of India: being a Description of the Venomous Snakes of the Indian Peninsula, with an Account of the Influence of their Poison on Life; and a Series of Experiments." By J. Fayrer, M.D., C.S.I., F.R.S.E. London: Churchill. 1872.

hitherto supposed. The poison may be absorbed through the conjunctiva, the buccal mucous membrane, and the lining membrane of the stomach, and will produce its fatal effects. With regard to the relative deadliness of these snakes, Dr. Fayrer believes that the Cobra, Hamadryad (or *Ophiophagus*), and Russell's viper are about on a par; next to these is the *Bungarus fasciatus* or Krait, and probably the *Echis*, and then the *Bungarus cœruleus*. The *Hydrophidæ*, as far as is known, are intensely poisonous. The *Callophides* and *Crotalidæ* of Hindostan are somewhat less so. The most poisonous of these snakes seem to possess a perfect immunity from the poison of their own species, and considerable immunity from the poison of other poisonous species. Dr. Fayrer says—"In many of the various experiments I have performed, the Cobra, *Daboia*, and Krait did not appear to be able to poison themselves or each other." This result was not absolutely invariable, but was sufficiently constant to be remarkable. On this point Dr. Fayrer's observations confirm those made many years ago by Dr. Russell. Snake poison acts with most vigour on warm-blooded animals; birds die very rapidly. The power of resistance is generally in proportion to the size of the animal, but not invariably so: for instance, a cat will resist the poison almost as long as a dog three or four times its size. Cold-blooded animals, fish, non-venomous snakes, and invertebrate animals all die when bitten. There seems to be a certain difference in the action of the poison of the colubrine and viperine snakes. In poisoning by the colubrine snakes, the blood coagulates firmly, but in death by the viperine it remains permanently fluid—at least, this was the result in many experiments performed by Dr. Fayrer. Such differences may suggest an explanation of the different results obtained by Dr. Fayrer in his experiments with ammonia on the Indian snakes from those obtained by Professor Halford in his experiments on the Australian. We may add that Dr. Fayrer has not been able to confirm Professor Halford's observations of microscopic changes produced in the blood by snake-poison.

We cannot close this very imperfect notice of a most valuable work without expressing our admiration of the courage and sagacity evinced in the long series of experiments it contains. It is no easy or light matter to handle a poisonous snake or to direct experiments with them. We congratulate Dr. Fayrer on having escaped to give the world and India the result of his labours. Once only was there an accident, when Dr. Fayrer's principal snake-man was bitten by an *Echis*. Immediate excision and cauterisation fortunately saved him. The series of experiments are not only a monument of sagacity, courage, and ingenuity, but of public spirit and of determination to carry out a great object for the public good. The mere pecuniary expense of several hundred experiments on all sorts of animals—from the horse down to the snail—and the obtaining of hundreds of venomous snakes, must have been very great. It was all borne by Dr. Fayrer himself. It is true that the Indian Government gladly accepted the onus of publishing his work in a fitting form, but the expenditure apart from the publication was entirely his own. We are sure that the work will live, both as a valuable addition to a most interesting part of natural history, a rich record of careful experiments and of cases, and as an authority on the practice to be pursued in snake-bite; and that its author, who has done so much, as our own columns have long testified, to illustrate Indian Medicine and Surgery, will in virtue of this, his latest contribution, long be remembered in that country as a public benefactor.

THE WEEK.

TOPICS OF THE DAY.

At a meeting of the Council of the Metropolitan Counties Branch of the British Medical Association, held on August 21, the following report from the committee appointed to investigate the charges of unprofessional conduct made by Mr. William Adams against Mr. Brodhurst was presented:—

"The Committee appointed by the Council of the Metropolitan Counties Branch of the British Medical Association to investigate certain charges made by Mr. William Adams against Mr. Brodhurst in connexion with recent occurrences at the Royal Orthopædic Hospital, beg to report as follows:—

"Mr. Adams charges Mr. Brodhurst with unprofessional conduct—

"1. In having been privy to the purchase and fabrication of a number of votes on the day prior to the meeting of the governors of the Royal Orthopædic Hospital on March 13, which votes were used at that meeting to injure Mr. Tamplin and Mr. Adams.

"2. In having been privy to the use of the same votes, and of others similarly purchased at a subsequent date, for the rejection of a proposition brought forward and supported by Lord Abinger, Lord Shaftesbury, Lord Ebury, and other of the Vice-Presidents, at the meeting of April 8, for the reparation of that injury.

"To these charges Mr. Brodhurst gives an explicit and unqualified denial. He asserts that the names and subscriptions of new governors were sent to him prior to the meeting of the governors of the Royal Orthopædic Hospital on March 13, for the support of a resolution which would place him in the position of full Surgeon. He states positively that he had no cognisance of, nor did he directly or indirectly seek to influence, the vote of any governor, new or old, respecting the adoption of the report of the Committee which has ended in the resignation of Mr. Adams and Mr. Tamplin; and he further states that he had no knowledge of the contents of the report, or that it contained anything which, if accepted by the meeting, would necessitate the resignation of his colleagues. He also denies that he was cognisant of or privy to the creation of new governors prior to the meeting of governors on April 8, for the purpose of supporting the report, or of opposing Lord Abinger's motion; and states that he did not in any way or at any time attempt to influence the vote of any one of the governors who were present at that meeting.

"While the Committee consider that, under the circumstances of the case, Mr. Adams was justified in asking for an investigation of Mr. Brodhurst's conduct, they cannot refuse to accept Mr. Brodhurst's positive and emphatic denial, as they have failed to obtain sufficient evidence to establish the charges made against him.

"August 16, 1872." "Wm. Fergusson.

It was unanimously resolved by the Council—

"That the report of the Committee be accepted, and that copies be sent to Mr. Adams and Mr. Brodhurst, to the *British Medical Journal*, and to the other medical journals."

The members of this Committee were—Dr. Russell Reynolds, F.R.S.; Sir W. Fergusson, Bart., F.R.S.; T. Heckstall Smith, Esq.; R. Dunn, Esq.; Dr. A. P. Stewart; Campbell De Morgan, Esq., F.R.S.; J. Marshall, Esq., F.R.S.; Dr. Sieveking; J. Wood, Esq., F.R.S.; and Dr. A. Henry, Secretary. The somewhat equivocal terms in which the Committee record their judgment will scarcely allow it to be accepted, we should think, as final. They say they cannot refuse to accept Mr. Brodhurst's positive and emphatic denial of the charges brought against him, not because he is in a position to make that denial, but because they "have failed to obtain sufficient evidence to establish" those charges! Without considering the merits of the case, we may certainly consider the merits of the verdict, which seems to us eminently unsatisfactory.

A telegram from Calcutta states that cholera has broken out in a severe form in Meean Meer, Lahore, Kassowlie, and elsewhere. Seventy men of the 37th Regiment have died at Meean Meer. Of 200 cases at Lahore half proved fatal. Dengue fever is abating at Calcutta, but is still rife in the other presidencies.

The potato disease is attracting general attention. At the request of the Prime Minister, Dr. Hooker has written a letter to the *Times*, reminding the public that the starch of a diseased

potato is perfectly good in itself and easily obtained. He gives Professor Henslow's simple way of procuring it from the diseased tubers. He writes—

"This method depends on the fact that the starch of the potato is not affected by the disease, but retains its nutritive properties, and consists in rasping the peeled tubers upon a bread-grater into a tub of cold water. In a few minutes the starch will be found to have sunk to the bottom, and the diseased matter, woody fibre, etc., will be suspended in the water, and should be poured away with it. Fresh water should then be added, the starch stirred up, and again allowed to settle. Two or three of such washings will remove all impurities and render the starch fit for use. If *thoroughly* dried it will keep for any time, and can be used as arrowroot, for puddings and cakes, or, mixed with flour, as bread. A flat piece of tin, prepared as a grater, may be had of a tinsmith for a trifle, and nothing else is required but a knife and a tub of water. But this temporary measure cannot be all that scientific resources may supply. Surely some method (by desiccation or otherwise) is applicable and available to the cottager by which the sound tubers and the sound parts of diseased tubers may be so treated that they may be preserved for winter use; and I cannot doubt but that chemists will suggest such."

MEDICAL OFFICER OF HEALTH OF ST. GEORGE'S, HANOVER-SQUARE.

On Thursday week the report of a committee, appointed by the Vestry to inquire into the amount of salary to be paid and the duties to be performed by the Medical Officer of Health, when appointed, was brought before the Board. The report recommended that the salary be £350 per annum, and that the gentleman engaged should be prohibited from private practice. He should also be gas examiner and water analyst. Dr. Schulhoff ridiculed the recommendation of the Committee. If the Vestry were willing to pay a salary of £800 or £900 a year, they might then obtain the services of a gentleman of experience; but it was preposterous to imagine that they could secure the whole services of any gentleman of note for such a salary. An amendment, moved by Dr. Brown, negativing the recommendation of the Committee prohibiting the officer from private practice, was put and carried—30 voting for it and only 8 against it.

INDIAN MEDICAL SERVICE.

The following is a list, in order of merit, with total number of marks, of successful candidates at the competitive examination held at Burlington House, on August 12, for fifteen appointments as Assistant-Surgeons:—S. Brereton, 2429; E. Bovill, 2255; G. Price, 2233; M. B. Moriarty, 2215; G. A. Dundas, 2097; B. O'Brien, 2035; E. Levinge, 1985; A. W. Rogers-Harrison, 1893; Z. A. Ahmed, 1870; W. A. Gilligan, 1860; H. A. Hill, 1795; L. Beech and D. H. Cullimore (equal), 1785; W. E. Griffiths, 1775; H. B. Esmarde-White, 1750. Thirty-two candidates competed for ninety-five appointments; all were declared qualified. (The maximum of marks was 3700.)

CORONERS AND MAGISTRATES.

Have the magistrates of Middlesex the power to enforce their unseemly order of compelling the coroners of the county to attend before them and verify on oath the correctness of their accounts? It is clearly on the part of the magistrates a vexatious proceeding, and, as far as the circumstances go, we think quite unwarranted. At the meeting of the Board on Thursday week, Dr. Lankester and Mr. Bedford did not attend "according to order." The magistrates accordingly decided to withhold the payment of their accounts until they verified them as required. Captain Morley reiterated his old complaint against Dr. Lankester, and said that he held 149 inquests against 147 by Mr. Humphreys, and the expenses of the former were £108 higher. Dr. Lankester caused a "post-mortem examination" to be made "on almost every occasion," and, by implication, we are to suppose that Mr. Humphreys does not. It is time that the unseemly and undignified disputes between the magistrates and the coroners should cease.

GARRISON FEMALE HOSPITAL, WOOLWICH.

In reply to a memorial expressive of a desire that Dr. Hogg be permitted to remain in medical charge of the above hospital, the Director General, Army Medical Department, "begs to observe that, whilst noting with extreme satisfaction the general appreciation which Dr. Hogg has so well earned, he cannot but feel that that officer has been so exceptionally favoured in having been allowed to hold the appointment in question for a double staff term—namely, ten years—in October next, that a sense of fairness and justice to other officers precludes him from recommending his tenure thereof beyond the above period." Dr. Hogg has won such universal respect among the soldiers and their families, as much by his unvarying kindness as by his high professional skill, that the prospect of his connexion with the garrison having an end, even after a double term of office, will create profound regret in the garrison. We understand that his term will expire on September 30, and that, although every possible effort has been made by the officers' and ladies' committees to obtain any further extension of his appointment, there is no hope of success; his successor, however, has not yet been named.

"AN UNSATISFACTORY, UNCOURTEOUS, AND IMPERTINENT ANSWER."

Such is the definition by a Board of Guardians of a communication made by Mr. Pearse, Medical Officer, of Brierley-hill, Stourbridge, in answer to the complaint to the Board of a pauper named Thomas Pearson. We think Mr. Pearse's letter under the circumstances merits a very different epithet. Here it is:—

"*In re* Thomas Pearson.—1st. This man was suffering from ulcer of cornea. He was at my surgery on July 30, and I neither saw nor heard anything of him till August 5—six clear days—when the eye was so far recovered nothing more could be done except removing it. The whole time he was under my care, from July 13, he has been well able to attend at the surgery, and did so fourteen times. This is my answer as to neglect. 2nd. Then, as to my behaving harshly towards him, I will also answer this, but beg to be understood I do not by being a medical officer drop my individuality as a private person. I told him it was a disgrace for a man without any family, living in a house of his own, full—so far as the lower rooms—of very good furniture, and even nicknacks, should be a pauper on the parish, and that I should apply to have the vote cancelled. I also told him, when he was insolent, that he was a drunken, lazy fellow, and shut the door in his face, and will do the same to any person, be he whom he may, for the same reason. I hold the guardians are overstepping their duties in interfering with an officer except in cases of neglect of duty. The really poor I have no trouble with; but the class I term paupers are insolent beyond measure.

"I am, yours truly, Edward Sainthill Pearse."

After some remarks, it was resolved by the Board—"That this Board has received from Mr. Pearse, the Medical Officer, his reply to the complaint of the pauper Thomas Pearson, and consider the answer most unsatisfactory, uncourteous, and impertinent, and instruct our clerk to send a copy of this resolution and the letter to the Local Government Board."

CHOLERA ON THE CONTINENT.

Cholera in the northern parts of Europe seemed to die away gradually; no really alarming occurrence has taken place there. The Ministry at Copenhagen has put in force orders of precautions against vessels coming from Russian ports, where the plague is said to have regained its violence, but nothing serious has happened anywhere up to the present. The south-eastern provinces neighbouring the Russian frontiers, however, have experienced a grave revival of the epidemic. From Jassy (the chief township of Moldavia) and Skoleni, on August 23,

231 cases are reported officially to have occurred recently, of which 22 ended fatally. Exact data as to the time over which this new attack extends are wanting. It must be remarked, however, that cholera has been reigning in Jassy and its neighbourhood for some time, and that the death-rate of little over 10 per cent. must be considered as very favourable. In Czernowitz, capital of the Austro-Hungarian province Bukovina, serious events must have taken place as respects cholera. On the 24th inst. instructions from Vienna were received ordering the release of prisoners for minor offences as much as possible, and to lodge another quantity in barracks outside the town. Particulars have not yet been given According to the *Hamburger Nachrichten*, during the week ended the 18th inst., not less than 107 cases from choleraic diarrhœa were reported in that place.

A BOARD OF HEALTH IN GERMANY.

The Chancellor of the German Empire, states the *German Correspondent*, has proposed to the Federal Council to create a board of health for the empire, composed of ordinary and extraordinary members. The duties of the former, who must be resident in Berlin, would consist in aiding the Government to exercise a supervision over matters in the province of the medical and veterinary police, to take cognisance of all analogous institutions existing in the different Federal States, to prepare and submit legislative measures to the empire, to observe the practical working of laws enacted in the interest of public health, and in particular cases to report on them to the State and local authorities, to follow the progress of medical legislation in foreign countries, and to organise a satisfactory system of medical statistics for Germany. The extraordinary members would have to be selected from persons who do not reside in Berlin, and from the municipal officers of the larger German towns, professors of Medicine, Government medical officers or practical chemists, and architects. They would be required to express an opinion on certain questions when summoned to do so by the president, to watch everything likely to affect the public health in the neighbourhood of their respective residences, and to report on it to the president, and finally to take part in the general conferences to be held from time to time at Berlin. These proposals of the Chancellor will in the first place be laid before a committee for examination, and afterwards submitted to the Federal Council.

FROM ABROAD.—PROFESSOR LEIDESDORF ON PUERPERAL PSYCHOSES—SUICIDES IN FRANCE DURING 1860.

Professor Leidesdorf recently read a paper at the Vienna Medical Society, on "The Psychoses which occur during Pregnancy and the Puerperal State," of which the following is an abstract:—

"It is an admitted fact," he observes, "that pregnancy and the puerperal state have a many-sided and complicated causal connexion with psychical disturbances, and, for shortness, such disturbances may be termed puerperal psychoses. Owing to the circumstances under which they are observed, the relative frequency of their occurrence has been very differently stated; and after referring to the figures given by Reid, Esquirol, Marcé, etc., Dr. Leidesdorf states that among 200 women suffering from insanity he has found this arise from this cause in twenty, therefore in 10 per cent. In six of these the insanity occurred during pregnancy, and in fourteen during the puerperal state; this proportion agreeing with the observations of other physicians, that lying-in women furnish a much greater contingent than pregnant women.

"In four of these six pregnant women, a state of mental disease had prevailed before marriage, but they had been treated with success. Although they had married happily, during their pregnancy they became the subjects of saddening ideas, which, in the puerperal state, passed into complete melancholia with maniacal actions, terminating later in incurable dementia. In the fifth case, the mental disturbance first arose during pregnancy, and, augmenting during the puerperal state, terminated in recovery. In the sixth case, recovery took place immediately after delivery. This woman, 24 years old, had, at the fourth month of each of her three pregnancies, become the subject of melancholia, accompanied by horrible hallucinations. These continued until shortly before delivery, after which they soon disappeared. Esquirol mentions a similar case, in which mental disturbance occurred in five pregnancies. The first four cases plainly show that, in general, a preceding mental disturbance will not be favourably influenced by pregnancy, and that the advice often given for a woman exhibiting it to marry is very exceptionally justified. It should be discountenanced, even without taking into account the hereditary character of this disposition to insanity.

"The puerperal state produces mental disturbance much more frequently than pregnancy. Even during delivery, the passage of the child's head may give rise to a state of psychical excitement that, in some rare cases, passes even into mania transitoria; and a precisely similar condition is sometimes observed in non-pregnant women to result from the forcible dilatation of the cervix uteri. Among the psychical disturbances during delivery, eclampsia must be noted, which is also attended with loss of consciousness. For some days afterwards a kind of stupor remains, which sometimes, if rarely, passes into a condition of permanent mental disturbance."

Of the fourteen cases of puerperal psychoses observed by the author, the affection made its appearance eight times from the sixth to the tenth days, five times from the third to the eighth week, and once during the twelfth week. Between the tenth and twenty-first days no case occurred. Marcé has also observed that puerperal insanity either appears during the first ten days or during the fifth or sixth week—its outbreak on the tenth day being rare. Of these fourteen cases, five were primiparæ, a fact to be noted because it has been stated that the disease occurs seldomer in these. With respect to the form of insanity, eight of the cases were examples of melancholia,—in two with stupor,—five of mania, and one of dementia. The youngest patient was 20, and the oldest 29 years old. Hereditary predisposition existed in three of the cases. As to the results, in eight of the cases recovery took place—in five after four months, in two after six months, and in one after a year; four of the cases proved incurable; one is still under treatment; and one has died in a state of dementia, exhibiting after death atrophy of the brain and hydrocephalus.

These fourteen cases may be ranged into three groups:—1. Those in which a completely or incompletely cured insanity had existed prior to pregnancy. 2. Those in which the disease first showed itself during pregnancy in the form of melancholic temper undergoing exacerbation after delivery. 3. Those in which the psychosis first manifested itself after delivery, usually from the fifth to the tenth day. While the cases of the first two groups were connected with the changed conditions of the circulation which take place during pregnancy, and the shock to the nervous system and loss of blood occurring at delivery, those of the third group were due apparently to a more direct connexion with the puerperal process, occurring amidst the disturbances incident to the first week and in connexion with "blood intoxication." Two of the cases are related at length (*Wiener Med. Wochenschrift*, No. 26), to show their intimate connexion with a pyæmic or septicæmic condition of the blood, recovery from the insanity coinciding with the disappearance of the symptoms characteristic of this. Dr. Leidesdorf has found psychoses connected with anæmia pursue a more unfavourable course than those connected with blood-poisoning.

In treating these cases during pregnancy, expectation must be the rule. During the puerperal state the greatest quietude must be observed, all sources of mental irritation removed, and careful watching instituted. The child should be removed from the breast. When the violent psychical symptoms are preceded by, or accompanied with, attacks of shivering, quinine with opium—and when the pulse is very rapid, digitalis—should

be prescribed. Opium has by many alienists been prescribed to the extent of ten or even sixteen grains per diem; but the author, as a rule, never gives more than from two to three grains, or half a grain of morphia, for when these have not exerted a calming effect he has not found larger doses more successful. The obstinate sleeplessness, so often present, is best treated by tepid baths continued for half an hour three times a week, and by chloral. If the patient refuses medicines, morphia may be injected subcutaneously. If five or six baths have been employed without a calming effect, they should be discontinued; and as a general rule the violence of the symptoms should not induce a too heroic employment of remedies. The excitement may last for weeks or even months, and for this reason alone a cautious and expectative procedure is indicated. When *melancholia cum stupore* is present, accompanied at times with cataleptic attacks, stimulants and cold lotions should be applied to the skin, and when these are not of service, flying blisters should be resorted to. Anæmia is especially present in those forms of mental disturbance which occur during the period of lactation.

The French *Journal Officiel* has recently published the "Report of the Administration of Criminal Justice in France for the year 1860." The following are the passages that relate to suicides:—

"During 1870 there have been brought under the notice of the Administration 4157 completed suicides, 3371 (81 per cent.) occurring in men, and 786 (19 per cent.) in women. The ages of 10 individuals are unknown, 18 were less than 16 years old, 130 between 16 and 20, 1067 between 21 and 40, 1669 between 40 and 60, and 1243 were 60 and upwards. As to their civil status, 1447 were unmarried; 1380 married, with children; 599 married, without children; 464 widowed with, and 199 widowed without, children. There were 2630 inhabitants of rural districts to 1461 inhabitants of towns, the domicile of 66 being unknown. With respect to their occupations, 1848 belonged to agricultural, 933 to the various forms of industry, 119 were merchants or shopkeepers, 716 were of the liberal professions, 116 were servants, and 395 without avowed occupations. Of the 4157 suicides, 1384 took place during spring, 1129 in summer, 668 in autumn, and 976 in winter. As in former years, hanging and drowning have been the most frequent means of death resorted to. The presumed motives were misery and reverses in fortune in 383, family discords in 512, love, jealousy, debauchery, or other misconduct in 701, various forms of suffering in 930 (these being physical in 515), and cerebral disease in 1377. In 22 instances suicide was committed by the authors of capital crimes, and in 232 the probable motive could not be assigned."

ST. THOMAS'S HOSPITAL.

(*From a Correspondent.*)

At a meeting of the Court of Governors of St. Thomas's Hospital, on Thursday, the 22nd inst., the proposal to rate the Hospital on a net rental of £10,900 a year was discussed. Sir Francis Hicks explained that a rating of £3000 a year would be equivalent to abstracting £100,000 from the property of the Hospital. It was proposed to make an appeal to the House of Lords, and in order to meet the claim, for the present, five wards containing 140 beds had been closed.

It is certainly much to be regretted that, in consequence of the determination of the General Assessment Session, the Almoners should be compelled to place themselves in the invidious position of refusing admission to a large number of patients whose ailments are too severe for out-patient relief. It was stated that £13,000 was the estimated gross rental of the building. The Hospital is also burdened, it appears, by a sum equal to about £6000 a year to pay off the interest and principal of £100,000 borrowed for completing the new building at Stangate, upon which upwards of half a million of money is said to have been spent. Hence the temporary embarrassment of the exchequer. The prominent central position of the Hospital, immediately opposite the elaborately decorated Houses of Parliament, necessitated a large outlay upon the carved stonework and river frontage. It has been said that, admitting the necessity for architectural display on the Albert Embankment, the governors should for this very reason have hesitated to accept the offer of the Board of Works. We must remember, however, that for ten years the Hospital was located at the Surrey Gardens, in consequence of the great difficulty there was in meeting with large enough space in a good locality. It was even seriously contemplated to transport the Hospital ten miles out of town. Had that arrangement been made, the Poor-law Guardians of Lambeth would have had to go elsewhere for the £3000 they are now exacting from the Hospital, as well as twice £3000 now saved them in Poor-law relief by the administration of relief, medical advice, and treatment at St. Thomas's Hospital. Notwithstanding such a large reduction in the number of beds, the Hospital will be none the less efficient.

It is a mistake to suppose that a hospital which boasts of a large number of beds is best adapted for clinical teaching. From the statistical reports published while the Hospital was located at Newington, it would appear that the Surgeons could boast of as many and as important operations as the larger hospitals. The student is better able to study and profit by a few well-selected cases than a large number of chronic cases which might be treated as out-patients.

These reductions have been most severely felt on the surgical side, for there is to be no limit to the admission of accident cases, and these have averaged thirteen a week, or more than double the number at the Surrey Gardens; so that the number of beds available for operation cases will be somewhat limited.

Notwithstanding the large number of serious operation cases in the Hospital at the present time, and the fact that for four or five weeks during the hottest part of the summer the occupied wards have been constantly full, in consequence of reductions elsewhere, the Hospital continues in a healthy state. This speaks well for the sanitary condition of the wards and the system of ventilation, and is a signal proof, also, of the advantages of a well-trained staff of nurses, who have it in their power, by regular attention to their duties, to secure for a hospital almost complete immunity from erysipelas. The writer has had some opportunity of estimating the advantage of care and cleanliness in the wards of the hospital with which he is connected. One ward was under the charge of two or three rather old women, and the other wards were nursed by a sisterhood. The circumstances of the patients, the ventilation, and the cubic space were the same; erysipelas was almost unknown in all but the one ward above alluded to. The natural inference was that stale dressings and pent-up discharges are almost the sole cause of hospital fever in a properly ventilated building.

To satisfy ourselves as to the advantages of the new building for clinical teaching, we have visited the Hospital since the reductions have been effected. We selected two operation days in August. If we may judge by the number and importance of the operations performed at a season of the year when even hospitals are in a quiescent state, there can be no doubt as to the advantage of excluding as far as possible such cases as might be treated almost as well in the out-patient department. The student is not embarrassed by the multiplicity of cases, and, by devoting his attention to one or two patients at the time, is the better able to make himself acquainted with the details of progress and treatment.

On August 14 Mr. Mason excised the hip-joint of a lad about 15 years old for caries of the head of the femur. Instead of turning out the head of the thigh-bone previous to sawing through the neck, Mr. Mason preferred to disengage the head, and then to disarticulate. The limb was fixed to a long outside splint, bracketed opposite the wound. Mr. Mason next opened up some sinuses about the hip-joint of another patient, and removed a sequestrum about the size of half a walnut. Mr. Mason then operated for stone on a little boy about 5 years

old. The usual lateral operation was performed, and a calculus, about the size of a large bean, removed with a scoop. Mr. Mason's last operation was for the removal of a sequestrum from the tibia of a young man about 28 years of age. A herniotomy was then performed by Mr. Churchill, Acting Resident Assistant-Surgeon.

On August 21 Mr. Sydney Jones amputated the thigh of a lad, about 18 years of age, who had been suffering for many months from deep-seated abscesses in the thigh, ultimately invading the knee-joint. The severe drain upon his system had caused him to lose flesh, and he was somewhat emaciated; but for a week previous to the operation he had been gaining strength. Mr. Jones thought this a favourable time for removing the useless limb. A circular amputation was performed about the centre of the thigh; the vessels were controlled by digital pressure, and scarcely any blood lost previous to the closing by torsion of the main arteries. As soon, however, as the pressure was relaxed, copious general oozing from small vessels occurred. A few more vessels were secured, and iced water applied. The wound was closed with wire sutures.

Mr. McCormac also amputated a thigh for extensive disease of the knee-joint and much prostration. The circular method was also adopted in this case. The cartilages covering the femur, tibia, and patella had been almost entirely destroyed by ulceration, and there were large pouting sinuses all about the knee-joint.

Mr. McCormac next excised the astragalus. The head of the bone had been bruised and partly crushed by a fall from a height; the bone was displaced forwards, causing considerable inversion of the foot. The integument over it had ulcerated and exposed the head of the bone surrounded by granulations from the surrounding integument. There was some little difficulty in disarticulating the bone. The limb was laid on a Liston's splint; and, with a view of correcting the inversion of the foot, a U-shaped piece of sheet-lead was passed round the arch of the foot to support the malleoli.

Mr. McCormac next excised the knee-joint of a little girl about 8 years of age. The cartilages of femur and patella much destroyed by ulceration were removed. As little as possible of the bone was removed, so as to preserve the epiphyses. Limb put up on a modified Liston's splint—*i.e.*, with the addition of an extra piece of iron on the outside, prolonged to the axilla so as to keep up extension, with a perineal band. A Magdalen patient was then brought into the theatre, and some large warts removed from the vulva, anus, etc. The two largest bounding the orifice of the vagina were as large as hens' eggs. Numerous small vascular warts about the anus. Perchloride of iron was then freely sponged over the surface.

Mr. Mason also excised two hip-joints—one a male and the other a female; both young.

There were several very interesting cases in the wards; among them were some emergent cases operated upon during the interval of our visits, including two perineal sections.

PROFESSOR HOLMES'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

In the fifth lecture Professor Holmes had stated the case, as Mr. Syme had put it, in favour of the old operation as compared with that of Hunter. In this his last lecture, after recapitulating Mr. Syme's main reasons for preferring the method of laying open the sac, and the weighty considerations which Mr. H. Lee urges against Mr. Syme's theory, the lecturer passed to the consideration of the question whether it is true, as Mr. Syme says, that in every aneurism there is only a limited portion of the vessel contained within the cavity of the sac or embraced by its walls. Mr. Syme passed lightly over the great difference which indubitably exists between aneurisms of the limbs, which are usually to some extent the result of violence, and those of the trunk, which are commonly the result of visible degeneration. Most pathologists, however, agree that in abdominal, thoracic, and iliac aneurisms we more commonly find the artery in the immediate neighbourhood of the aneurismal orifice diseased than we do in those of the axillary, popliteal, and other arteries of the limbs. Having examined most of the pathological collections in London, the Professor could quite confirm Mr. Lee's opinion, that the majority of the preparations contained in them do not correspond with Mr. Syme's description. Several specimens of aneurisms of the common, the external, and the internal iliac arteries were produced, showing that the cases of iliac aneurisms which surgeons are usually called upon to treat are not sacculated, but tubular dilatations, embracing more or less of the whole calibre of the vessel, and in which the upper and lower openings of the artery are divided from each other by the whole length of the sac. Further, it will be evident to anyone who will examine a few preparations of abdominal aneurisms that the coats of the artery are often, though by no means always, diseased around the aneurismal opening.

On the whole, it seems that the old operation is impracticable unless the aorta can be controlled by pressure; but this appears the most decisive argument against the operation in cases of iliac aneurism, such as those of Sir A. Cooper and Mr. Syme, and it would seem that until we find surgeons more enterprising and dexterous than Astley Cooper and Syme, we must allow that only those aneurisms are amenable to cure by the old operation which are within the reach of the method of compression.

Again, the old operation can hardly be put in force in any aneurism above the bifurcation of the aorta; and we cannot easily believe in the probability of its being successfully applied even to the common iliac, for the cases in which the common iliac is aneurismal are usually instances of tubular aneurisms in which the disease extends up to the aorta, and in which an attempt to open the sac would lead to disaster.

The evidence adduced justifies, Mr. Holmes thinks, the following conclusions:—

1. That the relations between the artery and the sac, which Mr. Syme considered universal, are not so. That there are some cases in which the aneurism is tubular, and the two openings are separated by an unknown distance; and others in which the aneurism is sacculated, and in which the portion of the aneurism embedded in the sac is so extensive, and the sac so thick, that it would be very difficult to tie the artery.

2. That it must always be doubtful whether, in spontaneous, and especially abdominal aneurisms, the portion of the artery tied will bear the ligature.

3. That in aneurisms which grow rapidly in large cellular spaces, such as the abdomen, the risk that must be run in finding the artery is unjustifiable unless the aorta is secured by compression.

4. And that on this account the old operation can hardly be applied, except to aneurisms which, as a rule, will be amenable to compression.

Allowing that iliac aneurism is amenable to all three methods—Hunter's, the old operation, and compression applied to the aorta or common iliac—there is no denying that the number of cures by the latter bears a very large proportion to the number of cases treated, while the cures by the Hunterian method are very rare, and the other method is almost untried. In those cases of iliac aneurism, however, in which pressure has failed, Mr. Syme's suggestion ought to be further tried, on account of the great fatality of ligature of the common iliac, and the uniform fatality after ligature of the aorta; and this notwithstanding the risks which attend the performance of the operation—viz., the probability of secondary hæmorrhage, and the extensive injury which must be inflicted upon parts in the immediate neighbourhood of important organs. If we grant that the artery where it is involved in the sac is healthy enough to bear the ligature, many advantages exist in the old operation over that of Hunter—*e.g.*, the clots removed and the sac laid open—consequently, that softening of clot and inflammation of a closed sac lying in proximity to the peritoneum, which is so surely fatal, is obviated. The ligature will be placed probably on the external instead of the common iliac, and thus the chances of gangrene will be greatly diminished; thirdly, the artery will be tied at a point where the peritoneum and viscera have been pushed away from it by the sac, so that there is less risk of hurtful interference with these latter in the operation. Against these advantages must, however, be set the risk of secondary hæmorrhage.

There can be but little doubt that the general reasoning on which Mr. Syme founded his proposal is incorrect. Mr. Syme was not successful in demonstrating generally the superiority of the old operation over that of Hunter. Yet this is the conclusion to which his reasoning led inevitably. Mr. Syme made popliteal aneurism an exception to his condemnation of the Hunterian operation; but in the abdomen, the axilla, the buttock, at the root of the neck, and in the bend of the elbow, the old operation was, according to him, preferable.

In adopting so grave a conclusion, no ambiguity ought to have crept into the premises on which it was founded. This was not the case with Mr. Syme's reasoning. If he deliberately meant (as he said) that in every aneurism the relations existed which he described, he was egregiously wrong. If, on the other hand, he only meant that such relations are common, but not universal, the whole force of his argument is destroyed, and the surgeon is left in doubt in every instance whether he is commencing an operation which will be easy, difficult, or impossible.

But while altogether protesting against Mr. Syme's theory, and maintaining that the old doctrine on which the superiority of Hunter's operation is based is quite true in general, Professor Holmes would have no objection in the particular instance of iliac aneurism to follow Mr. Syme's practice, only the less dangerous expedient of rapid compression or gradual compression of the trunk artery should first be tried. Rapid compression under chloroform has given gratifying success in iliac aneurisms as well as in aortic aneurisms. It used to be pretty universally considered necessary for the cure of aneurism that there should be a gradual deposition of fibrine in successive laminæ in the sac. This was termed by Broca "active clot," and for it a certain amount of circulation ought to be maintained through the tumour. This doctrine is opposed by such instances of complete consolidation of an aneurism after only a short application of pressure as the cases of Dr. Murray, Dr. Heath (of Newcastle), Mr. Holden, and Mr. Bryant; and we must allow, in opposition to Broca's doctrine, that aneurisms may be cured by the rapid coagulation of the whole mass of the blood. From this admission some authors have rushed to the conclusion that such coagulation *en masse* is more sure to cure the patient than the slower process. This, however, is by no means self-evident, and present experience has been insufficient to afford a fair comparison.

Each form of aneurism, however, must be treated with a due regard to its own circumstances. In abdominal aneurism many persons can tolerate gradually increasing but partial compression; but many are quite unable to bear the prolonged anæsthesia requisite for complete compression, and no one can be exposed to protracted and deep pressure on the aorta without great risk. If the pressure be applied high up, as it must be in order to act upon the aorta, the pancreas, end of the stomach, the duodenum, the root of the superior mesenteric vessels, and all the great sympathetic plexuses in that region are exposed to pressure, and possibly the liver may be bruised. Even in pressure applied lower down the small intestines and mesentery are exposed to risk and injury, from which fatal peritonitis may result, as in Mr. Bryant's case.

In many cases the profound impression made on the whole circulatory system is shown by the immediate effect on the radial pulse when the aortic tourniquet is screwed down. In a case of amputation at the hip-joint recently under the Professor's own care, pressure on the aorta appeared to be the chief cause of a state of syncope, from which the patient was rescued with very great difficulty.

The anatomical lesions which existed in three cases referred to, in which deep and prolonged compression upon the abdominal aorta had been employed, were briefly these—In Sir J. Paget's patient the superior mesenteric artery was bruised and flattened for about an inch. Its inner coat looked inflamed, and it contained firmly adherent coagula, though it was not entirely obstructed. In Mr. Bryant's case the small intestine and its mesentery and the mesocolon were bruised, and enteritis and peritonitis ensued. In Mr. Durham's fatal case there was no visceral lesion, but there was slight extravasation in the post-peritoneal areolar tissue. This fact that death has occurred three times lately in the practice of London hospital surgeons from prolonged attempts to compress the aorta, is sufficient to show that the operation, most justifiable and most useful as it certainly is, is not one to be lightly undertaken, or to be confided to the hands of any but an experienced surgeon narrowly watching every symptom.

The great dangers which accompany the compression of the upper portion of the abdominal aorta may justifiably be incurred for an adequate motive, but it is useless to deny their reality, or to expect that any dexterity in management of apparatus or any care in watching symptoms will make that safe which in its own nature is so very hazardous. It seems, therefore, important to try whether many of these cases might not be cured by gradual and partial pressure applied on the principle which the Dublin surgeons showed to be so successful in popliteal aneurisms.

The rapid coagulation of the blood of an aneurismal tumour cannot be regarded as in itself the means of cure, but only as the commencement of a process which, if not interrupted, may result in cure. Thus, in Dr. Murray's case the aneurism was not cured at the conclusion of the pressure, but the pulsation was diminished, and "hopes were entertained that some advantage had been gained." So in Mr. Durham's and Mr. Holden's cases. Many other cases, too, show that in all probability the effect of rapid coagulation is commonly to fill the sac more or less completely with a mass of soft clot which afterwards becomes laminated under the effect of the blood-current through the tumour. On the other hand, there are instances in which pulsation has disappeared rapidly and entirely. It is just possible that in some of these latter cases the cure has arisen from distal impaction of clot.

Finally, the question of combining distal and proximal pressure was considered. It was stated that the suggestion rests on the authority of Dr. O'Ferrall, and that the plan has been employed successfully by Dr. Mapother and others. The object is to obviate the rapid collapse of the tumour, which sometimes ensues on the compression of the artery above. Distal pressure is not, however, we know, a necessary adjunct to proximal, and present experience does not warrant our attaching much importance to it.

Although it seemed necessary to insist strongly on the dangers of pressure applied to the abdominal aorta, because they are as yet hardly fully realised, such caution should not dissuade from its use in proper cases; for of all the methods of treatment which have been reviewed in this course of lectures it is the only one which has been undoubtedly and brilliantly successful, and which marks a definite advance over the surgical attainments of our predecessors.

In conclusion, Mr. Holmes stated that he should seek from the Council of the College the honour of re-election to the Professorship of Pathology and Surgery, and hoped thereby to have an opportunity of taking up the surgical treatment of the main forms of external aneurisms, and of thus reviewing the progress of Surgery in a province where its success has been great and indubitable.

REPORT ON THE

TEACHING OF PRACTICAL PHYSIOLOGY IN THE LONDON SCHOOLS.—IV.

7. The Middlesex Hospital.

The Lecturer on Physiology at the Middlesex Hospital—Mr. Lowne—is also the teacher of the subject practically, and the two courses are accordingly so arranged that the first is illustrated and completed by the second. For this purpose the theoretical course is given in winter, and during the following summer the more purely demonstrative and experimental work, as well as instruction to the students in the use of instruments.

The winter lectures, which include ten on histology, are also made as useful and practical as possible by means of microscopic demonstrations, etc. Several extra lectures, moreover, on practical physiology are given at intervals during the winter to complete if necessary the preceding summer ones.

The strictly practical, or summer course, commences with histology. The class—of some twelve students this year—assembles three times a week for an hour at a time, in the practical chemistry laboratory, which is arranged for the purpose, and where the light is suitable for microscopic work. The microscopes with which the men are furnished are English and good, but apparently not sufficient in number to provide the students with an instrument each. After five weeks have been spent over the simple tissues, portions of liver, kidney, lung, etc., are supplied to the students, who cut, colour, and mount sections, although not for permanent

preservation. At short intervals, also, after the completion of their practical histological course, the students are taken over a number of permanently mounted specimens to test and improve their powers of recognition.

Following immediately on the lessons on histology are four demonstrative lectures on the schema of the circulation (Richardson's); the use of the sphygmograph is at the same time explained by its application in the schema, and the effect on the pulse-tracings demonstrated of any alteration in the condition of its various parts. Each pupil is moreover individually trained to adjust the sphygmograph, and to analyse the various parts of the tracings, and the cardiographic and respiratory tracings are duly studied. Besides these, various other demonstrations are given—for example, on the mechanism of vision by means of an arrangement of lenses, etc.—as well as on myopia, presbyopia, etc., and the correction of these by spectacles.

Under the present arrangements no experiments on animals of any importance have yet been undertaken.

Physiological chemistry has not been separately taught by the lecturer on physiology, but it is intended, we believe, to introduce experiments on artificial digestion into next summer's course.

8. Guy's Hospital.

The knowledge of physiology which the students of Guy's Hospital have an opportunity of acquiring is of an eminently practical character.

In the first place, lectures are delivered by Dr. Pavy three times a week during the winter session on "Physiology and General Anatomy." These are abundantly demonstrative, numerous experiments being performed on animals to illustrate and explain the various functions—especially those of the stomach and liver. These experiments are prepared in the physiological laboratory, which comprises Dr. Pavy's private room, a small working room, and a small stable for animals.

Individual instruction is given to the students in practical histology also during the winter session, in two successive and similar courses of three months, each attended by half the class—that is, by about thirty-five students. The class assembles three times a week for one and a half to two hours, and is under the direction of Dr. Pye-Smith, assisted by two senior students. At the first two meetings of the week the regular course of histology is pursued; on the third day an extra hour is devoted to permanent mounting, the Assistant-Demonstrators instructing the students in the arts of cutting sections, colouring, and so on.

The room in which histology is taught is large and commodious, fully furnished with tables, etc., and especially with numerous handy lockers where the various instruments, preparations, and reagents may be deposited. It is lighted partly from the roof and partly by end windows.

At the commencement of the course the student is first taught to recognise the numerous extraneous substances which are met with in microscopy; his attention is then directed for a short time to the simple vegetable tissues, especially the cell; afterwards he passes on to animal histology proper, and studies the tissues and organs in the usual order. His microscope he is required to provide for himself, with two objectives of a quarter of an inch and one inch.

During the summer physiological chemistry has hitherto been taught by Dr. Debus; it will probably, however, be undertaken in future by Dr. Pye-Smith. The class meets for two hours three times a week in the practical chemistry laboratory. The chief animal constituents are first lectured upon in succession, and then investigated analytically, special attention being paid to urine, bile, blood, and milk.

POOR-RELIEF IN SAXONY.

No. II.

Those who regard efficient medical relief as one of the most promising modes of diminishing pauperism will by no means find their views confirmed by the account of this branch, as given in Mr. Doyle's report on Elberfeld. There but little importance appears to be attached either to the doctoring of the paupers or the pecuniary claims of those who doctor them; and whatever other portion of the Elberfeld scheme of poor-relief it may seem desirable to transplant to English soil, this can hardly be recommended, opposed as it is to the views of advanced philanthropists. Mr. Doyle says:—

"The system of medical relief for out-door poor is this: The town is divided into five districts, each district being in charge of a Medical Officer and of a subordinate of a lower status, termed a *Heil-diener*,—the equivalent, I suppose, of the extinct barber-surgeon—whose functions are only occasional, and confined to the performance of the simplest operations. The Medical Officer is bound to attend every pauper who applies to him for medical aid with an order from the *Armenpfleger*. This order is essentially the same as our own order for medical relief. The Medical Officer writes a prescription in every case, which is taken to the apothecary who for the current year has the contract to dispense medicine. In the course of the year 1869 the Medical Officers wrote for the whole town 2882 prescriptions, which are produced as vouchers for payment, and attended as Medical Officers fifty-one cases of midwifery. The salary of three of the Medical Officers is 250 thalers, or £37 10s., per annum; of the other two, 200 thalers, or £30. The five *Heil-diener* receive 12 thalers, or £1 16s., per annum each. The cost of medicines for the year was 1400 thalers, or £210. The whole cost of out-door medical relief for the year 1869, therefore, was—

"Salaries . . .	1210 thalers, or	£181
Medicine . . .	1410 „	„	210
Total . . .	2610 „	„	£391"

If the salaries of Medical Officers bear to the salaries of private practitioners in Elberfeld anything like the proportion which the same items bear to one another in England, the former certainly does not strike us as a place offering a very desirable opening for medical talent.

As regards in-door relief, it is difficult to form a comparison with the English system, since, as understood in England—that is, as a test of destitution—it forms no part of the Elberfeld system. The *Armen-haus*, or poor-house—which is more of an almshouse than a workhouse—contains about 180 inmates; and, though its arrangements do not appear to contrast very favourably with those of "an average English workhouse," the inmates were found seemingly comfortable and contented. They live very much as people of their class live in their own homes, but little attention being paid to floor space or cubic space, and still less to ventilation. The inmates are sufficiently well-clad, the dietary good, and more freedom is enjoyed than in an English workhouse. To quote from the Report—"In short, an old Elberfeld pauper smoking his eternal pipe in the *Aufenthaltszimmer*, or 'day-room,' of the *Armen-haus* may well feel that he has got a comfortable asylum for the close of his days." Barring the want of space and the absence of ventilation, this appears to be just what should be felt by a respectable old man or woman at the end of a life well spent, but not fortunate. But then, whilst taking care to provide such an asylum as shall make the aged poor thus feel, we should be at infinite pains to winnow the applicants for admittance, lest we offer a premium to improvidence and vice.

Some of the sick, both in-door and out-door, are sent to the *Kranken-haus*, or general hospital of the town, where they are paid for at the rate of 10½d. per day. Out of 1611 patients of all classes admitted in 1869, 456 were paupers.

All orphan or deserted children who become dependent are sent to the *Waisen-haus*, or orphanage. The total number so sent is large in proportion to the pauperism, and the deserted large in proportion to the number of orphans; but it does not appear to be considered that the care bestowed upon the children affords any inducement to desertion. With regard to the management, the Inspector says:—

"It may be admitted that the arrangements and management of the Elberfeld orphanage are inferior to those of our own district schools; but, on the other hand, it may be said of it, in the first place, that the cost of maintenance is only 70 thalers, or £10 10s., instead of from £18 to £20 per annum; and, secondly, that the children who are brought up in it turn out creditably as factory hands, shoemakers, tailors, domestic servants, etc. The work proposed may not be very ambitious, but it seems to be thoroughly done. Indeed, the character of the people is in some sort reflected in this and similar institutions—plain and unpretending—and, if somewhat rough,

eminently practical, even in their teaching of singing—for not otherwise than 'practical' I suppose might be considered the zealous efforts it must have cost to teach the large class of infants to chant with so much spirit as they did upon the occasion of our visit the now national hymn of the 'Wacht am Rhein.'"

It was assumed by the framers, and is accepted by the administrators of the English Poor-law that the workhouse affords the only real test of destitution. As that test forms no part of the Elberfeld system, what is the substitute? In the first place, the applicant for relief is subjected to an examination so close and searching, so absolutely inquisitorial, that no man who could possibly escape would submit to it. He is not, as here, one of several hundreds, each of whom can tell his own story to an overworked relieving officer, but one of a very few, never exceeding four—frequently the single applicant—bound by law to answer every one of that long string of questions that his interrogator is bound by law to put to him. One of the peculiar merits claimed, and doubtless rightly claimed, for the system is that, before a man can obtain relief, it must be shown that he cannot exist without it.

In addition, the officer is bound to ascertain, so far as he can, the causes of the pauperism of the applicant, and the inquiries made are not merely superficial, but amount to a strict investigation of the man's life and present position. Again, when the case is satisfactorily proved to be one in which the applicant is entitled to relief, he gets it to such an amount only as will furnish the bare necessaries of existence for himself and his family; it is given to him from week to week in money or in kind, as may be thought most advisable. If articles of furniture or clothing are given the visitor must satisfy himself from time to time that they are not pawned or sold. Subsequently, the applicant having established his claim, and being allowed weekly relief, is constantly "looked up" by the visitor; every change, however minute, in his own condition or in that of his family is noted and reported. The pauper is, in fact, kept under constant surveillance; he is urged to find work, and if he cannot find it, labour is provided for him. It rarely happens, however, that the town is compelled to find work for individual cases; the conditions of relief are found to be sufficiently stringent to induce a man, if he can work, and if work is to be found, to find it for himself, if not in Elberfeld, then elsewhere.

In the event of any large number of persons being out of work and requiring relief, some public work—generally the making or improving of a road—is at once undertaken. The success which attended a similar arrangement in our own manufacturing districts during the cotton famine warrants the adoption of this portion of the system; and, while so much is needed in the way of sanitary improvement, there can be no difficulty in finding suitable public works.

REVIEWS.

The Science and Practice of Medicine. By William Aitken, M.D. Edin., Professor of Pathology in the Army Medical School. Sixth edition, in two volumes. London: Charles Griffin and Co. 1872.

That Dr. Aitken has completely succeeded in his desire to render his text-book a "representative book" of the Medical science and practice of the day is fully confirmed by the fact of the work having within fourteen years passed into the sixth edition. The former editions have each in their turn attained such a high position in the estimation of both students and practitioners, that an author of less extensively recognised position as a painstaking and conscientious teacher than Dr. Aitken enjoys might have contented himself with a simple reprint. The present edition, however, represents the result of eighteen months' careful labour on the part of Dr. Aitken in revising the whole of the fifth edition, the plan of which has been remodelled, so as to embrace a consideration of the topics in the order of the classification of the College of Physicians, whose nomenclature had already been adopted in the fifth edition. Dr. Aitken is so fully impressed with the necessity for uniformity in this respect that he not only on his own part adheres strictly to this authoritative nomenclature, but utters the suggestion that it would be advisable that, as an example to others, the Fellows of the London College of Physicians should in their published writings individually adhere steadily to the nomenclature adopted by their College and accepted as authoritative by the various public departments under Government and most of the large hospitals.

Additions and amendments may be observed in almost every chapter, and the practical value of many—as, for instance, that on the use of the clinical thermometer—has been thereby considerably increased. The size of the book, however, has not on the whole been increased, the type being smaller, but still very clear and distinct. To the peripatetic practitioners of our art in the public services the axiom that "a great book is a great evil" applies with peculiar force, but we can assure all who for this reason may have hitherto refrained from adding Dr. Aitken's book to their necessarily limited libraries, that the more distant the region to which they may be consigned by the exigencies of service, the more will they recognise the value and extent of the information placed at their disposal by Dr. Aitken.

Harris's Principles and Practice of Dentistry. Tenth edition. Revised and edited by Philip H. Austen, M.D. Trübner. 1871.

In the present edition of this favourite American text-book of dental surgery, the various sections of the book have been for the first time entrusted to different editors—a subdivision of labour rendered almost a necessity by the very comprehensive scope of the work, which enters at length into the structure and development of the teeth, the anatomy and surgery of the mouth and jaws, mechanical dentistry, and other matters besides dental surgery properly so called. Much valuable new matter has been added to the book; for example, there is a clear and comprehensive account of the mechanical appliances for the treatment of cleft palate, together with a concise exposition of the surgical operations resorted to in such cases; and the section relating to dental surgery proper has been carefully brought up to the present state of our knowledge. But the same measure of commendation cannot be awarded to the account of the development of the teeth—for, although our conceptions of the early development and homologies of the tooth-germs have been so materially changed by the researches of Marcusen, Kölliker, and Emil Dursy, no allusion whatever is made to the conclusions of these observers; but the notions of Arnold and Goodsir, now in many respects obsolete, are set forth without comment as embodying the present state of knowledge. Moreover, the account given of the tooth-pulp itself is both inaccurate and inadequate; the important observations of Boll on the distribution of its nerves are not even alluded to, and two illustrations from a work published when microscopy was in its infancy are retained unaltered. Such omissions are the less excusable as the observations of all these German observers have appeared in an English form: the first are embodied in the last edition of Quain and Sharpey's "Anatomy," and Boll's paper was translated some years since in an American dental journal; moreover, such blemishes as these should certainly not be found in a book which lays claim to the position of being the universally recognised text-book on the subject.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, August 27.

Death of Dr. Vigla and of Dr. Louis—Professor Sée on the Bromide and Iodide of Potassium—Dr. Quinquaud on Infectious Puerperism—The Palais d'Industrie.

Two Medical celebrities departed this life during the last week. One, Dr. Eugène Napoléon Vigla, was up to the day of his death Physician to the Hôtel-Dieu. He was born on October 16, 1813, was appointed Chef de Clinique at the Hôpital la Charité in 1841, and in 1847 became *agrégé* by *concours*. Dr. Vigla had not much distinguished himself as an author, owing perhaps to want of time, as he had a very large *clientèle*; but he contributed a good deal to the medical periodicals of the day. He had for a long time suffered from disease of the heart, which carried him off almost in the prime of life. He was followed to the grave by a large concourse of friends and admirers; but out of respect for his expressed desire no funeral oration was pronounced over his tomb. Dr. Barth, however, as President of the Academy of Medicine, of which Dr. Vigla was a distinguished member, read before that learned body the

discourse he had intended for the occasion, and which will be found *in extenso* in the Paris medical journals.

The other subject of our obituary notice is Dr. P. C. A. Louis, son of Dr. Antoine Louis, a distinguished physician who died at the end of the last century. He received his degree of Doctor of Medicine in 1818, and, although he had not aspired to a professorial chair, he was well known as a medical teacher of no ordinary ability. He was for a long time Physician to the Hôtel-Dieu, and was a great friend of Chomel's, with whom he represented the same principles. M. Louis is the author of several medical works, and was considered one of the greatest authorities of the day, and it is to him we are indebted for the elucidation of the pathology of typhoid fever. He was the first to prove that the putrid, bilious, mucous, nervous, and inflammatory fevers of the older authors were only various forms of one and the same disease, exhibiting, as a characteristic anatomical lesion, the alteration of Peyer's patches. His labours on phthisis, emphysema, etc., are too well known to be insisted on. Louis, however, is more generally known in France as the author of the "numerical method" (*méthode numérique*), and as the founder of the Société Médicale d'Observation. He evidently attached too much importance to this new method, which, however, exerted a most powerful influence upon the minds of men in his day, and may be described as a sort of medical positivism.

The pupils of Louis, many of them eminent men, are widely scattered over Europe and America. During the last twenty years of his life Louis had almost entirely retired from public life. The death of an only son, a promising youth, struck the father a blow from which he never recovered. He was, however, an attentive follower of the debates of the Academy of Medicine, of which he was one of the oldest members, and over whose decision he exerted great influence down to his dying day. After a short but painful illness Louis breathed his last on Friday, the 23rd inst., in the 86th year of his age. His funeral, which took place on the following day, was numerously attended, and a most touching discourse was pronounced over his grave by M. Barth, in the name of, and as President of, the Academy of Medicine.

There is little going on just now in the medical world of Paris: the clinical lectures are over, and the School of Medicine will be closed in a day or two. Doctors and patients (only those, however, who can afford it) are alike leaving the capital—some for the watering-places and sea-boards, others for mountain-tops and country air; but all in search of health and relaxation from work, so necessary for the well-being of civilised man. The dons of the Profession are also leaving, and those holding clinical professorships are generally replaced by *agrégés*, some of whom deliver a series of lectures during the vacation, of which I shall keep your readers *au courant*.

Professor Sée, in concluding his lectures for the session, thanked the students for their zeal and attention, and said he saw in this the determination of raising France to its normal position, and that if his countrymen could not beat their enemy with the sword, they will show them that they are ever their masters in the more peaceful pursuits of the arts and sciences. In one of his last lectures M. Sée expatiated upon the medicinal properties of the bromide of potassium, a drug so much in vogue and yet so little understood. He said it was often prescribed in a most reckless manner, and administered with substances not only chemically incompatible with it, but whose therapeutic action is diametrically opposed to it. For instance, it is frequently ordered with, or as a substitute for, the iodide of potassium, and *vice versâ*, and there is a prescription in Bouchardat's "Formulaire" which bears the name of a celebrated physician, containing these two salts in combination with the chloride of sodium and butter, which was to be eaten with bread as a substitute for cod-liver oil. The bromide of potassium acts specially as a sedative on the vascular and nervous systems, whereas the iodide is purely an alterative operating on the general processes of nutrition and elimination. The bromide of potassium is essentially a vascular remedy. It is probable that through the nerves it acts on the muscular coats of the vessels, causing permanent contraction of the latter and consequent anæmia of the organs, a condition opposed to that produced by belladonna. It acts indirectly as a sedative on the heart, which it may stop, but only when given in enormous doses. As a soporific or narcotic it is preferable to opium, particularly in children, as it does not produce headache or the other inconveniences of the latter. Its double action, as vascular and as a nervous hyposthenisant, renders it a most invaluable agent in all cases of neurosis accompanied with congestion of the nervous centres, and hence its great utility in epilepsy, hysteria, chorea, etc.; it has also been found useful in the localised forms of neurosis, such as dysphagia, asthma, hooping-cough, etc. But to be useful in these cases, particularly in epilepsy, it must be administered in large doses, not less than five grammes a day for an adult, and two grammes for a child of 4 in this latter affection. When given in smaller doses it is not only a waste of time, but it increases the epilepsy; and in order to keep the disease in check he recommends it to be taken continuously, and largely diluted, so as to prevent any irritating effect on the stomach, and to promote its elimination by the kidneys. It is a dangerous remedy in coughs, but most useful in asthma, which it relieves, not by increasing the bronchial secretions, but by relieving the respiration. The bromide of potassium cannot be replaced by the other salts of potash, nor yet by the iodide of sodium, which has lately been recommended as a substitute for it.

"Essai sur le Puerpérisme Infectieux chez la Femme et chez le Nouveau-Né," is the title of an excellent thesis by Dr. Eugène Quinquaud, who has just obtained his doctorate. It is one of the most voluminous theses that have been submitted to the Faculty of Medicine of Paris. It consists of 278 pages in quarto, and the author divides his subject as follows:—(1) Etat physiologique de la nouvelle accouchée; (2) De la fièvre traumatique puerpérale; (3) Puerpérisme infectieux—ses formes; (4) Etat physiologique du nouveau-né; (5) Puerpérisme infectieux; and concludes with an elaborate bibliographical index. Dr. Quinquaud adopts the term "puerpérisme" in contradistinction to the word "puerperal," which he says ought to apply only to the physiological condition of the lying-in woman, including parturition and the normal flow of the lochia; whereas the term "puerpérisme" applies to an abnormal or pathological state, whatsoever its seat or manifestation. In other words, the author comprehends under the term "puerpérisme infectieux" all the diseases to which a parturient woman is subject, and on the grounds above mentioned objects to the term "puerperal fever" as employed by obstetricians to express this condition. Our author, however, is apparently in contradiction with himself, as the second chapter of his work, p. 24, is headed "De la fièvre puerpérale traumatique," by which he implies a simple febrile condition which follows parturition uncomplicated with any of the diseases which characterise the morbid condition termed puerperal fever, or "puerpérisme infectieux." He compares this traumatic fever to that which occurs after amputations and other traumatic lesions, the nature of the fever being identical in all these cases. I would therefore take the liberty of suggesting that the term "puerpérisme simple" be substituted for "la fièvre puerpérale traumatique," and "puerpérisme infectieux" to that condition known as puerperal fever. The former, the author states, is non-infectious, and invariably to be found in the lying-in room, and the latter only exceptionally so, and is essentially infectious, occurring only at certain periods, and assuming an epidemic form. The term "milk fever" the Doctor adds is also a misnomer, as the two elements which characterise the state called fever—viz., increase of temperature and increase of urea—are here wanting.

Dr. Quinquaud, in restricting the term "puerperal" to the physiological condition of the parturient woman, including the duration of the lochia, might, in my opinion, have extended it to the return of the uterus to its normal state, which takes place a month or six weeks after delivery. Some authors include under the term "puerperal" all that period comprised between conception and the return of the menses (gestation, parturition, lactation, menstruation); but Dr. Quinquaud objects to this, and observes that this definition would be incorrect, as it would include entirely distinct conditions. There are arguments for and against this view of the subject, which, however, I cannot enter into here.

True to his theory, our author sums up in one chapter the treatment to be adopted for the different modalities of the condition he comprehends under the term "puerpérisme infectieux"; and in order to reduce the risk of infection to a minimum, he recommends, in common with other obstetricians, the substitution of small for large maternities.

As regards infectious puerperism in new-born infants, Dr. Quinquaud concludes that the nature of the affection is identical with that which is observed in the parturient woman, occurring as it does at the same time and under the same circumstances as with the latter.

"C'est bien l'epidemie," the author asserts, "qui frappe du même coup les mères et les enfants, attendu que," quoting from Lorain, "l'ombilic est au nouveau-né, comme l'uterus est à la mère; de là resulte pour la mère et pour l'enfant une condition, un état identique." For further particulars I must refer

your readers to the thesis itself, which is extremely interesting, and well worth a perusal.

Dr. Dally, a distinguished physician, and well known for his contributions to medical literature, has lately published two brochures, one "Sur la Necessité de l'Education Physique et sur l'Organisation des Gymnases Municipaux Hydrothérapiques," and the other "Des Resources nouvelles de l'Orthopédie Physiologique," and has just opened a hydrotherapic establishment at Neuilly for the treatment of orthopædic and chronic affections, for which he is eminently qualified, as he has made these his special study. The establishment, which is superintended by Dr. Dally himself, who lives on the premises, is fitted up with a complete gymnasium, and with all the requirements of hydrotherapy, where patients are boarded and lodged at a moderate cost.

The Palace of Industry, in the Champs Elysées, is now occupied by the "Exposition Universelle d'Economie Domestique," which was opened about a fortnight ago under the auspices of the Society for Encouragement of the Working Classes. It forms the great attraction of the day. The payment for admission is trifling, and, in order to enable the *ouvrier* and small *employé* to share in the enjoyment, the building has been very generously opened to them gratis on Sundays, which is readily taken advantage of, as it is literally thronged on that day. Musical entertainments enhance the attraction, and great pains are taken to render the visit as pleasant as possible. The building seems well furnished with a variety of articles, but I regret to say that the medical department is but poorly represented.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

August 20.

Negative Result of Appointment of a Public Analyst—Proposed Cottage Hospital at Babington—Infantile Diarrhœa.

Either Liverpool tradesmen must be exceptionally honest or there must be a strange indifference in the consumers of food and drink in the town as to the purity of the substances consumed. Some months ago a public analyst was appointed, and people were invited freely to bring suspected articles for examination; yet at the weekly meeting of the Health Committee, held on the 15th inst., Dr. Trench reported that there had been only eight samples submitted, and that in no single instance could action be taken. The only case in which a seizure was made was that of a poor woman, who, eighteen months previously, had purchased a stock of sweet biscuits, of which all that remained had naturally enough become rancid. Now that the Adulteration Act has become law, and that inspectors of markets and others are compelled to procure articles for analysis suspected to be adulterated, and to prosecute on the analyst's certificate being obtained, the town will probably not figure quite so well; for a suspicion certainly pervades the public mind here, notwithstanding the negative results of the eight reported examinations, that adulterations do exist to a large extent.

It has been determined to establish a cottage hospital for infectious and other diseases in Babington, a village on the other side of the Mersey. The idea originated with a gentleman who has already done very much for this town and its neighbourhood. Mr. Joseph Mayer a few years ago presented a very costly museum of antiquities to Liverpool, which had required many years and a large expenditure of money for its collection. In Babington, where he resides, he established a free library, which has proved a source of the utmost pleasure and profit to a neighbourhood a little removed from access to books; and, as though these and many other beneficent deeds were not enough, he opened an art exhibition in the village last year, intending to devote the profits towards a fund for the establishment of a cottage hospital. Upwards of £100 was realised; and on Monday, the 12th inst., the project was fairly started by the appointment of a committee of gentlemen to collect subscriptions, procure a suitable building, and frame rules. It is the more necessary to make the proposed building available for the reception of patients suffering from infectious diseases, as at present there is no institution in the district to which they can be sent, the Birkenhead Guardians having refused to receive such cases into their hospital at Tranmere from the out-townships; and several instances were mentioned at the meeting of fever and small-pox having spread, and many deaths ensued, apparently from want of the means of isolation.

With the hot weather the usual fatality from infantile diarrhœa prevails. Of the 101 deaths from diarrhœa which occurred last week ninety-three were those of children below 2 years of age.

GENERAL CORRESPONDENCE.

THE ALDERSGATE-STREET SCHOOL OF MEDICINE, E.C.

Letter from Mr. James Dixon.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you allow me to correct a slight error which I find in your biographical sketch of the late Mr. Skey, in the last number of your journal? I have observed the same error in other notices of this gentleman. He is said (p. 212) to have "established the Aldersgate-street School of Medicine." The fact is that, in conjunction with the teachers whose names are here associated with his own, Mr. Skey re-opened this school; but it had been originally founded and the premises built by my old teacher, Frederick Tyrrell, who was lecturing there in 1830, when I became his house pupil. I am, &c.,

James Dixon.

Lower Seymour-street, Portman-square.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, July 3.

J. Braxton Hicks, M.D., F.R.S., President, in the Chair.

The following gentlemen were elected Fellows of the Society:—Wm. Michell Clarke, M.R.C.S. (Clifton), and James Roger Thomas, L.R.C.P. (Tinnivelly).

A communication from Professor Bezly, of Kiev, was read, accompanying two specimens of Russian pelves, which he had presented to the Museum.

Professor Trenholme, of Montreal, read a paper "On Irregular Contraction of the Uterus," and stated that in such cases he had found adhesions existing between the decidua and the uterine surface at term. The production of this form of contraction and its consequent results were attributed to laceration of the muscular fibres at the points of adhesion, the parts lacerated acting, during attempts at contraction, as direct excitants of the spasm of the walls of the organ. When the adhesions were near the os uteri they not only prevented its dilatation but also rendered the contents of the womb unable to elongate and adapt themselves to the diminished capacity of the cavity, and they neutralised the efficiency of the contraction. When the adhesions existed on one side, the vaginal pouch of waters was formed by the membranes of the opposite side, and this in its turn necessarily forced the neck of the womb to the side on which the adhesions existed. In some rare cases adhesions were found between the neck of the uterus and the vagina, which affected labour in a similar way. The treatment recommended was to pass the finger gently between the united surfaces and effect their separation. When the adhesions were beyond the reach of the finger, rupture of the membranes should be resorted to, for the purpose of allowing the child's head to glide over the decidua, since the adhesions prevented the natural passage of the membranes over the surface of the uterus. Attention was drawn to the fact that in all probability the determining cause of labour at term was due to the separation of the decidua having taken place to such an extent that the contents of the womb acted as a foreign body, and thereby induced efforts at expulsion. Hour-glass and other irregular contractions of the womb after delivery were attributed to the same cause as produced irregular contraction during the first and second stages of labour.

The President considered Dr. Trenholme's paper opened up a new point for clinical investigation. He had no doubt that the adhesion in retained placenta determined the position of

irregular uterine contractions. But there was also a condition which was not dependent on placental adhesion. He had several times noticed in passing the hand within the uterus that the walls would be in one part hard and firm, at another relaxed and flabby; and then gradually the firm part became relaxed, while the relaxed part would become firm.

Dr. Aveling read a paper on "Post-mortem Parturition." He referred to forty-four cases of the kind, and from these deduced the following conclusions:—1. Expulsion of the contents of the uterus may take place after death without the aid of art. 2. This may occur in cases in which no symptoms of natural parturition can be discovered before death. 3. Many of the manœuvres and accidents which take place in labour during life may occur in post-mortem parturition, such as expulsion of the placenta, spontaneous evolution of the fœtus, and prolapsus, inversion, and rupture of the uterus. 4. Expulsion of the uterine contents and accidents which accompany labour may be caused after death, either by the contracting power which persists in the uterus after the death of the rest of the body, or by the pressure exerted upon the uterus by gases of decomposition pent up in the abdomen. 5. Of these causes the latter is the more frequent. 6. After the death of its mother a child may continue to live in the uterus for many hours. 7. After the death of a women undelivered, no time should be lost in removing the fœtus.

The President observed that if we called in rigor mortis to explain the post-mortem parturition we must also remember that rigor mortis would also affect the rigidity of the passage. The question would then be, Does the uterine rigor last longer than that of the passages?

Dr. Snow Beck said that some of the older cases of the kind should be accepted with some doubt as to their accuracy. Dr. Beck then described a case of partial expulsion of the child after the death of the mother which he had himself noticed.

Dr. Madge said it was an important point how soon after the death of the mother one would be justified in opening the womb to save the child. In one case of convulsions Dr. Madge did this twenty minutes after death, but the child was dead. There were no signs of uterine action after the mother's death, and on removing the child the uterus remained in its uncontracted state.

EPIDEMIOLOGICAL SOCIETY.

Wednesday, June 12.

Robert Lawson, Esq., President, in the Chair.

A paper was read by Dr. Smart, C.B., R.N., on "Asiatic Cholera in Africa." Africa, from its geographical features and social conditions, possesses four epidemiological regions. 1. Egypt and Tripoli. 2. The western basin of the Mediterranean, so far as Algeria and Morocco form part of it. 3. The west coast south of the Sahara. 4. The east coast from Abyssinia to the Portuguese settlement. Egypt, next neighbour to Arabia, has not suffered invariably when Arabia has done so; its visitations have been of short duration. It has on one occasion only been the source of European infection (in 1865), and, on the other hand, it would appear to have been infected from Europe in 1854. Tripoli, although not always involved in the epidemics of Egypt, as in 1847-48 and 1854, has had its visitation concurrently with others of that country. Tunis has generally followed on Algeria after a year's interval. In 1859-60 it escaped when Algeria was infected. Egypt was also then untouched. Arabia being infected. The western basin of the Mediterranean—except in 1865, when it received its infection from Egypt—has participated in the epidemics of northern Europe imported into its Atlantic States. But in 1853 and again in 1859 its epidemics are said by some to have had regional origin and growth in the Peninsula. Algeria and Morocco have been always indebted to the European shore for the "contagium" of cholera—the former generally to France, except in 1834 and 1859, when it was so to Spain; and the latter to Spain usually. Morocco was free in 1865, when Spain was severely visited; but this was reversed in 1868, Spain being then free and Morocco diseased, having relighted the epidemic that had been present in Algeria in 1866-67, and in Tunis in the latter year. Both Morocco and Tunis had excluded cholera by quarantine in 1865, but they failed later on their land frontiers. The west coast of Africa was visited for the first and only time in 1868-69, when the disease appears to have been carried from Fez across the Sahara to an upper trading station on the rival Senegal by caravans. It then extended to the Gambia and Rio Grande, through the inland stations, and was at the same time present in the State of Bonadoo—800 miles inland betwixt the watersheds of the Niger and Gambia. The east coast of Africa, from Abyssinia to the Portuguese settlements, has had a series of epidemics entirely apart from those of Egypt. Abyssinia is in constant communication with Arabia, and during the season of the north-east monsoon, from December to March inclusive, Zanzibar has many arrivals from India, the Persian Gulf, and Arabia, from either of which cholera might be conveyed to be spread from it southward by means of the native trading craft. The first visitation was in 1836-37, affecting almost exclusively the negro race. It crept along the coast north of Zanzibar, and from that port to the stations south of it, remaining only a few weeks in Zanzibar. The second visitation was in 1856; it was confined to Abyssinia. Arabia had suffered in the two preceding years, and Zanzibar was undergoing a heavy loss by small-pox in the same year. The third visitation fell in 1858-59. Whilst Arabia was in an epidemic from Muscat to Djeddall, the disease appeared early in the monsoon in the ports south of Guardafui, and extended to Mozambique with great epidemic force. The fourth visitation was in 1865, the year of the last great epidemic that spread into Europe from Arabia. The disease showed itself very early in the year in Abyssinia, and at the fair of Berbera on the south shore of the Gulf of Aden. From this latter place it was conveyed by caravans to the coast of the Indian Ocean; but, being late in the monsoon season, it did not extend to Zanzibar. The fifth and last visitation of Zanzibar in 1869-70 has been traced by Dr. Christie as far as the Galla country, travelling slowly southward among pastoral tribes. It seems not impossible that it may have been conveyed into Africa by the negro pilgrims of Soudan, called "the Takroories," or people of Tocrur, which embraces the fertile plains from the Nile to the Niger. This race was the first to suffer from the epidemic in Arabia, and they may have carried it home with them into the centre of Africa, from which it may have extended westward to Bonadoo by the course of the Niger, and southward by the Nile to the place where the Arab caravans from Zanzibar fell in with it, and took it back with them to that emporium, from which it was carried again inland by caravans that followed a more southerly direction, and northward by native craft to Socotora. In 1870 it spread southward as far as Quillimane, and seaward to the Comoro Islands and Madagascar, and from it to Mauritius—an island that had on previous occasions been infected direct from India or had grown its own epidemics of cholera. A remarkable feature of the epidemics of the east coast of Africa is, that they have, with the exception of that in 1865, arisen in the apogee of the great epidemic cycles when about to cease beyond the limits of Asia, and not when first issuing forth from them—which is strange if we consider its direct intercourse with India. The history of cholera in Africa bears very strong evidence to the theory that its spread is entirely regulated by human intercourse, and timed relatively to the rapidity or slowness of that intercourse, Africa in this respect presenting the very antithesis of what is shown where mankind travel by steam power—consuming years in effecting as much as is there completed in months. In the African epidemics the native negro races have suffered incomparably more severely than the Arabs, Indians, or Europeans present with them. On the Mediterranean shores of Africa there have been repeated instances of the abortive introduction of the contagium of cholera, and others where epidemic intensity has speedily followed on apparently trivial importations. In Algeria the outbreaks have always followed a history of importation, and they have been manifested in crowded hospitals, prisons, and barracks, and in camps, and evacuation of these, wherever it has been applied to such foci, has been invariably successful in cutting short the epidemic. Ample proofs have been amassed of the efficacy of strict quarantine in excluding cholera on the seaboard, although it has appeared in parts thus temporarily exempted after suspicion had ceased and quarantine relaxed, being introduced by a slower land intercourse.

The *Bombay Gazette* of August 2 states that everyone, from the Deputy Commissioner downwards, is said to have had dengue in the Bassein district of British Burmah. Cholera was still hanging about in the Cashmere districts bordering on the valley, but was not nearly so severe as it has been before.

OBITUARY.

JAMES HEYGATE, M.D. Edin., M.R.C.S., F.R.S., etc.

Dr. Heygate was a native of West Haddow, in Northamptonshire. He commenced his medical career at Hanslope, in Buckinghamshire, and went to Derby in 1837. Besides a large private practice, he was senior Physician to the Derbyshire General Infirmary. He had filled the vice-presidentship of the British Medical Association. He was a Fellow of the Royal Society, a magistrate for the county and borough, and took a prominent part in local affairs. His fondness for children was remarkable, and he was never more happy than when his spacious garden and grounds in Friarsgate were the scene of juvenile festivities—the workhouse children especially enjoying his charitable attention, in which he was admirably seconded by Mrs. Heygate and his daughters. The deceased took great interest in the affairs of his parish church, particularly in the formation of the choir. On Saturday week Dr. Heygate, whose strength had been visibly impaired of late, underwent much exertion, having attended the county asylum at Mickleover in the morning, visited his patients, and attended the induction of the Rev. F. J. Lyall at St. Luke's Church in the afternoon by the Bishop of Lichfield. He then drove himself to Little Eaton, to his son-in-law's, and, on his arrival, he complained of being poorly and tired. During the night he had pains in the chest and sickness, symptoms which were relieved by brandy and a mustard-poultice. About five o'clock on Sunday morning the sickness returned, and a messenger was despatched for Mr. Hoskins, of Duffield, who went immediately, but arrived to find his patient already dead. Mr. Hoskins attributes the cause of death to syncope, arising from the effects of over-exertion upon an enfeebled heart. He was author of essays on "Tic Douloureux" and on "Iodide of Potassium," and of several papers in medical journals.

FREDERICK FURNELL, M.D.,

Was the Medical Officer of the Castleconnell Dispensary District. It appears that on Friday he had occasion to visit a patient residing some distance from Castleconnell, and procured a canoe for the purpose. He had not gone up the river far when a heavy shower of rain came on, and while the Doctor was adjusting his coat his hat was blown into the river. Stooping over to reach the hat the boat capsized. The unfortunate gentleman was observed by a little boy to strike out at once for the Clare side of the river, and being an experienced swimmer he could easily have succeeded, but the weeds in this part of the river entangled him. He then swam back to the Limerick side, but the like fatal obstacle debarred him also, and after swimming about for some minutes he was observed to sink by some men and boys, who put off in boats to his rescue, but too late for his recovery. Dr. Furnell had not been long stationed in Castleconnell, but he was universally liked by the residents, particularly by the poorer classes. He belonged to one of the oldest and most respectable families in the county of Limerick. He was a skilful physician, an accomplished gentleman, and the much-valued friend of a very large circle.

SIR ANDREW SMITH, K.C.B., M.D. Edin.,

Director-General of the Army Medical Department from 1851 to 1858, died on Sunday, the 11th inst., at his residence in Alexander-square, at Brompton. He was born in Roxburghshire in 1797. He entered the army as assistant-surgeon in 1815, having received his medical education at Edinburgh. He served with distinction for short periods in various parts of the world, and proceeded to the Cape in 1821, returning to England in 1838. Shortly after he was sent to Fort Pitt, Chatham, and appointed principal medical officer there. He was transferred to London by Sir James McGregor as his professional assistant, and on the retirement of Sir James in 1851 he was appointed by the Duke of Wellington to the vacant post, which he filled till 1858, when he retired from the service in consequence of impaired health, and received the distinction of K.C.B. At the time of the Crimean disasters grave imputations were made upon the department over which Sir Andrew presided, but the evidence and documents laid before the Sebastopol and other Committees showed that these charges were groundless. In addition to his constant and zealous exertions in the interest of the public service, Sir Andrew Smith's scientific researches in Southern Africa resulted in the publication of many papers and his great work, "Illustrations of the Zoology of South Africa." It was upon his representation and advice that the prosperous district of Natal was constituted a colony.

GEORGE JEPSON, M.R.C.S.,

Was the son of the Rev. George Jepson, Prebendary of St. Botolph's in Lincoln Cathedral, in which city the subject of the memoir was born in 1788. He was educated at the Lincoln Grammar School, and on leaving was apprenticed to the late G. Parnell, Esq., of Gainsborough. At the expiration of his apprenticeship he went to Guy's Hospital, where he studied under Sir Astley Cooper, for whom he dressed, and by whom he was held in high estimation. He obtained his diploma as M.R.C.S. in 1810, and in the following year entered into partnership with his former master, who retired from the practice in 1827. Mr. Jepson continued in active practice to within a short period of his death, which took place on the 17th inst., in the 85th year of his age, to the regret of a large circle of friends, to whom his kindness of heart and unwearied devotion to the duties of his profession had greatly endeared him. His two sons are in practice—Edward Cane Jepson, F.R.C.S., Durham; Octavius Jepson, M.D., Medical Superintendent City Lunatic Asylum, Stone, near Dartford, Kent.

NEW INVENTIONS.

WESTERTON'S PATENT ZYMOTIC DISINFECTING FLUID.

During the prevalence of the late very oppressive weather we have made many experiments to test the virtues of this agent. It may be stated that it differs from all disinfectants in giving to the surrounding atmosphere a coolness and comfort which we seek for in vain from any compound of a like nature. It is not simply a disinfectant of substances, but it appears to make the air we breathe more tolerable, and, in fact, to eliminate, as it were, infectious matters from the air. It consists of a mixture of pyroligneous acid, ether, spirits of wine, and carbolic acid in such proportions as conduce to this end. We should strongly recommend it in all cases of infectious disease; in the close atmosphere of rooms, where it is difficult to obtain a free ventilation; and as a wash for scarlet-fever patients, combined with a sufficient quantity of warm water. The relief that it affords in such cases is really surprising. A tablespoonful of the fluid mixed with the water of an ordinary bath imparts a delicate fragrance to it which cannot be too highly commended, and which those who have once experienced it would be desirous of trying again. In a word, Mr. Westerton appears to have combined in his "zymotic fluid" the elements of a disinfectant in its widest sense, by the production of a fluid which is at once prophylactic, agreeable, and effective.

HOT-SAND BATHS.

We are to have in London an establishment for administering hot-sand baths in different diseases, principally in rheumatism, recent cases of nervous disorders, affections of the kidneys, and all those cases where heat is wanted to be the chief therapeutic agent, unmingled with other disturbing influences. This mode of treatment was introduced on the Continent for such purposes about twelve years since. It has proved successful in certain cases; and being supported by some of the leaders of the Profession abroad—Virchow, Traube, and others—who send their own patients to it often enough, it is gaining ground more and more every day. As we consider it to be a most useful invention, which will bring comfort to many a sufferer upon whom other methods prove less efficacious—being a rational proceeding, based upon simple physiological facts—we mention it for those of our professional brethren who may feel inclined to take an interest in it. We may take an opportunity to recur to the scheme some day; for the present we will only state that it possesses several important advantages over the usual ways of bringing heat into action upon the body. It does not suppress perspiration as does the hot-water bath, but increases it; nor does it interfere with the respiration like the steam-bath or the Turkish bath. The body can stand its influence for a much longer time and to a much higher degree of temperature than with any of the other systems hitherto known. It can be used for babies as well, and allows local application as easily as for the whole body.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—ARTS EXAMINATIONS.—At the recent preliminary examination for the diplomas of Fellow and Member of the Royal College of Surgeons, 336 candidates presented themselves—viz., 101 for the first-named distinction, and 235 for the latter. The examination took place at the University of London, Burlington House, and was conducted by a staff from the Royal College of Preceptors, under the superintendence of the Rev. Dr. Jacob, when the following gentlemen passed for the Fellowship, viz. :—

Andrew, J. E.	Ferguson, J.	Pike, J. B.
Arnott, S.	Fisher, F. B.	Pinnell, A.
Baber, J. A.	Fletcher, C. W. C.	Pope, F. M.
Ball, W. M.	Fox, L. W.	Prowse, A. B.
Beaumont, A. W.	Gascoigne, F. O.	Quicke, W. J.
Bell, T. A.	Glyn, H. A.	Saunders, W.
Beverley, W. H.	Harrison, E. T. B.	Simpson, W. J. R.
Birch, Dr. B.	Harsant, W. H.	Souther, M. C.
Black, J.	Hobley, S. H.	Spong, W.
Blaker, T. F. I.	Holbecke, A. O.	Stamp, W. D.
Boodle, R. M.	Kilner, C. S.	Strong, R. G.
Castle, H.	Langdon, J. S.	Taylor, A. N.
Chaffey, W. C.	Lediard, H. A.	Todd, H. J. McC.
Channer, J. S.	Lee, H.	Tomes, A.
Clark, H. E.	Liddell, H. J. S.	Treves, F.
Clarke, R.	Mackern, J.	Trewmau, G. T.
Compton, F. C.	Macready, J.	Turner, E. B.
Cowan, F. S.	Morshead, E. G. A.	Underhill, T. E.
Cree, P. K.	Munyard, T. G.	Walsh, W. A. S.
Douglas, A. L.	Murray, H. H. C.	Walter, E. W.
Drinkwater, T. W.	Norman, W. H.	Ward, G. J.
Dunn, H. P.	Oxley, A. J. R.	Ward, G. S.
Dutton, E. G.	Palm, W. S.	Weston, C. E.
Ellis, P. M.	Parkyn, E. A.	Willoughby, J. F. D.
Evans, T. W.	Parry, T. F.	Wilson, A. H.
Farneel, H. D.	Perry, F. F.	

The following gentlemen passed the preliminary examination for the Membership, viz. :—

Allwork, A.	Garland, G. H.	Noyce, F. E. B.
Ambler, H. E.	Garman, J. S.	Owen, A. L.
Astley, J. D.	Garman, V. C.	Packer, W. H.
Aylward, E.	Giffard, H. E.	Paddon, W. P.
Baillie, R. H.	Gilbert, A.	Partrige, W. S.
Bell, T. F. W.	Giles, W. B.	Pedley, T. F.
Bellaby, F.	Glanville, F. F.	Pick, A. H.
Bennett, W. C.	Golland, A.	Praeger, E. A.
Boreham, F. S.	Goss, S.	Price, J.
Bridgeford, J. S. S.	Gould, H. C.	Rean, W. H.
Brown, C.	Gross, C.	Reckitt, J. D. T.
Brown, J. A.	Gwynn, R. H.	Reckitt, W. F.
Browne, H. Æ.	Harvey, J. J.	Redmayne, H.
Buckby, R. G.	Haslam, W. F.	Reily, J. Y.
Buncombe, J. D.	Haynes, P. O.	Rennie, S. J.
Cannock, C. W.	Hearden, W. F.	Renolds, W. P.
Carver, W. E.	Hewson, R. W.	Reynolds, L. W.
Cary, J.	Hicks, A. B.	Rhodes, J. D.
Cheshire, A. E.	Hindle, J. C.	Richards, P. M.
Chevers, N. B.	Holloway, G.	Richardson, S. L.
Claremont, C. C.	Homes, J.	Richardson, T. W.
Clarke, R.	Hoskin, T.	Roberts, T. H.
Clements, W. G.	Hough, C. H.	Rundle, C. S.
Cockell, F. E.	Howe, J.	Rutherford, R. L.
Cook, P.	Hutchison, J. G. F.	Sawdy, G. J.
Congreve, G. T.	Irvin, J. H.	Smailes, F. W.
Crook, H. D.	James, C.	Smith, E.
Davies, R. H.	Johnston, A. J. T.	Smith, W. H.
Davies, W. G.	Johnston, T.	Stanley, S.
Dening, A.	Jones, A. C. B.	Stephens, W. J.
Dening, E.	Jones, T.	Stevens, C. S.
Denman, F. P.	Kempe, A. W.	Sutton, E.
Dingle, W. A.	Knowles, E.	Tamplin, G. W. D. H.
Drummond, J. H. G.	Langdon, H. J. J.	Taylor, R. T.
Duke, G. A.	Law, E.	Thomas, D. E.
Eagleton, J.	Layton, H. A.	Thomas, T. R.
Edwards, P. W.	Leigh, W. W.	Todd, J.
Evans, A. L.	Luscombe, W. E.	Travis, J. G.
Evans, C. W.	McGeorge, S. J.	Trewman, G. T.
Evans, D. P.	Mackie, D. C.	Vachell, E. S.
Evans, E. P.	Marshall, E. J.	Walker, B. W.
Everest, C. A.	Masters, J. A.	Webb, J. R. W.
Faulkner, A. S.	May, A. E.	Whereat, E. Y.
Flood, F. P.	Mills, R. J.	White, A. T. O.
Fox, W. H.	Milne, W.	White, H. A.
Fraser, A. H.	Murray, G. M.	Wood, J.
Fraser, G. B.	Newman, T. W.	Woodhouse, T. P.
Fuller, S. H.	Neylen, J.	Worswick, F. H.
Gaisford, M.	Nicholson, A. W.	
Gallatly, G. F.	Norris, R. H.	

Of the 101 candidates examined for the Fellowship, seventy-three were successful and six rejected, fifteen obtaining sufficient marks for the Membership, but in order to qualify for the Fellowship will have to undergo another examination in those subjects in which they respectively failed. Of the 235 examined for the Membership, 135 passed (three having obtained sufficient marks for the Fellowship), and 100 were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 22, 1872:—

Atkins, Francis Thomas, Plumstead, Kent.
James, Arthur Culver, Kennington-park-road.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Davey, Charles James, Guy's Hospital.
Harsant, Wm. Henry, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

DICKINSON, E. H., M.A., M.B.—Lecturer on Comparative Anatomy and Zoology at Liverpool Royal Infirmary School of Medicine.

GRANDISON, ALFRED, A.B. and M.B. Trin. Col. Dub., L.R.C.S.I., L.M.—House-Surgeon to the Dover Hospital and Dispensary.

HENSLEY, P. J., M.A., M.D. Cantab., F.R.C.P.—Physician to the Royal Hospital for Diseases of the Chest, City-road, *vice* Dr. J. C. Fish, resigned.

HUGHES, WILLIAM, M.R.C.S. Eng., Resident Assistant Medical Officer to the *Hamadryad* Hospital Ship.

PARKER, RUSHTON, M.B., B.S.—Demonstrator of Practical Physiology at the Liverpool Royal Infirmary School of Medicine.

PRICE, THOMAS, M.R.C.S. Eng. and L.K. & Q.C.P.—Junior Assistant Medical Officer to the Workhouse Hospital, Manchester.

WARNE, W. COLSTON, M.B. Edin., M.R.C.S. Eng.—Resident Medical Officer to the Royal National Hospital for Consumption, Ventnor.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—Assistant-Surgeon Charles McConaghy has been placed on the retired list.

INDIA OFFICE.—Bengal Army.—To be Surgeons-Major: Surgeons James Macnabb Cuningham, Joseph Christian Corbyn, George Moncrieff Govan, and Richard Henry Perkins. To be Surgeons: Assistant-Surgeons George William Jameson, Henry Cookson, Robert Wiseman Cunningham, William Moir, and Thomas Gray Skardon. Madras Army.—To be Surgeons-Major: Surgeons Edward D'Arcy Everard and Francis Day. To be Surgeons: Assistant-Surgeons George Williamson and Charles Robert George Parker. Bombay Army.—To be Surgeons-Major: Surgeons Alexander Fox, Alexander Valentine Ward, Robert Wallace James, and Harry Octavius Thorold. To be Surgeon: Assistant-Surgeon Robert Augustus Alleyne.

SHARPE, ALFRED, M.D. Edin., L.R.C.S. Edin., has been appointed, by the Secretary of State for War, Assistant Visiting Surgeon for Woolwich, under the Contagious Diseases Acts, 1866 to 1869, in the place of J. B. Ryley, resigned.

BIRTHS.

BUCHANAN.—On August 23, at Clover House, Chatham, the wife of Walter Buchanan, M.R.C.S.E., of a daughter.

EARLE.—On August 26, at Brentford, the wife of E. S. Earle, F.R.C.S., of a daughter.

LEWIS.—On August 25, at Loughton, Essex, the wife of W. T. Lewis, M.R.C.S. Eng., of a son.

ROGERS.—On August 22, at Rainhill, Lancashire, the wife of T. L. Rogers, M.D., of a daughter.

ROPER.—On August 26, at 17, Granville-park, Blackheath, the wife of Arthur Roper, M.R.C.S. Eng., L.S.A., of a daughter.

TEEVAN.—On August 27, at 10, Portman-square, the wife of W. F. Teevan, F.R.C.S., B.A., of a daughter.

THEOBALDS.—On July 19, at Jubbulpore, the wife of Surgeon-Major J. R. Theobalds, 21st Madras Native Infantry, of a daughter.

THOMPSON.—On August 14, at Southsea, the wife of Staff Surgeon-Major J. A. W. Thompson, of twin daughters.

WYMAN.—On August 21, at Putney, the wife of W. S. Wyman, M.D., F.R.C.S.E., of a son.

MARRIAGES.

COGAN—BUXTON.—On August 20, at St. Sepulchre's, Northampton, Lee Fyson Cogan, L.R.C.P. Edin., M.R.C.S. Eng., second son of the late Lewis Bew Cogan, of Winsley, Wilts, to Isabel Anne, youngest daughter of George Buxton, Esq., J.P., of Northampton.

EADE—LING.—On August 22, at St. Giles's Church, Norwich, by the Rev. W. N. Ripley, M.A., vicar of the parish, assisted by the Rev. G. H. Cooke, M.A., vicar of Worstead, Peter Eade, M.D., of Upper St. Giles's-street, Norwich, to Ellen, widow of the late Henry Ling, Esq., and only daughter of Hugh Rump, Esq., of Wells-next-the-Sea.

FOSTER—RUST.—On August 22, at All Saints' Church, Huntingdon, Michael Foster, M.D., F.R.S., Fellow of Trinity College, Cambridge, to Margaret, third daughter of George Rust, Esq., of Cromwell House, Huntingdon.

HAWTHORNE—GOSTENHOFER.—On August 21, at the parish church, Frankby, Cheshire, Robert J. S. Hawthorne, Esq., of Alexandria, youngest son of the late George S. Hawthorne, M.D., of Liverpool, to Eleanor Bond, daughter of the late Lewis H. Gostenhofer, Esq.

LUCAS—DICKINSON.—On August 22, at St. Chrysostom's Church, Liverpool, the Rev. G. Reed Lucas, M.A., second son of the late Dr. P. Bennett Lucas, F.R.C.S. Eng., to Alice Jane, only child of the late Thomas Dickinson, Esq., of Alston, Cumberland.

MOON—GIBBONS.—On August 27, at St. Nicholas Church, Brighton, Henry Moon, M.D., Old Steyne, Brighton, to Henrietta, widow of the late James B. Gibbons, Esq., of West Hoathly, Sussex.

ROYSTON-PIGOTT—MITTON.—On August 22, at the parish church, Ilkley, George West Royston-Pigott, M.A., M.D. Cantab., late Fellow of St. Peter's College, Cambridge, to Agnes, youngest daughter of the late Rev. Joseph Mitton, Vicar of Baildon, Yorkshire.

WRIGHT—GRANT.—On August 22, at the parish church of Ware, Arnold Howard Wright, elder son of the late Samuel Wright, M.D., of Birmingham, to Frances, second surviving daughter of Henry Grant, Esq., and granddaughter of Robert Chalmers, Esq., of Brighton, late of Thurloe-square, S.W.

DEATHS.

BERNARD, ROBERT, M.B., Deputy Inspector-General, at Spa, Belgium, on August 25.

BUCHANAN, ROBERT, M.D., at 2, St. Leonard's Villa, Maida-hill, on August 25, aged 86.

FAIRBAIRN, HELEN, only daughter of the late Peter Fairbairn, Esq., and granddaughter of Sir William Fairbairn, Bart., of Ardwick, Manchester, at the residence of her stepfather, Edward Halford, M.D., the Grove, Hammersmith, on August 22, in her 15th year.

FORSTER, THOMAS BALLE, M.D., at Norbiton House, North-road, Plymouth, on August 20, aged 47.

JEPSON, GEORGE, M.R.C.S. Eng., at Gainsborough, Lincolnshire, on August 17, aged 84.

JOHNSON, KATE, youngest daughter of the late Thomas Johnson, surgeon, of Bassingshaw, at Stragglethorpe, suddenly, on August 21, aged 23 years.

LIESCHING, LOUISA ELIZABETH, fifth daughter of the late Louis Liesching, M.D., at Mowbray, Cape of Good Hope, on June 23.

MULLINGER, FREDERICK JOHN, M.R.C.S., at 5, Somerlayton-road, East Brixton, S.W., on August 20, aged 40.

RUNDLE, WILLIAM JOHN, M.D., L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., suddenly, at his residence, Audrey House, Gosport, Hampshire, on August 20, aged 66.

WADDINGTON, MARY ANN, relict of James Waddington, late of 1, Coleman-street, E.C., and last surviving daughter of the late Robert Eden, M.D., of the county of Durham, at her residence, 4, Crown-terrace, Lavender-hill, Surrey, on August 26, in her 84th year.

WINSTANLEY, ROBERT, M.R.C.S. Eng., L.S.A., formerly of Wigan, on August 17, after a long illness, in his 39th year.

WALL, CAVENDISH LISTER, M.D., at Hastings, on August 24, aged 55.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Committee of Management, on or before September 2.

DAVENTRY UNION.—Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to George Norman, Clerk to the Guardians, on or before September 3.

GLOUCESTER COUNTY ASYLUM.—Junior Assistant Medical Officer. Candidates must be single, and must possess qualifications in Medicine and in Surgery. Applications, with testimonials, to the Committee of Visitors, on or before September 5.

METROPOLITAN DISPENSARY, 9, FORE-STREET, CRIPPLEGATE.—Physician. Candidates must possess a Degree from a British University, and also be Fellows or Members of the Royal College of Physicians of London, or undertake to become so within six months after election. Applications, with testimonials, to the Secretary, on or before September 8.

PROVIDENT MEDICAL INSTITUTION AND LYING-IN CHARITY, 20, PIMLICO-ROAD, PIMLICO, S.W.—Attending Medical Officer. Must be duly qualified to practise. A gentleman residing in Chelsea or Brompton preferred. Applications to the Committee on or before September 3.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Candidates must be registered as Members of one of the Colleges of Surgeons of the United Kingdom, and as Licentiates of the College of Physicians of London or of the Society of Apothecaries of London. Applications, with testimonials, to the Hospital, on or before September 11.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WARNEFORD LUNATIC ASYLUM.—Resident Medical Superintendent and Secretary. Applications, with testimonials, to the Secretary, Warneford Asylum, Oxford, on or before August 31, from whom copies of the regulations prescribing the duties and conditions of the respective offices may be procured.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Alverstoke Parish.—The Town District is vacant; salary £90 per annum.

Evesham Union.—Mr. Anthony Martin has resigned the Workhouse; salary £30 per annum; and the First District; area 8997; population 3364; salary £52 per annum. Also, Mr. J. B. Haynes has resigned the Second District; area 10,832; population 3943; salary £50 per annum.

Martley Union.—The Leigh District is vacant; area 11,266; population 4703; salary £85 per annum.

APPOINTMENTS.

Aberayron Union.—James R. James, M.R.C.S. Eng., M.B. Edin., to the Llansantfread District and the Workhouse.

Glendale Union.—John K. Thornton, B.M. and M.C. Univ. Edin., to the Ford District.

Luton Union.—Fredk. R. Haward, M.R.C.S. Eng., L.S.A., to the Leagrave District.

DR. W. BATHURST WOODMAN, Assistant-Physician to the London Hospital, and Lecturer on Physiology at the London Hospital Medical School, has been elected by the Master and Court of Assistants of the Apothecaries' Society a Member of the Court of Examiners of that Society.

THE library of the Obstetrical Society will be closed from Monday, September 2, to Saturday, September 14, both days inclusive.

HEALTH DEPARTMENT OF THE SOCIAL SCIENCE CONGRESS, to be held at Plymouth, September 11 to 18. *President*—H. W. Acland, M.D., F.R.S. *Vice-Presidents*—J. F. Bateman, C.E., F.R.S.; C. Albert Hingston, M.D.; F. S. Powell, M.P.; Frederick Row, M.D.; and H. W. Rumsey, M.D. The following are the special questions for discussion:—1. What are the Principles on which a Comprehensive Measure for the Improvement of the Sanitary Laws should be based? 2. What steps should be taken to guard against Sewage Poisoning? 3. What means can be adopted to prevent the Pollution of Rivers? *Secretaries*—William Clode and William Hardwicke, M.D. *Local Secretaries*—Thomas Littleton, M.D.; John Rolston, M.D.; and William J. Square, M.R.C.S.

THE office of Physician to the Metropolitan Dispensary has become vacant by the resignation of Dr. Eustace Smith.

THE Guardians of St. George's, Hanover-square, have decided to pay their medical officers 2s. 6d. for each child under remand at the instance of the London School Board where a certificate is given, and 2s. 6d. for each child examined and certified under order of a justice of the peace.

THE Trustees of Watts's Charity at Rochester are about to provide public swimming baths in the Medway for the use of the inhabitants of Rochester and Chatham.

A HOSPITAL FOR INCURABLES.—A Hospital for Incurables is to be established at Oxford, which will be partly self-supporting.

SMALL-POX has increased at Santiago, and Congress has voted $100,000 in aid of the small-pox hospitals.

SMALL-POX has made its appearance in two unions in the neighbourhood of Neagh, county of Tipperary, and at the Neagh Workhouse there has been one death.

SMALL-POX in Vienna has been on the increase during the week ending the 22nd inst.—at least, so far as mortality is concerned—seventy-one deaths having occurred, amongst which number twenty-three were adult persons. This death-rate is much higher than that of the foregoing month, when the number of fatal cases varied between 55, 64, and 48.

OIL OF CLOVES FOR MICROSCOPICAL PREPARATIONS.—Dr. Webber states that the use of oil of cloves is preferable to that of turpentine, not being so volatile, and enabling preparations to be kept a day or two for examination. If carbolic acid is used, the preparations must be washed before Canada balsam is used, while with oil of cloves the balsam can be used at once, and the preparations do not harden so soon.—*Boston Journal*, July 1.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Senex.—We believe mustardseeds are no longer employed in Medicine, and metallic mercury very seldom. The unhappy Caroline of Brunswick died of the impaction of masses of calcined magnesia.

Mortality.—Yes. In England and Wales the annual deaths were in the Census of 1780 so numerous as 1 in 40. In 1801 they were 1 in 47.

A. Mourilyan.—1. Certainly not. 2. Dr. Parker, of New York, was the first surgeon in America who practised the subcutaneous ligation of varicose veins, which he did successfully in 1831. He has also treated varicocele in the same way, and with the like success.

T. G. S. Emmerson.—Parliament, in 1802, voted Dr. Jenner a reward of £10,000 for his discovery, and in 1807 the additional sum of £20,000. In 1808 vaccination was taken under the protection of Government.

Nauticus, Swansea.—There can be no doubt of the existence of scurvy in the northern countries of Europe from the earliest ages. Of the four ships which sailed from England in 1609 for the establishment of the East India Company, three were severely visited by scurvy. Lemon-juice, as a remedy and preventive, was then known, although it was altogether slighted for 150 years afterwards.

A New Disinfectant.—Mrs. Bountiful goes to visit the gardener's wife, who was just confined—"Glad to see you and the dear baby so well, Mary; but—hem, ha,—I think, perhaps, you are a little *close*, and I shall send you some chloride of lime to put in a saucer under the bed." Mary: "Oh, please missus, don't go to make me have no more of them stinks; nusses breath 'll keep hof anythink that can fly through the hair."

Pulex Medicus.—A man who lounges in chemists' shops, asks whether they get so many prescriptions from Dr. A. as they used to have a year ago; how it is that Dr. B. got called in at —— House; wonders that Dr. C. does not drive a better turn-out; relates how Dr. D.'s son was plucked at Cambridge, and is going into a merchant's office;—that man may be a great nuisance, but is beneath the dignity of criticism.

Payment for Attendance in Accidents.—Our Paris Correspondent says that "with reference to the inquiry whether a Physician, when summoned to a case of emergency, is, in the event of non-payment by the parties concerned, remunerated out of any public fund, I have to inform you that there is no such fund in France. The Medical man, in such a case, obtains his fee as he best can. If required by the police authorities to afford the necessary medical or surgical aid, he is paid six francs, whatever be the nature of the case."

An Old Subscriber—A Tutor—An Anxious Parent—will find the list of successful candidates, who passed the preliminary examination in Arts, etc., for the diplomas of Fellowship and Membership of the College of Surgeons, published in another column of the *Medical Times and Gazette*.

St. Mary's Hospital.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Seeing it stated in your paper of this date that "St. Mary's Hospital will be cleared of in-patients in a few days, to make alterations in the building," I beg to inform you that there is no foundation for such a statement. The annual cleaning of the wards is going on, as is usual at this time of the year, and the number of in-patients is in consequence somewhat reduced, but there is no intention of clearing out all the in-patients, nor of making any alterations in the building.

I am, &c.,

August 24. Jos. G. Wilkinson, Secretary.

Sling Rests for Babies in Arms.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Small babies cannot be well locomoted in a perambulator. A heavy lump of a boy, three months old, is a distressing weight for a small nursemaid (nursemaids are always small) to carry about for an hour or more on the left arm. I proposed recently to a nurse to try a sling. She found it the greatest comfort, and was completely relieved of all sense of fatigue. Baby, too, appeared to approve of the change. But alas! Mrs. Grundy! Baby did not mind, but nurse could not go about with "such a paraphernalia, which nobody else wore." I think, however, if Messrs. Maw or some other enterprising firm were to manufacture a neat net sling with a pretty strap and buckle it would soon become fashionable and save many an aching arm, and keep many a little spine straight.

I am, &c.,

Prince's Town, Dartmoor, August 23. R. E. P.

Balmforth *v.* Buckley and Fletcher.

*** We have been requested to publish the following letter:—

"Sir,—Having read the two letters signed 'J. and E. Whitworth' and 'William H. Hewitt,' published in the *British Medical Journal* of the 24th inst., may I ask you to insert the following reply:—

"Mr. Hewitt states his object to be to contradict a previous statement—namely, 'that Mr. Southam strongly advised that the case should be submitted to arbitration, but that this was refused by the defendants.' Mr. Whitworth writes with the same object, though he does not very clearly state it. The previous statement was quite true, as will be seen by the following facts:—

"On June 24 last, the plaintiff called upon me and stated that he had seen Mr. Southam, to whom, after Mr. Beever's death, he applied; that Mr. Southam positively refused to examine him and give evidence, or have anything to do with the case, upon the ground that the professional reputation of brother surgeons was likely to be affected, unless he were first allowed to offer a reference to both defendants. By the plaintiff's instructions, I then wrote the following letter to Mr. Southam:—

"'61, Brown-street, Manchester, June 24, 1872.

"'*Balmforth* v. *Buckley and Another.*

"'Dear Sir,—Mr. Balmforth informs us that, before examining him, you have expressed a wish to suggest an arbitration to Messrs. Buckley and Fletcher. Mr. Balmforth instructs us to say that there is no objection to that step.

"'Yours truly,

"'Cobbett, Wheeler, and Cobbett.

"'G. A. Southam, Esq., Surgeon.'

"Upon receipt of this letter, Mr. Southam showed it to both the defendants, and strongly urged upon them the advisability of a reference; but that course was at once declined by Dr. Ogden Fletcher, and, after consideration, by Mr. Buckley, in the following letter:—

"'Ardwick Villa, 6, Hyde-road, June 27, 1872.

"'My dear Sir,—After leaving your rooms I saw my solicitor, who advises me to decline the offer for an arbitration in Mr. Balmforth's affair.

"'I remain, with thanks, yours very respectfully,

"'To G. Southam, Esq.' "'J. Buckley.

"After the receipt of this letter the writ was issued, and Mr. Southam and the other surgeons, who were subsequently witnesses for the plaintiff, first examined him. Shortly prior to the first examination of the plaintiff by the surgeons who were afterwards witnesses for the defendants, Mr. Whitworth and Mr. Hewitt called upon me for the purpose of obtaining my consent to that examination. That was the only object of their visit, and the main subject of the conversation. The subject of reference was, however, incidentally referred to, by my expressing my surprise that the overtures made had been refused. Both solicitors intimated that they were not authorised to accept a reference, Mr. Hewitt expressing strong disapprobation of such a course, and the subject dropped. A day or two before the examination just mentioned took place, Mr. Southam left a memorandum at my office inviting my attendance at the examination, as he hoped to be able to arrange a reference even then. I accordingly communicated to Messrs. Whitworth and Mr. Hewitt my intention to attend, and received from Mr. Hewitt, in reply, the following letter:—

"'8, Marsden-street, July 19, 1872.

"'*Fletcher* ats. *Balmforth.*

"'Dear Sirs,—I understood that it was arranged between us that we should not attend upon these examinations. It will not be possible for me to be in attendance, as I shall be engaged upon a reference—in which, by the way, your office is concerned. My client will, I am quite sure, protest against your presence, and I do not think it at all likely that the medical gentlemen will consent to your being present. You must take it, also, that I decidedly object under the circumstances.

"'Yours truly, "'Wm. Hy. Hewitt.

"'Messrs. Cobbett, Wheeler, and Cobbett, Brown-street.'"

"From Mr. Whitworth I believe I did not hear. I then wrote to Mr. Southam the following letter, enclosing a copy of the letter from Mr. Hewitt:

"'61, Brown-street, Manchester, July 19, 1872.

"'*Balmforth* v. *Buckley.—Same* v. *Fletcher.*

"'Dear Sir,—We are sure your brother practitioners will appreciate the efforts you have made to end this matter peaceably and privately, but you will see by the enclosed letter that such a result appears to be impracticable. We, therefore, do not attend; and, should Mr. Whitworth appear, you will perhaps kindly intimate to him he had better withdraw.

"'Yours truly, "'Cobbett, Wheeler, and Cobbett.

"'G. Southam, Esq., M.D.'"

"A few days before the assizes Messrs. Hewitt and Whitworth met me accidently in the street, and proposed to refer. To this I replied that they had hitherto declined to listen to any such proposition, and had put the plaintiff to every possible expense; that to refer now would be to their client's advantage, and to my client's disadvantage, without any equivalent to him. Alluding to the strong pressure put upon me by Mr. Southam to refer, I added that even he would hardly now expect the plaintiff to do so without an admissiou of liability or some other equivalent. There the matter ended.

"Your readers will observe that Mr. Whitworth omits to state what answer Mr. Buckley (his client) returned to the offer which he admits was made before action, and that he states that no offer of reference was ever made to Dr. Fletcher (?), and that Mr. Hewitt says that no offer of arbitration had been made, and that the suggestion made was of a nature which Mr. Whitworth thought did not warrant him in taking any notice of it.

"The terms imposed by Mr. Southam upon the plaintiff before examining him were considered by him and by me to be somewhat peremptory; but they were submitted to, because upon no other terms could his assistance, and that of his colleagues at the Manchester Infirmary, be obtained.

"All the above circumstances were perfectly well known to the defendants and their solicitors; and I can only express my regret that the painful duty of stating the facts should have fallen upon me.

"I am, Sir, your obedient servant, Wm. Cobbett.

"for Cobbett, Wheeler, and Cobbett, Plaintiff's Solicitors,

"61, Brown-street, Manchester."

"P.S. As Mr. Hewitt has thought proper to raise a question as to what Mr. Beever's report really was, I send you a copy of it:—

"'Mosley-street, Manchester, April 29, 1872.

"'Gentlemen,—The injury Mr. Balmforth has sustained is a dislocation of the head of the thigh-bone upwards, and has been caused by violence. The symptoms of this dislocation are so well marked by shortening and inversion of the limb that no degree of swelling about the joint, following the accident soon after its occurrence, ought to prevent easy detection of the displacement. It must, therefore, be a want of practical skill on the part of the surgical attendant which would cause such an injury to be overlooked. "'I am, gentleman, yours faithfully,

"'Messrs. Cobbett, Wheeler, and Cobbett.'" "'W. W. Beever.

Reflective.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—One Thursday night a few years ago, a young officer after mess wanted to hear the "Dead March" in *Saul*, but this request was naturally objected to in favour of the overture to *William Tell*, *Fra Diavolo*, or the *Grand Duchess*. The following Thursday the band *did* play Handel's superb composition, this time sadly appropriate—at the poor fellow's own funeral. Some soldiers prefer quiet interment where the rude forefathers of their hamlet sleep; but the majority, affectionately clinging to cherished associations, wish to be buried with military honours. The impressive wailing dirge, the sword and shako on the coffin, the horse in gloomy trappings, the reversed boots, the firing over the grave—in short, the dismal parade generally—these things are but stereotyped forms, but many a general and many a doctor hopes thus to be escorted home to his rest in God's Acre by the grand old regiment.

In drizzling rain the funeral of an amiable and talented officer (Fellow of the Royal Society) takes place to-day, and at the bedside of a case of dysentery my attention is distracted by the tolling of the bell and the shuddering roll of the drums. His turn to-day, whose to morrow?—Will the heart pulsate much longer?—Will it cease to beat to night? speculates the sufferer, conscious of the aneurism, the renal mischief, the brain confusion, and the so-called rheumatism of the arm. When the foot feels not the stirrup—the walking-stick dropped—the pen beyond control—the keys mislaid—the temper capricious—it may be liver, it may be nothing; alas! it may be the beginning of the end. Here on the table lies the unwelcome order soon to relinquish charge of certain duties, including this little hospital. Out of window the red and white rosebuds are bending under the storm. Ever and anon the thought occurs that before the Virginian creeper reddens on the wall and the autumnal russet tints appear, the present writer will be many thousand miles away, chewing the bitter cud of contemplation of life being a failure. Amongst many qualifications for success a medical man should have robust health, unwearied application, a good wife, and a comfortable home. As to talent, one great art appears to consist in the early recognition of difficulty and danger, and instead of

working alone until too late, promptly to insist on consultation. Resisting all temptation to interpolate frivolous matter, the scribbling practitioner should never trespass beyond the boundaries of dry detail, bearing in mind witty Wendell Holmes, who said—"Don't you know that people won't employ a man that wrongs his manliness by laughing like a boy. It's a vastly pleasant prospect, when you're screwing out a laugh, that your very next year's income is diminished by a half!"

Also there should be a stimulus to exertion. Helps considers most men are disheartened if they do not in the course of a certain period—say ten years—obtain a distinct rise in their position.

Above everything, we, the cripples who carp at the winning athlete, should bear in mind one quotation from Shakespeare—"Men at some time are masters of their fate; the fault is not in our stars, but ourselves, that we are underlings." The other night there was a discussion about pandemic waves—how, at some stations in India, all the ladies suddenly became pregnant, and at others elopements became the rage. An old woman, the mother of a family, went off with a lad, but took two young children with her, who created such squalling that the lover levanted. A fat man, about 40, going to India for the first time, runs the greatest risks of liver and sunstroke. He should take out nothing but clothes, and should always wear a pad of felt along the spine. Should take a fair amount of wine, especially champagne, avoiding beer, too many brandy pegs, and excess of animal food. The greatest wrecks are men who, suffering from secondary syphilis go out to hot climates. The hypodermic injection of quinine in ague, even for young children, appears to answer admirably, but strong tea is also increasing in estimation. Abscess of the liver appears wonderfully insidious, often never suspected by patient or physician. Lately one or two women have been under treatment who previously suffered from dengue—a combination of rheumatic and scarlet fever, with a dash of urticaria, but not fatal, and leaving no sequelæ; quinine and iodide of potassium the popular remedies. Dreadful things Delhi boils must be, leaving such terrible scars behind!

Soon it will be necessary to say farewell, a long farewell, to the *Medical Times and Gazette*. Should health permit, I shall take careful notes in the "shiny East," hoping they will be acceptable to the journal. The other day, brooding over impending exile, and entering a miserable lodging to visit a case of malignant fever, one tenant, noticing the book and pencil, said to another most contemptuously, "Here's the Jew broker again after the rent."

I am, &c., A Dyspeptic.

COMMUNICATIONS have been received from—

Paterfamilias; Dr. Eade; Mr. Hutchinson; Dr. F. R. Wilson; Mr. W. R. Dalton; R. E. P.; Mr. Wilkinson; Mr. Conti; Mr. Dixon; Dr. F. R. Hogg; Mr. Riley; Mr. Kemp; Mr. Angell; Major Stehelin; Mr. Propert; Mr. Coales; Mr. Swain; Dr. Jepson; Dr. Henry; Mr. Rundle; Dr. Wiltshire; Mr. Wright; Dr. Powell; Mr. F. Churchill; Mr. C. Roberts; Sir W. Fergusson; Mr. J. Chatto.

BOOKS RECEIVED—

Du Prolapsus Utérin, par M. le Dr. Vulliet—On the Drainage of Towns, by W. Newman, M.D., F.R.C.S.—Living Larvæ in the Human Ear, by Clarence J. Blake, M.D.—Report of the West Ham Local Board of Health—A System of Surgery, by Samuel D. Gross, M.D., LL.D., D.C.L. Oxon.—Jahrbuch für Balneologie, Hydrologie, und Klimatologie, herausgegeben von Dr. E. Heinrich Kisch.

PERIODICALS AND NEWSPAPERS RECEIVED—

Dublin Medical Journal, August—Nature—The Western Lancet—Canada Medical Record—L'Union Médicale—The Trelawney and Public Advertiser—Monthly Microscopical Journal—Science Gossip.

APPOINTMENTS FOR THE WEEK.

August 31. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

September 2. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

3. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

4. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

5. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædie, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

6. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Meeting of Council.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 24, 1872.

BIRTHS.

Births of Boys, 1052; Girls, 1037; Total, 2089.
Average of 10 corresponding weeks, 1862-71, 1998·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	654	620	1274
Average of the ten years 1862-71	706·8	676·1	1382·9
Average corrected to increased population	...	...	1521
Deaths of people aged 80 and upwards	...	...	46

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	1	2	...	2	4	...	4	...	29
North ...	751668	5	3	4	...	12	...	1	1	43
Central ...	333887	...	...	...	...	3	...	4	2	14
East	638928	3	6	1	...	8	2	1	3	39
South	966132	6	1	7	1	8	...	6	1	72
Total	3251804	15	12	12	3	35	2	16	7	197

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·939 in.
Mean temperature	64·3°
Highest point of thermometer	78·2°
Lowest point of thermometer	49·7°
Mean dew-point temperature	55·1°
General direction of wind	E., E.N.E, & N.N.E.
Whole amount of rain in the week	0·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 24, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Aug. 24.	Deaths Registered during the week ending Aug. 24.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2089	1274	78·2	49·7	64·3	17·94	0·00	0·00
Portsmouth ...	115455	12·1	80	70	78·6	52·0	64·3	17·94	0·00	0·00
Norwich	81105	10·9	48	38	75·0	51·5	62·0	16·67	0·04	0·10
Bristol	186428	39·8	117	75	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	39	28	81·4	48·8	62·5	16·94	1·08	2·74
Birmingham ...	350164	44·7	261	205	81·6	48·0	62·3	16·83	0·11	0·28
Leicester	99143	31·0	83	60	...	...	...	...	...	...
Nottingham ...	88225	44·2	58	47	82·0	47·3	63·1	17·28	0·43	1·09
Liverpool	499897	97·9	367	278	79·0	53·2	62·6	17·00	0·08	0·20
Manchester ...	352759	78·6	279	213	83·8	48·0	63·1	17·28	0·10	0·25
Salford	127923	24·7	103	71	83·5	49·6	62·8	17·11	0·09	0·23
Oldham	84004	20·2	60	62	...	...	...	...	...	...
Bradford	151720	23·0	126	82	79·2	51·3	62·8	17·11	0·00	0·00
Leeds	266564	12·4	221	168	81·0	48·0	62·8	17·11	0·00	0·00
Sheffield	247847	10·9	195	135	82·0	47·0	62·3	16·83	0·06	0·15
Hull	124976	35·1	94	60	...	...	...	...	...	...
Sunderland ...	100665	30·4	76	47	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	107	65	...	...	...	...	...	...
Edinburgh	205146	46·3	92	73	67·0	48·7	58·3	14·61	0·40	1·02
Glasgow	489136	94·8	356	242	73·3	49·0	60·5	15·83	0·10	0·25
Dublin	310565	31·9	156	124	75·1	47·5	63·1	17·28	0·28	0·71
Total of 21 Towns in United Kingd'm	7393052	34·0	5007	3417	83·8	47·0	62·5	16·94	0·18	0·46

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·94 in. The highest was 30·13 in. on Saturday morning, and the lowest 29·78 in. on Wednesday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

BRITON
MEDICAL AND GENERAL LIFE ASSOCIATION.

CHIEF OFFICE—429, STRAND, LONDON.

Trustees.

General Sir J. E. DUPUIS, K.C.B. | Sir W. FERGUSSON, Bart., | R. PARTRIDGE, Esq., F.R.S. | W. TYLER SMITH, M.D.
Sir JAMES DUKE, Bart. | F.R.S. | FRANCIS WEBB, Esq. | MILLIS COVENTRY, Esq.

Actuary and Secretary—JOHN MESSENT, F.I.A., F.S.S. Assistant-Secretary—WILLIAM BEAMAN.

Every practical system of Life Assurance business transacted at moderate rates. The Association issues "Special Settlement Policies" under the provisions of the "Married Women's Property Act, 1870," whereby a sum of money may be secured to the Wife, or Wife and Family, of the Assured Member without the risk of such provision becoming subject to the claims of creditors.

New Premiums for the year 1871 ... ... £20,191 7 9
Total Income from Premiums, Interest, and other miscellaneous receipts 245,824 18 8

The next Valuation, with a view to the declaration of a further Bonus, will be made at the close of the present year.

Detailed Reports, Prospectuses, and every information may be obtained on application, personally, or by letter addressed to the Actuary and Secretary of the Company, at its Chief Offices, 429, Strand.

Special advantages allowed to Members of the Medical Profession upon effecting or introducing Assurances.

BEER IN BOTTLE.
WHITBREAD & CO.'S LONDON COOPER, STOUT, & ALES.

Whitbread & Co. are the ONLY large Brewers who Bottle their own Beer.

Prices and full particulars can be obtained at the STORES, 277, GRAY'S-INN-ROAD, W.C.—ROBT. BAKER, SOLE AGENT.

Natural Mineral Waters of Vals, Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton; R. Ellis and Son, Ruthin; and the Natural Bromo-Iodine Water of Woodhall Spa, Lincolnshire.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

NEPENTHE.

Prepared exclusively from Opium. (Dose the same as Tinctura Opii.) **Price 8s. per lb.**

From the "Lancet," Dec. 18, 1869.

Nepenthe, or Anodyne Tincture (prepared by Messrs. Ferris and Co., Bristol).

This preparation really consists, as stated, solely of opium, resembling somewhat the liquid extract of the British Pharmacopœia. It is claimed for it that it does not produce headache, stupor, giddiness, depression of spirits, diminution of nervous energy, prostration of strength, nor constipation; it is doubtless less stimulating than those preparations of opium made with the solid and crude drug; and a further commendation of Nepenthe is its uniformity of strength. The Nepenthe intended for subcutaneous injection is of double the ordinary strength; and that it is really so we have verified by analysis.

May be procured direct from the Sole Manufacturers,

FERRIS, BOORNE, TOWNSEND, and BOUCHER,
Wholesale Druggists, Bristol,

And through all leading Wholesale and Retail Chemists in Great Britain and the Colonies.

NOTICE.—Notwithstanding the enormous and increasing advance in Opium, the price of Nepenthe remains the same, and it is now the cheapest as well as the best preparation of this important drug.

N.B. Two Pounds NEPENTHE, or One Pound NEPENTHE and Three Pounds Ferris and Co.'s SYRUP of CHLORAL, will be sent, Carriage Paid to any Railway-station on receipt of P.O.O. for 16s.

BOUDAULT'S PEPSINE.

In 1854, after many experiments, PEPSINE was obtained in a pure state by **M. BOUDAULT**, Chemist, and Dr. L. Corvisart.

Boudault's PEPSINE was honoured with two Reports at the Academy of Medicine, Paris, and with having its formula inserted in the New French Pharmacopœia.

The International Jury of the Universal Exposition, Paris, 1867, awarded to Boudault's PEPSINE the only Medal given for PEPSINE and its preparations. (Silver Medal, 1868.)

Boudault's PEPSINE is the only one that has been furnished to the Hospitals in Paris since 1854.

PEPSINE Wine (Sherry), in bottles, 4/ and 8/. Dose—a tablespoonful before each meal.

PEPSINE Lozenges, in bottles, 4/. Dose—3 before each meal. PEPSINE Pills, in bottles, 4/. Dose—3 before each meal.

Boudault's PEPSINE or Poudre Nutrimentive. Dose—15 grains; sold in 1-oz., 4-oz., 8-oz., and 16-oz. bottles.

HOTTOT BOUDAULT, 7, Avenue Victoria, Paris.

London: A. & M. ZIMMERMANN, 7, Fen-court, E.C.

May be obtained through all Chemists.

Notice of Removal.—Mr. William VAN PRAAGH has REMOVED to 12, FITZROY-SQUARE, LONDON, W.—Association for the Oral Instruction of the Deaf and Dumb.

New Giant Rocca Onion, splendid variety, of delicate flavour; weight two to three pounds. Sow at once. Seed, with full cultural directions, 2s. per ounce, post free. Daniels Brothers, Seed Growers, Eaton, Norwich.

ORIGINAL LECTURES.

LECTURES
DELIVERED IN THE
COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

Sketch of Conjunctivitis in General, or Ophthalmia.

Gentlemen,—Without some knowledge of the natural history of primary inflammation of the conjunctiva, its effects cannot be sufficiently understood, and treatment must be conducted under disadvantages.

The phenomena of increased redness, pain, augmented heat, the effect of hyperæmia, and swelling due to effusion of serum, the result of congestion rather than of enlargement of the bloodvessels, are evidences of true inflammation, any one of which may be in excess of the other, or any the least marked. They are but the outset of the affection—the developing of it from some injurious stimulation of the tissues attacked. This is not necessarily in itself a spoiling or destructive process, for even when it has reached a high state it may decline under treatment, or without it, and not leave a trace of any mischief.

Inflammation of this membrane, in common with all mucous membranes, is usually attended by morbid secretions. When it is mild, mucus is secreted. This scarcely mingles with the tears, but lies, as it were, rolled up, and may be drawn out in shreds. It is thicker and more transparent the slower the inflammation proceeds. With more vascular action, especially quicker developed, the mucous base is more turbid, and mucus and pus cells produce streaks in it. Next follows in development a greenish-white or yellow discharge, from the preponderance of pus cells. The several products in the discharge are the same as those from other inflamed mucous membranes. At this stage of the disease there is interstitial exudation, by which serum is poured out, and liquor sanguinis with its albumen and fibrine, which increase with the intensity of the inflammation. The nutritive activity of the cellular elements is increased by the abnormal cell structures, the direct product of the inflamed tissues, as well as that of the leucocytes. The swelling of all the inflamed parts increases till the inflammation has reached its height. The palpebral conjunctiva swells least, because it is closely bound down. The effect of tumefaction on the oculo-palpebral and ocular portions is very marked.

The colour of the hyperæmia varies according to its variety—that is, whether it is active and arterial, or mechanical and venous; and again, whether the conjunctiva alone be hyperæmic, or with it the sub-conjunctival tissue and the sclerotic coat be likewise affected. It is further modified by the condition of the epithelium, by which is produced tints of rose, or lilac, or yellow, or brown.

When the inflammation lessens, the conjunctiva becomes pale, wrinkled, and soft, although the bloodvessels remain enlarged. Afterwards, the interstitial inflammatory growths, the result of proliferation, disappear; the bloodvessels contract, and the surface tissue, which had been morbidly affected by the inflammation, is either atrophied or thrown off, and normal epithelium is restored.

A reduction in the quantity of abnormal secretions is simultaneous with the reduction of the inflammation. The pus element declines, the mucous basis gets thinner and more transparent, until at last the conjunctival mucus is restored, and no trace of the disease will be left.

Unfavourable terminations are not uncommon. Hypertrophy of the entire conjunctiva ensues—slightly marked, however, in the ocular, more marked in the oculo-palpebral, and still more apparent in the palpebral portion.

The several primary and secondary conditions must be examined in detail: for this, and account of the range of symptoms, and also the treatment, grouping under certain heads is requisite.

Catarrhal Ophthalmia.

This is the mildest and commonest form of conjunctival inflammation, and although it is generally seen in those persons who have disordered health, it may appear in any one, and at any period of life, from the earliest existence to very advanced age. But it is most common in early life, and new-born infants often have it. It just reaches its height without inflicting damage on any of the ocular tissues or appendages, and when there is excretion, which is the rule, it is scanty, and consists of mucus, or of pus added to it in a small proportion. It involves the conjunctiva and its ramifications in the Meibomian ducts, the canaliculi, and the ducts of the lachrymal gland.

Symptoms, in their order of development: Itching; a sensation of sand, or dust, or grit in the eyes (it may be difficult to dissuade a patient from his idea that an extraneous substance has entered, and to assure him that the deception is produced by the sensitive palpebral conjunctiva rubbing against the enlarged and projecting bloodvessels of the sclerotic portion of the same); adhesion of the edges of the eyelids in the night; redness of the palpebral, and reticular redness of the retrotarsal and sclerotic conjunctiva. The undue redness, or hyperæmia, is not vivid, but of the colour of brickdust, or bluish, or it has a tint of lilac or violet. This is because the hyperæmia is conjunctival. The vascular network, which consists chiefly of veins, moves with the conjunctiva when it is raised or drawn from the eyeball. There are often many spots or blotches of extravasated blood deposited in the meshes of the vascular network of the conjunctiva, varying in size from a pin's head to the breadth of the cornea. Hæmorrhage is a common result of this form of hyperæmia—the mechanical variety. It may occur from the passage of the red corpuscles of the blood through the capillaries, or from rupture of them.

The degree of the hyperæmia of the ocular and retrotarsal portions of the conjunctiva is unmistakable, but not so that of the palpebral portion. It must be judged of indirectly or inversely by the extent to which the Meibomian glands are obscured.

The arrangement of the bloodvessels on the ocular conjunctiva may be more relied on for diagnosis than that which occurs in other ocular inflammations, but it might be obscured by chemosis, or rendered less definite by the co-existence of inflammation of the sclerotica. While thus speaking of this conjunctival inflammation as a thing by itself, it must not be supposed that there is a definite line to the diseased action. Anastomosis of the bloodvessels rendering this impossible, the vessels of the subconjunctival tissue particularly, and those of the sclerotica, are in some degree affected. When they are more than usually influenced, they may be readily discerned as being deeper, darker, and lying in different directions to those of the conjunctiva. The student should learn to recognise them. The eyelids participate more or less whenever there is an active attack of the inflammation.

The conjunctiva swells; the palpebral portion is villous and irregular. This is due to the villi being engorged and turgid, and the glands being enlarged and prominent from their increased activity. The oculo-palpebral and ocular portions of the same are thickened. This state must not be mistaken for the chronic condition of granular conjunctivitis. Irregularity of surface is a common effect of swollen mucous membrane. This is well seen in the pharynx, slight inflammation causing it to look very uneven.

Chemosis is very rare; it appears only when the inflammation is highest, is never very marked, and is always of the serous form. The conjunctiva rarely overlaps the cornea, and never adheres to it.

The ordinary lachrymal moisture is increased in the first instance; then it stops, and its place is supplied by mucus from the inflamed membrane. At first there is an increase of mucus, rich in corpuscular elements. The recent mucus cells are partly emigrant blood-corpuscles, and partly productions from within the epithelial cells by endogenous multiplication. With the increased proliferation many of the epithelial elements—proper tissues of the part—are partly destroyed, and are discharged with the mucus. The mucus glands give a freer secretion; the excretion gets thicker, and is whitish or yellowish. Later it may take on more of a purulent character from the greater number of the corpuscular elements. Some of these cannot be told from pus corpuscles. The quantity and the quality of the abnormal product which is secreted depend on the extent of the inflammation. There may be a little mucus lying on the eyeball—just enough to be recognised,—or, more copious and yellowish, collecting about the cilia, which it glues together in bundles, or so purulent and profuse as scarcely to be distinguished from mild purulent ophthalmia. Intolerance of light is scarcely present, nor is there increased lachrymation unless the cornea be in some way diseased or injured, or the sclerotica be inflamed. Such

complications are extremely rare, except the ophthalmia be from a mechanical cause.

Pain does not occur. There is no impairment of vision beyond what is caused by the excretions passing over the cornea, and forming a semi-opaque medium or cloud which obscures the sight; or any peculiarity of refraction, such as prismatic colours, or distortion of objects, which are due to alterations in the corneal epithelium.

The active pupil and the acuteness of vision declare the eyeball to be sound. So long as the visual power is unimpaired, we are sure that all redness on the surface of the eyeball is merely conjunctival.

There are scarcely any constitutional symptoms unless the mucous membrane of the nose and that of the frontal sinuses participate, when there is generally catarrhal fever, with headache, heat, chills, or foul tongue, with impaired appetite, and perhaps sickness.

Both eyes are usually attacked, not always at the same time; and if severally, the second is involved just as the other is getting well. Whatever may be the degree of the symptoms, they are usually more marked in the evening, but decline when the patient retires to rest. Sleep is not interfered with.

In very severe cases, the eyelids participate in the inflammation. It is then only that an appreciable elevated local temperature occurs, but it is of short duration. With the process of proliferation in any degree there must be some heat beyond that of the physiological point.

The well-developed symptoms then are, a varying amount of mucus, or of a muco-purulent discharge, with hyperæmia and some swelling of the conjunctiva.

Mild Catarrhal Ophthalmia.—In this, usually described as slight inflammation of the conjunctiva, the symptoms of ophthalmia are not fully developed. There is slight hyperæmia and a sensation of grit in the eye, with itching, stiffness, and heaviness of the eyelids, as if they cannot be kept open, with or without adhesion of their edges at night. But only the palpebral and the reflected portions of the conjunctiva, together with that over the caruncle and the semilunar fold, are slightly swollen. There is no appearance of mucus (or there may be exceptionally) but a shred or two lying in the lower conjunctival sinus, and apparent only when the eyelid is pulled from the eyeball; or only a little mucus collected at the inner canthus, in a fresh state, or dried into little yellowish or brownish crusts. The symptoms are much aggravated by exposure to wind, especially cold wind, and then lachrymation is produced. It is usually chronic, attacks persons in ill-health, and is difficult to cure. Extravasation of blood may occur even here. It is to this form that the term "chronic ophthalmia" is generally applied. It should be used rather to any slow or protracted inflammation of the conjunctiva, in whole or in part.

Diagnosis.—Only one observation is necessary here; it is, not to mistake the direct irritation produced by the presence of some extraneous substance in the cornea or on some part of the conjunctiva for the disease. If there be grounds for any doubt, the eye should be carefully examined.

The usual duration of the disease, from the commencement to the end, under treatment or without, is from three or four to ten days, and in severe cases from a fortnight to three weeks. When untreated, or when the exciting causes are not removed, it may last as a chronic affection for many weeks, or even months. Then the discharge becomes more purulent, perhaps altogether purulent, the conjunctiva thickened and granular, and the cornea inflamed. Febrile symptoms may appear. Eczema palpebrarum may be a sequel of this.

The disease is apt to recur.

The causes are primary and secondary.

The primary are the more common. They include the intrusion of an extraneous substance, the inversion of eyelashes, surgical operations on the eyeball, or anything which irritates the conjunctiva or the cornea (so far they are mechanical); foul air, with excrementitial exhalations; smoke, fumes from chemical works; crowded rooms, with dusty occupations; keen winds, draughts of cold air, wet clothes, wet feet; permanent exposure of the conjunctiva, from disease of the eyelids, or protrusion of the eyeball. As organic influences, straining the eye by long employment on minute objects, especially by artificial light, and more especially if there be unrelieved presbyopia or hypermetropia. To these must be added, in the case of new-born children, the irritation of the conjunctiva by various substances with which they are sometimes washed just after birth, such as soft soap, spirits, etc.

The secondary arise out of the anatomical union between the conjunctiva and the surrounding parts, whereby inflammation of the mucous membranes of the lachrymal and the nasal regions reach the conjunctiva by continuity. The inflammation of the facial integuments from erysipelas, impetigo, eczema, and other cutaneous affections, including measles, scarlet fever, and small-pox, are thus conveyed; also extension of inflammation from any of the tissues of the eyeball.

Catarrhal ophthalmia is occasionally epidemic, attacking numbers of persons, and, it may be, a large proportion of the inhabitants of towns or of rural districts. I have seen several epidemics of it in London during the spring months, and a very marked outbreak occurred in the summer in London a few years ago.

That it is infectious is certain. (I use the term "infectious" as including that of contagious.) When one member of a family is affected the rest usually suffer, and very often other persons of the household. The infection of the one after the other, from the importation of the disease by a visit from one who has it, when there is no epidemic, proves the truth of its being conveyed from individual to individual. It is in this manner that the disease continues for years in public institutions.

In the year 1861 I was asked by the guardians of the Central London Union to visit the Central London Schools, at Cuckoo Farm, near Hanwell, where the disease had existed for several years (I think over eight), and to suggest means for its suppression. The new comers were nearly always attacked. I examined over two hundred children, who were in different stages of the disease. The inflammation was of the usual form, and was in no way intensified by its long propagation, nor was it complicated. Without an exception, the morbid action was confined to the conjunctiva. In several instances there co-existed other diseases, as corneitis, eczema palpebrarum, etc.; but I ascertained, without doubt, that they were antecedent affections.

Treatment.—If the exciting cause be removed, the inflammation will nearly always decline under the influence of local cleanliness, and still quicker, with the advantage of lessening suffering, under very simple treatment. This treatment consists in frequent fomentations, the use of astringents, rest to the eye, and confinement to the house in cold weather, and at any time of the year if there be a marked mixture of pus with the mucus, when there are usually febrile symptoms; and attention to any disordered constitutional states, be they those of depression or otherwise. As the physiological temperature is not increased in any ordinarily recognisable degree, and as the period of inflammatory irritation is very short, and has generally passed away when we are consulted, antiphlogistic measures are not wanted. It is with the condition of relaxation of the mucous membrane that we have to contend, and astringents are indicated. General treatment is called for if it be likely that the person's health renders him liable to repeated attacks.

It is difficult to point out the superiority of any one drug as an astringent over the many which are available in the organic and inorganic preparations of our Pharmacopœia. Whichever be selected, it should be diluted till it does not give pain, nor even decided smarting, or else harm rather than good will be produced. Detrimental practice in this direction is most likely to occur when the nitrate of silver is used.

I believe alum to be as efficacious as anything. I prescribe two or three grains of it to an ounce of distilled water, and direct a drop or two to be applied to the conjunctiva after each fomentation with hot water alone, which should be made thrice, four times, or oftener during the day, according to the urgency of the symptoms. Besides the beneficial effect of the heat, the fomentation cleans the conjunctiva, and prepares it for the astringent. My detailed instructions to my patients are, to saturate a camel- or sable-hair brush with the lotion, and to discharge it at the outer corner of the eye, by depressing the under eyelid and drawing the brush across the tarsal edge. Afterwards, with the brush again charged, to wet the tarsal edges and the inner corner of the eye. There should be a change of drugs if that first employed do not produce a sufficiently quick result. The treatment should not be continued too long. When the inflammation begins to decline the lotion ought to be used less frequently, and stopped as soon as the patient feels that the severity of the attack is over.

I do not think that any therapeutic advantage is to be obtained by applying ointments to the edge of the eyelids. It may be necessary to grease them at night to prevent the discomfort of their sticking together. I employ warm mutton suet. A case attended with very active symptoms should be treated as one of mild purulent ophthalmia.

When the inflammation is spreading by contagion, the

diseased subjects should be isolated until the inflammation and its effects have passed away.

If the disease should attack an eye which has another complaint, other measures may be required according to the symptoms arising out of such complication.

If in the mild chronic cases of the disease the above treatment be unavailing, there is probably some unhealthiness of the body which needs to be removed before the ophthalmic symptoms will decline.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY AND TREATMENT OF SMALL-POX.

By ROBERT H. BAKEWELL, M.D.,
Late Medical Officer of Health of the Colony of Trinidad, and late Medical Attendant of the Small-pox Hospital of Port of Spain, etc.

In a previous paper I have given a sketch of the pathology of simple discrete small-pox as derived from microscopical examinations of the fluid contained in the varioles or pocks. I have shown that, consistently with all that we know of the disease, it may be believed that certain corpuscles formed in the varioles are like the seeds of plants, capable of having their vital functions restored after a period of suspension, when they are introduced under favourable conditions into a proper soil; that these particles or corpuscles, introduced into the blood of a person who has never been vaccinated or had small-pox, will, in the large majority of cases, grow and reproduce their kind in that blood; that after a period of incubation generally(a) believed to be from twelve to fourteen days, fever comes on, lasting twenty-four, forty-eight, or seventy-two hours, before an eruption of minute "papules" appears; that these so-called papules, on being punctured, prove to be vesicles containing a transparent and colourless fluid; that the eruption continues to increase as to the number of varioles for from one to three days; and that when the full complement of varioles has appeared, the eruptive fever ceases; that the vesicles or varioles after the cessation of this fever continue to grow in size, and on the fifth day, or earlier if very numerous, cause, by their presence and pressure on the cutis, a "secondary" fever, which fever is of an irritative or surgical kind; and that as the varioles reach their fullest development, and burst or are punctured, the "secondary" fever diminishes, and ultimately ceases when scabs are formed.

Such is the course of simple discrete small-pox, whether in an unvaccinated person or in one on whom vaccination has been imperfectly performed. When the protective influence of vaccination has not entirely ceased, the course of the disease is, as is well known, much shortened; the eruption ripens on the fourth, fifth, or sixth day, and rapidly dries up. But the elements of the variole are just the same; the nuclei, corpuscles, granular or formative material, and proliferous cells exist as in the perfect form of small-pox, and no other difference exists than this: that there being less food for them in the patient's blood, there are fewer formed, and their life is shortened. The other contents of the varioles—the tissue *débris*, the epidermic and pigment cells—are the same.

Reluctant as I am to venture upon any innovation on the existing nomenclature of the various kinds of small-pox, it is impossible for me to describe them under the usual division of discrete, semi-confluent, confluent, etc.; for there is absolutely no pathological distinction between a case of discrete and one of confluent small-pox, except the mere extent of the eruption. The contents of the varioles, their individual growth, development, and subsidence, are identical. I have been compelled to adopt another mode of division, depending on the contents of the varioles. When these consist of the elements just enumerated—corpuscles, free nuclei, granular matter, together with tissue *débris*, epidermic and pigment cells—the case is one of simple small-pox, *variola simplex*; the varieties are *discreta*, *semiconfluens*, *confluens*, *corymbosa*, and *perconfluens*. The latter form I shall describe later on; it is not mentioned in any book to which I have access here.

When, in addition to the elements of *variola simplex*, red blood-corpuscles are found in the varioles, the disease is *variola hæmorrhagica*, including the petechial form. This presents just the same varieties as to extent or form of eruption as *V. simplex*.

Thirdly, we have a species alluded to by Mr. Marson, in which the varioles are very watery, the number of corpuscles found in them is very small, and they do not become yellow and form scabs, but dry up in wrinkles, or separate (when confluent or corymbose) large patches of epidermis from the cutis, much as a blister might do. These detached portions of epidermis fall off, if the patient survive, leaving the skin in the coloured races quite white, from the destruction of the rete mucosum and its layer of pigment cells. This form may be called *V. aquosa*. It has, like the others, its varieties as to amount of eruption; but I have not yet seen it in the discrete form. It is more often corymbose than any other. Frequently it occurs mixed with *V. simplex*, and is then chiefly found on the feet and legs.

The three species of variola of which a description will be given are *V. simplex*, *V. hæmorrhagica*, and *V. aquosa*.

The semi-confluent and confluent forms of *variola simplex* differ from the discrete variety only in the intensity of the symptoms, but not in their essential nature. Without giving a full description of phenomena so well known and so accurately described, I shall confine myself to a few points which seem to require further investigation.

The stage of incubation has been very little studied, and nothing is accurately known of it. I have seen so few cases in this stage that I have no observations to make on it.

The stage of *primary or eruptive fever* also requires much further study. This is the stage in which alone treatment of a curative kind can be adopted. Its diagnosis is tolerably easy, especially when there is an epidemic of small-pox. It should be observed that the lumbar pains so much relied on as a diagnostic sign may be absent, or hardly felt, even in severe confluent cases.

This is the stage in which the variolous poison germs are reproducing themselves in the blood; and it is to the examination of the blood chemically and by the microscope that the attention of the physician should be specially directed. We surely ought to be able in these days to distinguish, by the microscope and chemistry together, that kind of blood which is rich in the *pabulum* of the variolous corpuscles. There must be a difference in the blood of a person protected by vaccination or previous small-pox and of one unprotected. Now, the question is, In what does this difference consist? And, when that question is satisfactorily answered, the equally important one remains, By what means can we, during the period of eruptive fever, so modify the blood of the unprotected person as to render it as unsuited to the growth and development of the variolous germ as is the blood of a protected person? Probably when the first question is satisfactorily answered, the second will not be found a great difficulty. It is obvious that the only mode of solving these problems is to institute careful microscopical and chemical examinations of the blood of children *before*, *during*, and *after* vaccination. I have never examined the blood under the microscope before the appearance of any eruption; but I have done so in four cases before the eruption was complete. In all four I found numerous corpuscles exactly resembling those which are found in the varioles. In a Spaniard, who died of blood-poisoning during the first stage of hæmorrhagic small-pox, I examined the blood after death. It was, an hour and a half after death, so liquid that it ran out of a vein at the bend of the elbow in a copious stream. It was very black. Under the microscope, in addition to the ordinary white and red corpuscles, there were an immense quantity of corpuscles having one or two nuclei and much granular matter in them. These, when the blood coagulated, were found in a thick layer at the bottom of the clot. The eruption was extremely flat, imperfect, irregular, black, and contained many red corpuscles, but comparatively few variolous ones. The temperature in the axilla, an hour and a half after death, was 106·9 Fahr. (41·6 C.).

It is commonly but erroneously believed that the fever ceases when the eruption appears. This is certainly not correct, as has been proved in many cases—*e.g.*, *Case* 3 (Small-pox Hospital): E. P., female, aged 19; eruption appeared on day of admission. Temperature when admitted 103° Fahr.; pulse 117; respiration 30. At 8 p.m. same day, temperature 103·6°; pulse 117. Next day at 8 a.m., temperature 102°; pulse 120.

Case 9 (Small-pox Hospital).—D.C., male, aged 10. On second day, temperature 100°; pulse 112.

(a) I say "generally believed," because I believe myself that there is no fixed period of incubation. It seems to me much more probable that where (*a*) the blood is very rich in the pabulum required by the variolous corpuscles, or (*b*) when the number of these received into the system is very large; or (*c*) when there is a continuous infection, as when the infected person is in constant contact with one already in the contagious stage of small-pox, then, in any of these cases, the period of incubation is shortened, and perhaps very much so.

Case 38.—E. M., female, aged 13; unvaccinated. This girl I saw on the morning of December 20, and did not admit her because there was no trace of eruption. In the afternoon I saw her again; a few varioles had appeared on the face, and she was taken in. I note that there was fever on the day of admission, and for two days afterwards (21st and 22nd).(b) On the 23rd there was "no fever"; and it was not until the 26th that the secondary fever commenced, the pulse being 102 in the morning. On the 27th the pulse was 127.

Case 41 (Small-pox Hospital).—J. R., male, aged 18; unvaccinated. Eruption commenced on December 23; on the 24th, "fever persists"; on the 25th, the same; on the 26th, "*no fever, eruption very copious.*"

Case 47 (Small-pox Hospital).—R. F., male, aged 17; unvaccinated. Admitted December 28, before eruption appeared, as there were several other cases in the house he lived in; was then in a state of high fever. On the 29th, morning visit, "high fever; a few varioles have appeared on face; delirious." This state continued until the 31st, when, at 9 a.m., it is noted that there is "no fever; is quiet now; has slept a little in the night, and taken some nourishment."

Case 76.—P., female, aged 12; unvaccinated. Admitted on January 9, in a state of primary fever, it being the first day of eruption—"very few varioles"; at 6 p.m., "very hot." On the 10th (second of eruption), pulse 100; skin cool. On the 11th (third of eruption), pulse 76; no headache; seems very well."

All the above were confluent or semi-confluent cases, and all had secondary fever. I could quote many more, but the above will perhaps suffice.

On the hypothesis that during the stage of primary fever the variolous poison is circulating in the blood (whether we do or do not adopt the germ theory), it is clear that no cessation of the fever can be expected until the whole of the poison is eliminated by the eruption. Now, the eruption does not appear all at once; the number of varioles increases every hour during at least the first twenty-four hours after the outbreak of the exanthem; and everyone knows that an eruption which at first seems discrete, will next day be semi-confluent, and on the third confluent. The blood is, in my opinion, only freed from the variolous poison (*i.e.*, corpuscle) when the last pock has come out. From that time we have no longer to deal with small-pox poison *in* the blood, but with, as it were, a parasitic disease outside the blood and outside the true skin.

The following case, in which the blood was twice examined during the first days of the eruption, is one of those on which I rely for supporting this theory:—

Case 196 (Small-pox Hospital).—B. F., black, male, aged 22; sailor; unvaccinated. Admitted April 2, 1872. Eruptive fever commenced March 31; eruption appeared April 1. Has always had good health; is a full-blooded, well-made young man.

On admission (2 p.m.)—Pulse 106; temperature 39·8° C. (103·6° Fahr.); respiration 32. Bowels freely open this morning; eruption copious on face and upper port of body; still has a little headache and pain in back.

Microscopical Examination.—Varioles contain variolous corpuscles and red corpuscles of blood; blood itself contains many white corpuscles resembling those of the varioles, and the ordinary leucocytes also; nummulates(c) well. 10 p.m.: Complains of being cold; is shivering. Pulse 112; temperature 39·4° (102·9° F.) Sedative mixture (Battley).

3rd.—Slept well after dose of Battley. Conjunctiva suffused; eruption coming out very copiously; skin of lower extremities very dry and scurfy. Pulse 100; temperature 39·4°; respiration 20. 4 p.m.: Fever very high; complains of head; eruption very copious; many varioles black in centre; yield a clear fluid containing many red corpuscles, and the usual variolous corpuscles, etc. Venæsectio ad ʒx. Red corpuscles nummulate freely; *multitudes of the white ones described on the 2nd;* buffy coat. Temperature, half an hour after venesection, 40° (104° F.); pulse 110—fuller than before bleeding. 10 p.m.: Pulse 124; temperature 40·5° (104·9° F.). Says he does not feel very ill; was asleep; conjunctiva very red. Mist. salin. aper.

4th.—Slept well; eat well; is salivated. Skin feels cool; tongue clean at edges, coated in middle; throat pains him. Temperature 38·6°; pulse 96. Bowels well open; very offensive first time, second time healthy. A little headache and pain in back. 2 p.m.: Complains of throat being very sore; skin hot; high fever; eruption extremely copious. ℞. Potass. nit. ʒij., tinct. opii f. ʒij., quiniæ sulph. gr. xvj., acid nit. dil. q.s., aquæ ad ʒviij. sum. ʒj., 3tiâ q.q. horâ. Six leeches to the throat. 5 p.m.: Leeches have bled freely; *blood normal; hardly any white corpuscles, or such as were so abundant yesterday.* Baln. calid. Temperature before bath, 38·8°. Perspired well after the bath. 10 p.m.: Leech-bites bleeding most profusely; obliged to tie them.

5th.—Perspiring freely this morning; slept well last night; took food. Pulse 96; temperature 37·5° (99·4° Fahr.). Face swollen; throat painful.

The subsequent progress of the case has nothing to do with the point now in question. The man ultimately died from exhaustion, produced by the excessive amount of eruption. But what I wish to direct particular attention to is, that on the second day of eruption the blood contained corpuscles in great number resembling those in the varioles; that on the next day, when he was bled, these still continued very abundant, the eruption continuing to increase in quantity; while on the fourth day of eruption, when it was fully out, there were none to be seen, and only the normal quantity of white corpuscles or leucocytes.

The well-known fact that in malignant hæmorrhagic cases there is no remission of the primary or eruptive fever, which continues unabated until death, although the eruption is slight, little elevated, and can produce very little local irritation, also supports this view. Every severe hæmorrhagic case that I have seen might be quoted; but this point will be more fully discussed when the hæmorrhagic form is described. The duration of the primary fever before the appearance of any eruption varies from twenty-four hours to five days.

The temperature may rise at night to 40·8° (105.4° F.). I have not observed it higher than this, but my observations are very scanty.

The pulse is from 110 to 130. The headache is very intense, and frequently accompanied by delirium. We often had to use the strait-jacket at the Small-pox Hospital.

(*To be continued.*)

(b) At that time I had broken both my clinical thermometers, and there was not another one to be had in the colony.

(c) A word I invented to signify the act of running together like a rouleau of coin.—(See paper on the condition of the "Blood Corpuscles in various Races," *Proceedings* of the Anthropological Society, 1871.)

MEDICAL NOTES AND OBSERVATIONS.

By F. A. BULLEY, F.R.C.S.,
Consulting Surgeon to the Royal Berkshire Hospital, Reading.

Having on several occasions observed, while examining the bodies of persons who had died from scrofulous disease in the Hospital, a remarkable diminution in the size of the heart, and a general imperfect development of the arterial system in connexion with it, I was led to inquire as to whether any such peculiarity of the circulating apparatus had been noticed by others, and also as to how far such a pathological condition might account for the various symptoms and appearances observed in these diseases, as well as for the peculiar mode of deposition of the morbid material in the different parts and tissues of the body resulting from the tuberculous cachexia.

I find the subject has not escaped the attention of some of the most eminent and careful observers. Speaking of tubercular phthisis as one of the forms of the strumous cachexia, Sir James Clarke remarks that he regards a small heart as a predisposing cause of consumption, and considers that in the more decided cases of tuberculosis this organ will always be found to be small, and its nutrition imperfect; that its contractile power is feeble, and that the action of the vessels generally is weak, and their functions proportionally imperfect; and he believes that this state of the circulation tends to the weakness of cell-growth in the ultimate nutrition of the body. And Louis observed, in 112 cases in which death was caused by phthisis, that the heart in the majority was small, and very frequently not more than one-half or two-thirds its ordinary size. Some other observers have noticed the same circumstance.

This pathological peculiarity of the circulating apparatus in scrofulous subjects may perhaps account for what I have sometimes observed to occur after amputation of the thigh of patients labouring under incurable affections of the knee-joints. Several of such patients, although previously emaciated to the last degree, have seemed to me (apparently as a consequence of the removal of the limb) to have, after a time, completely thrown off the scrofulous disposition of the system, acquiring constitutional strength and muscular development, in which the heart has seemed to have participated (judging from the increased firmness of its beat), and to have assumed in every respect a state of perfect health, in which they have remained for many years under my observation; and I have also observed that,

under the same circumstances, in some particular cases of threatening phthisis, where the injection of tubercular matter into the pulmonary textures had seemed to have commenced, and indeed made some little progress, that even in these unpromising cases the tubercular action has appeared to have become suspended—for a time, at least—through the effects of the operation.

Doubtless much of the improvement in the health of a scrofulous patient after amputation may be attributed to the relief from pain, the cessation of profuse and debilitating discharges, and the discontinuance of the hectic and constitutional irritation which usually accompany scrofulous diseases of the joints; and such was my own view of the subject at first, until I observed that some other strumous affections of the glandular system and different joints, which had simultaneously existed in patients who had undergone amputation, became at least suspended in their progress, and in some instances, when not too far advanced, completely removed, apparently through the operation. It may possibly have happened in this way:—The process of sanguification remaining unaltered, or being perhaps a little improved by the removal of the local irritation, the same quantity of blood continues to circulate through the system as before the operation—the same quantity of blood is circulating, in fact, over a diminished area, the area vasculosa, as it has been termed, being contracted by the amputation of the limb. The effect of this proportionately increased quantity of blood in the system would be, after a time, to distend the arterial system generally; and the heart, having a larger quantity of blood circulating through its cavities, would naturally be compelled to a more vigorous muscular contraction, and thus, according to the natural law which applies to all other muscular structures, it would become more largely developed and stronger than before, and consequently would be enabled to propel the imperfectly developed fibrine and the white corpuscles (which, according to the opinion of Andral, Fricke, and others, are constantly found to be augmented in quantity in scrofulous affections) through the loops and meshes of the capillary system, where they had been previously arrested and impacted from the imperfect power of the small heart to force them through this portion of the capillary system; this infiltration of the textures being also favoured by the circumstance of the blood corpuscles generally of tuberculous subjects being, according to the researches of Mr. Ancell and others, of a less regular outline, and much more readily compressed into anomalous forms than the corpuscles of healthier blood.

The existence of the small heart would not be very difficult to make out by auscultation, the pulsations being heard distinctly only over a very limited surrounding space in the cardiac region, and they are generally quicker than natural, and feebler. If the patient is made to run or exert himself in any way during examination, the contractions become more rapid, but in no way increased in strength, and the exertion is generally followed by some amount of hurried respiration, which coincides with a remark of Sir James Clarke, that in scrofulous affections the circulation is generally feeble, as indicated by a weak pulse, cold extremities, and an inability to bear much bodily fatigue.

If the foregoing pathological circumstances in respect to tubercular disease are true, and the deductions legitimate, the principal consideration would be as to how far in the medical management of scrofulous affections in general we should endeavour by carefully regulated exercise and other appropriate means to increase the muscular tone of the weak organ—that this should be, in fact, the chief object of our remedial efforts. This would probably be most easily effected by the removal of the patient into a different atmosphere, either in a more elevated position or by the seashore, assisted by a well-regulated system of salt-water bathing, either artificially managed, or as it is practised in the different sea-bathing infirmaries, where the beneficial effects of this mode of treatment are constantly brought under our notice. And as, according to the opinion of the distinguished observers I have quoted, the blood in such cases is invariably found to be degraded in quality and endowed with a low degree of vitality, it might be useful to prescribe some of the freshly expressed vegetable juices, such as the *Galium aparinum*, the *Achillæa millefolium*, and a number of other indigenous remedies which seem to possess the property of restoring the natural healthy condition and globularity of the blood; and as, according to the same authorities, the circulating fluid is manifestly deficient in iron, the different chalybeate preparations, either simply, or in combination with iodine or cod-liver oil, or (where the bony textures are more particularly affected) with the phosphites, either of which would assist in rendering the blood a more healthy stimulus to the small and powerless heart, which I cannot help thinking is in the generality of instances the *fons et origo mali*—the hereditary pathological cause of what is termed the tubercular or scrofulous cachexia.

THE THERMAL WATERS OF EMS—THEIR PECULIARITIES AND EFFECTS.

By N. GEIRRE, M.D.,
Physician at Ems.

Although a strong suspicion might be entertained of the *oratio prodomo* nature of an article from the pen of a medical practitioner at a watering-place on the good effects of the waters, the use of which it is his peculiar province to direct, still, encouraged by many proofs of kind confidence received from eminent members of the Profession in England, I have resolved to put together a few plain words on the nature and effects of the Ems waters, and shall feel amply rewarded if my little sketch should be found of interest to any of my English colleagues who may be hesitating as to which of the German baths he ought to recommend to any of his patients.

All writers on mineral waters unanimously rank those of Ems as the very best alkaline, muriatic, gaseous, thermal waters. Their healing powers are produced by the combined physiological, chemical, and mechanical effects of the separate ingredients. The chief ones are:—

1. Bicarbonate of Soda.—The effect of which is to neutralise acidity and increase oxidation; it also keeps the blood alkaline, preserves the fibrin and the albumen fluids, promotes the conversion of albumen into protein, and increases the production of bile. (Liebig.)

2. Bicarbonate of Lime.—This alters acidity and promotes the formation of cells and phosphate of lime, a most valuable part of animal organisation. (Virchow, Liebig.)

3. Chloride of Sodium.—This assists digestion, increases the endosmotic reception of digested food into the capillary system, and preserves albumen fluids. (Liebig, Graham.)

4. Carbonic Acid.—This has a dynamic neurotic power, vivifying the circulation, strengthening the nervous system, improving the appetite, stimulating the peristaltic movement of the intestines, and enhancing the activity both of the mental and corporal power.

5. Water.—This increases the secretion of urine and of urea, dilutes bile and the contents of the bowels, diminishes uric acid, and increases appetite; in the warm state it calms the nerves of the stomach and respiratory organs, soothes cough, and promotes perspiration.

The Ems waters are also used as baths, which produce different effects by difference of temperature. The hot baths irritate, increase perspiration, and stimulate the action of the heart. The warm baths, by gently forcing blood into the external capillaries, remove internal congestion and stagnation. Lukewarm baths lower the temperature of the body, reduce the circulation, and soothe the nerves. All, of whatever kind, increase diuresis. My own experiments have not made me a believer in the absorption of solid ingredients through the skin, but have fully convinced me that the baths act only on the peripheric ends of the nerves in a mechanical way.

The douche I consider a great assistance to the baths. External douches are useful in gout, rheumatism, etc., while the internal douche gives very excellent results in a great many female complaints. Two other methods of application remain to be mentioned—(1) The inhalation of the spray in affections of the respiratory organs; and (2) the gargling for throat diseases.

Combining the effects of the single ingredients into an aggregate power, we are led to a result which long experience has sanctioned—the recommendation of the waters of Ems for a great number of diseases, especially chronic congestion, exudation, infiltration, perverted secretion, and acidity, while for acute inflammation and abnormally developed consumption they are positively injurious.

Pointing out briefly and generally the effects of these waters, I may state that they ease the cough, relieve dyspnœa, increase oxidation and diuresis, remove congestion and swelling of the mucous membrane and of the glands embedded within; they alter abnormal secretion, reduce infiltration of the cellular tissue, relieve stagnation of the portal blood and bile, neutralise acidity, increase the expulsion of urea, and prevent the forma-

tion of phosphoric and uric acid; they also dissolve calculi, remove disposition to fresh formation, improve digestion and assimilation, preserve the albumen in a fluid state, and soothe excitement in the nervous system.

These being the general effects of the waters, I proceed to notice some diseases in which their application is to be recommended:—

1. *Diseases of the Respiratory Organs.*—The entire respiratory system being lined with mucous membrane, it will be easily understood that the agency of alkaline waters must be beneficial. One very disagreeable and obstinate disease is chronic ozæna, which often taints the breath so offensively that the patient avoids all society, and even becomes disgusted with himself. Our waters, applied internally and as a nasal douche, have done excellent service in many inveterate cases. Chronic laryngitis is also a subject for our springs, and many a clergyman who has suffered from partial or total loss of voice has recovered its use by a course of Ems waters. It has been, indeed, believed that they act as a sovereign remedy against all kinds of lung diseases; but this is a great mistake. My experience has convinced me that they are very useful in cases of chronic congestion and inflammation of the bronchial tubes and lungs, and efficacious also in cases of pleuritic effusion; but they are just as injurious when breaking down of lung tissue has begun. Asthma also finds relief, when complicated with chronic bronchitis or gout.

2. *Diseases of the Alimentary Canal.*—Chronic pharyngitis, dyspepsia, gastric catarrh, ulceration of stomach, and muco-enteritis with all its troublesome symptoms, are beneficially acted on by the Ems waters; for in these diseases also the lining membrane and glands are the parts which suffer most.

3. *Diseases of other Abdominal Organs.*—Many patients suffering from catarrhal inflammation of the biliary ducts, frequently combined with jaundice and gall-stones, derive benefit from a visit to Ems. The waters reduce the thickening of the mucous membrane, expel the bile and concretions, of which also they prevent any fresh formation. Lithiasis, gravel, stone—diseases which cause the most acute suffering—I have often treated here with satisfactory results, if the concretions consisted of uric acid. Sufferers from an early stage of Bright's disease and of chronic catarrh of the bladder have not unfrequently found here permanent benefit.

4. *Diseases of the Blood.*—I do not recommend our springs in every symptom of gout, but I have found them exceedingly useful in gouty constitutions. The patients are weak, irritable, depressed, and often dyspeptic, and suffer from eructations and palpitations; the urine is acid and contains lithates; here and there swelling of the joints appears for a short time. A course of Ems waters has imparted comfort during the succeeding year to many a gouty subject, and has frequently been of good service to patients suffering from the remains of rheumatic fever—viz., stiff, swollen joints, and even valvular deposits of the heart. Small and frequently repeated doses have also proved an effective remedy against diabetes, where they diminish sugar and reduce the specific gravity. Erethic scrofula in its different forms and localisation is also an object for Ems waters, while, on the contrary, atonic scrofula finds its cure at Kreuznach.

5. *Diseases of Women.*—A very considerable majority of the visitors to Ems consists of ladies from all nations. Many of these entertain a grateful recollection of the good effects of the waters, and many, previously debarred of the hope of offspring, are indebted to our springs for the delights of maternity.

I shall not enter into a detailed description of symptoms and morbid pathology, but limit myself to the mention of those diseases of women which, according to the experience of more than a century, are partly relieved and partly cured either by a single or by a repeated course of the waters. These diseases are—cervical and vaginal leucorrhœa, uterine catarrh, deficient involution of the womb after delivery, genuine hypertrophy of womb in married but childless women, enlargement of the neck of the womb, erosion and ulceration of the os uteri, pelvic cellulitis and abscess; neuralgic, congestive, and membranous dysmenorrhœa; appearance of uterine pain in the intermenstrual period; scanty, excessive, or irregular menstruation, tendency to miscarriage, premature confinement, sterility caused by pathological change or want of vitality in the sexual organs; nor must I omit to mention eczema and pruritus vulvæ, and vaginælynia.

All these diseases are in a higher or minor degree caused by alterations of the mucous membrane and cellular tissue, wherefore it is easily understood that they yield to the treatment with alkaline muriatic waters. The uterine douche of suitable power and temperature forms the principal feature of the treatment of the diseases just mentioned.

In the course of the last winter I have made such arrangements as will enable ladies to regulate the power, duration, and temperature of the douche for themselves with the greatest ease, according to the instructions they receive from their medical adviser.

There is much more to be said about the mode of application, and I might describe more minutely and scientifically the effects of the waters and the change produced by them, but I fear I may have already tried the patience of the reader for the present, and will therefore reserve any further remark to a future opportunity.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

CASES UNDER THE CARE OF MR. ERICHSEN.

Case 1.—*Scirrhous Cancer of Skin in the Fold between the Mammæ and Sternum.*

Sarah M., aged 56, of Islington, was admitted into University College Hospital in 1872. Her family history was good. Remembered no blow or injury to part. Has suckled several children, the last nineteen years ago. About twenty years ago, when suckling a child, she noticed in the pit of the stomach, over the lower part of the sternum, a small nodule about the size of a pea, which was painful when she pressed it, but not at other times. It slowly increased, but she paid no attention to it till Christmas, 1870. By this time it was the size of a small walnut. She could take it between her fingers, but does not remember whether she could move it over the bone. It then began to be occasionally painful at night, the pains being laminating and made more severe with changes of weather. She says she sometimes thought the left breast felt heavy. Early in August last a doctor stated that it was enlargement of the bone. At the end, however, a small red spot appeared; this became black, increased in size, and the breast began to be drawn in. There was then a little discharge, and a crack formed, into which the skin was still more drawn. Now and then the axilla became painful, but it is not so now. The pain was like that of matter forming. A small nodule at the lower end appeared about three weeks ago; this is now nearly the size of a pea, and the skin over it is red. She has no cachectic look, and has a very fair amount of flesh. At the inner fold of the left breast, but rather above the corresponding fold in the opposite breast, is a crack about two inches long and about three-eighths of an inch deep. Into this the skin seems drawn, so as to cause a puckering of the skin to its inner side, and to draw the left breast over it, the skin of which is also puckered at the lower and inner part. The fissure is covered with a brownish scab of dry discharge. The edge of the fissure is inverted, and the skin rather red, but not shiny. The edge is hard, and this hardness extends outwards for about half an inch, ending in an irregular nodular border. In the skin about half an inch below the fissure is a slightly red somewhat prominent hard nodule; it is about the size of a pea, and quite movable. Deeply all round, to the extent of an inch or two inches, are hard nodules which cannot be seen, but are felt to be defined. They appear to be fixed below to the deep tissues, but the skin moves over them. The largest of these extends upwards and outwards towards the left breast. The nodules do not seem to extend below the ensiform cartilage. The breasts have much the same size and shape, except that the inner border of the left one is rather folded in. On the left breast, running upwards and inwards from the nipple, is a large vein, which she says is sometimes very full and painful. There are some enlarged veins on the other breast, but there are none in the neighbourhood of the ulcer. The breasts are full and pendulous. No enlarged glands can be felt in the axilla or above the clavicle.

January 31.—Mr. Erichsen removed a semilunar piece from between the breasts, carrying the incision close to the left breast. It was attached closely to the sternum cartilages and intercostal spaces, and had to be scraped off with the handle of the scalpel. The middle of the incision was brought together by two harelip pins. Microscopic examination showed the growth to have the ordinary characters of scirrhous cancer.

February 2.—There is no discharge from the wound; the lips in immediate vicinity of the pins seem to have united. The wound is dressed merely with lint soaked in carbolic water.

5th.—Temperature 100·1° at 11.30. Tongue still furred. The pins were taken out yesterday, and strapping applied. The pain in her left axilla is less.

6th.—Temperature 99·6° at 11.30 a.m. Tongue moist, slightly furred. The wound gapes very much, and is not discharging much.

9th.—Temperature 99·6° at noon. The discharge from the wound, which is pretty abundant, collects in the chasm, for the edges cannot be brought together by an interval of an inch by the strapping. The wound was dressed with red wash. The granulations are abundant and healthy. There are some circular sloughs and a few bullæ where the pins were.

March 1.—The edges of the wound all round are quite quiet. The wound is granulating from the bottom.

19th.—Complains of a shooting pain in right breast. No hard nodules can be felt in either breast. Wound looks quite healthy. Patient discharged.

Case 2.—Parotid Tumour: Mixed Myxoma and Enchondroma—Operation for Removal of Growth—Recovery.

Henry H., aged 45, a tailor, residing in Essex, was admitted into the Hospital in February of this year. He stated that he had always enjoyed good general health. About six years ago a lump about the size of a pea formed over the left parotid region. It was movable over the parts beneath to a slight extent, and the skin was movable over it. It gave him no pain, and grew slowly. About twelve months after it first appeared, when it had reached about the size of a walnut, he went under the care of a quack, who applied to it a black burning liquid, which did not fume, but which, if applied to a piece of linen, turned it black and burned a hole in it. (This was probably sulphuric acid.) This made a sore, from which the quack "pulled the tumour out." Into the hole left he used occasionally to pour some of the burning liquid. Even while under this treatment the tumour continued to grow, and the patient getting tired of it, left off seeing the quack. The sore healed, and from that time to this he has had no treatment of any kind. The tumour has been steadily growing. It has given him no pain. He has not suffered in general health, or lost flesh. He thinks it has been growing more rapidly lately. Being desirous of succeeding his father in the office of parish clerk, and the parishioners objecting to his appearance, he has come in to have the growth removed.

Present State.—The patient is a thin but healthy-looking man. In the left parotid region is a large tumour of irregular shape, about the size of a fist. It reaches from the ear to the angle of the jaw. The tragus is slightly displaced by the growth, and the lobule is situated over its upper part. The angle of the jaw can be clearly felt, but the ramus can only be reached by deep and forcible pressure. It is irregular in shape, consisting of three chief lobes, the largest being lowest down, and the smallest on the face. These lobes are again subdivided into lobules, especially at the upper and anterior parts. The lowest lobe is smoother than the others. In the centre is a deep pit, with the cicatrix of the former operation. The tumour measures from the ear towards the angle of the jaw six inches, and in a line transverse to this five inches. The skin is tightly stretched over the growth, especially at the lower part; but it is nowhere adherent except at the cicatrix in the centre. The skin over the lower part is of a pink colour, and in it are innumerable small veins ramifying. The tumour varies much in consistence. At its upper part it is tolerably firm, and has on its surface some small nodules, about as big as large peas, which are of cartilaginous hardness. At its lower part it is so soft and elastic as almost to fluctuate. The whole mass is freely movable to the extent of nearly one inch over the deep parts. It gives him no pain when manipulated. The functions of the facial nerve are not interfered with. It does not interfere with mastication. He has no dryness of the mouth during mastication.

February 28.—Mr. Erichsen removed the tumour. One incision was made downwards from the malar bone over the anterior part of the tumour; from this another was carried backwards towards the ear; the flaps were dissected up, and the tumour easily enucleated. It was necessary to remove a small piece of skin which had become adherent to the tumour. There was little bleeding.

29th.—The end of the upper flap of skin, which was stitched in the centre, is darkish in colour. The other parts of both flaps are rather red and swollen. There is slight bagging under the lower flap, probably from slight oozing of blood. Spoon diet.

March 1.—Temperature at 10.30 a.m. 102·8°. The central part of the skin flaps is becoming gangrenous. The sutures attaching it to the other parts have been removed.

9th.—Last ligature came away this morning. There is a little paralysis of the left side of his face; his upper lip drops a little on that side, and on attempting to shut his left eye the lids do not come together, but he turns up his eyeball.

30th.—Patient discharged with very slight wound, and swelling almost disappeared.

The tumour when removed was about as big as a fist. It was lobulated on the surface, and of varying consistence. Some parts were soft and gelatinous; others of the consistence of cartilage. It was of a delicate pinkish colour, with white streaks running through it. On scraping, it yielded a sort of mucous fluid, but this did not seem to be coagulated by acetic acid. On section, the tumour was found by Mr. Marcus Beck to be an ordinary parotid tumour. In parts its structure resembled myxoma, having striated cells in a homogeneous matrix. In other parts cartilage cells were found, and again, in others, patches of rounded cells in an oval space, resembling gland tissue. It was moderately vascular.

ST. GEORGE'S HOSPITAL.

REMARKS ON INFANTILE DIARRHŒA.

(By Dr. W. HOWSHIP DICKINSON.)

Diarrhœa, particularly in the autumnal months, so largely contributes to the mortality of early childhood that it can scarcely be too much considered by the physician. Depending, as it generally does, on removable causes, and for the most part unaccompanied by lesions other than of a transient kind, it is an affection well fitted to declare the efficacy of our means of prevention and cure.

Diarrhœa presents several phases in childhood, which have been described as simple, catarrhal, choleraic, inflammatory, and dysenteric. These, however, differ in severity and duration, rather than in kind, and pass into each other so as to be practically inseparable. Simple diarrhœa, or mere excess of natural action, when sudden, profuse, and frequent, becomes choleraic. With the addition of mucus from the large intestine—an addition scarcely to be avoided if the diarrhœa last—it becomes inflammatory, and, the irritation continuing, soon dysenteric. Without, therefore, much reference to hard lines of demarcation, we may be guided in the management of each case by the cause of the attack, its duration, and the nature of the discharges.

Diarrhœa continually occurs in infancy in connexion with improper food. Farinaceous food, which is often given (most unwisely) almost as soon as the child can swallow, is a fruitful cause of intestinal disturbance. The use of sour milk is another cause, especially among the poor. I once tested with litmus-paper the contents of a number of feeding-bottles brought one summer's day to the Hospital for Sick Children. In nearly half the contents gave an acid reaction, and in a considerable proportion were offensively sour.

When the child is supplied with the human aliment, a cause of disturbance may be found in its unhealthy quality—such, for example, as sometimes belongs to the milk of women in whom the catamenia have returned.

Foul air and contaminated water, inevitable to poverty as overcrowding and filth, are causes of diarrhœa in an obstinate form. The rickety condition, again, is so often associated with looseness of the bowels that diarrhœa may be looked upon as part of the general disease. From the variety of the circumstances which give rise to the complaint in question, it is obvious that in each case the cause of the disorder must be carefully sought out—an inquiry sometimes of difficulty.

Diarrhœa, even in its recent or acute stage, may vary almost infinitely in degree. It may occur without pain or trouble, as a slight increase in quantity and loss of consistence in the otherwise natural stools; or it may take the shape of violent and frequent purging, the bowels acting, with pain and spasmodic movements, perhaps several times in an hour, liquid matter being squirted out with explosive violence. The motions under such conditions are green, becoming yellow with recovery. They sometimes, in the later stages, are spotted or streaked with blood and mixed with mucus. When the attack is acute, there is often much sickness. Febrile symptoms are not prominent, though there is much thirst, with desire for cold water. Prostration ensues, sometimes with startling

rapidity, and may in a few hours become dangerous. The extremities become cold and shrunken; the eyes hollow; the features drawn, sharp, and cadaverous; the pulse rapid, feeble, and at last imperceptible. In fatal cases it is not unusual for the purging to cease for an hour or so before death.

The disorder—not to be despised even in its milder forms—must be met, where practicable, by the removal of its cause; in view of which, it may be laid down as a general rule that no farinaceous food should be given until teeth have appeared. Secondly, should artificial food be needed, lime-water should be mixed with the milk, in the proportion of a table-spoonful to the feeding-bottle, which holds about six ounces. Lime-water, beyond its nutritive value, keeps the milk from sourness, and is of general use when the wetnurse is a cow.

If the attack of diarrhœa be slight, it appears often to suffice for its own cure; or it may be sufficient to give at its outset a simple aperient—rhubarb, with soda or sulphate of magnesia, or a dose of castor oil. Should there be much sickness, it may be necessary to suspend all milk for some hours, giving water or barley-water, and possibly afterwards some thin animal broth.

Should the diarrhœa continue, and especially if the motions are mucous, no remedy can be compared in efficacy to an emulsion of castor oil with laudanum—for a child a year old five minims of castor oil with from one-third to one-half a minim of laudanum, with sugar, gum, and dill-water—given after every motion, providing that the doses should be at least two hours apart, and that the effect of the opium should be carefully watched. For diarrhœa with mucus, or mucus and blood, in the stools, this remedy, with appropriate diet, is so generally successful that it is seldom that any other is needed. Should it fail, the opium may be gradually increased, and, after a time, given no longer with castor oil, but with astringents, such as logwood or catechu; or the compound kino-powder may be used, cautiously, in consequence of its proportion of opium, as one of the most effective shapes in which the narcotic can be associated with a vegetable astringent. Finally, other remedies having failed, and the diarrhœa become chronic under their use, acetate of lead and sulphate of copper, both with opium, may be employed. With regard to chalk and sulphuric acid—popular remedies which, perhaps, should not be passed without mention—I have not found either to be so useful in childhood as with patients of riper years.

In almost every case of severe diarrhœa the failure of circulation and tendency to collapse are such that alcoholic stimulants are imperatively called for. Brandy, which mixes well with milk, does best. Ten, twenty, or thirty drops, sufficiently diluted, may be given at intervals of an hour, or less often. It is probably of no less importance to provide, as the urgent thirst suggests, a sufficiency of some aqueous drink; it is difficult not to connect the collapse and shrinking of the soft parts with the drain of fluid and dehydration of the body.

The chronic varieties of diarrhœa often take their rise in the simple or catarrhal form, the chronicity arriving by imperceptible steps. We have to deal now, not only with the diarrhœa, but with the wasting exhaustion and ill-nutrition which it has caused. Hence the diet, always in diarrhœa a prime consideration, must be not only unirritating, but especially nutritious. Nothing answers so well as a somewhat repulsive fare—raw meat,—not repulsive, however, to the children themselves, who will often fall upon it with carnivorous avidity. In the preparation of this dainty dish some care is required. A piece of the lean of mutton should be minced, pounded to a pulp, and all fibrous threads carefully removed. To ensure its fine division and complete separation from indigestible fibre, it is useful to have it rubbed through a sieve. The pulp, duly mixed with bread-crumbs and salt, may be given in a daily quantity of from one to three ounces, according to the age of the child. This is particularly called for when the motions contain a large proportion of unaltered food. Under this invaluable remedy, the state of the bowels and of the general health often improves at once and together. Occasionally in chronic diarrhœa I have seen benefit from the extract of malt.

As to pharmaceutical remedies, two (beside those which I have already referred to) deserve mention. One is ipecacuan, in doses gradually increased from a quarter of a grain, suspended in the castor oil and laudanum mixture, when the symptoms are dysenteric; the other is creasote, which often proves of use, as an addition to other treatment, when the motions are frothy or peculiarly fetid. Here, as in other instances, the treatment will be guided by the character of the evacuations.

I need scarcely allude to the use of opium in the shape of enemata—a familiar and excellent mode of using the drug.

Change of air, as a last resource, often proves of immediate service. Even though it do good in no other way, it may take the patient out of the range of some evil influence in air or water which is the undiscovered cause of the disease.

ST. PETER'S HOSPITAL.

STONE IN THE BLADDER—LITHOTOMY—DEATH ONE MONTH AFTER THE OPERATION.

(Under the care of Mr. TEEVAN.)

M. C., LABOURER, aged 66, from Ospringe, Kent, was admitted into the Hospital on April 15, 1867, having been sent up to Mr. Teevan by Mr. Watson, then of Faversham.

History.—For the last fifteen years has passed red gravel very frequently. Nearly as far back he found three small stones in his *pot-de-chambre* one day after suffering much pain in urinating. Six years ago he began to suffer regularly every day from frequent micturition, and pain at the end of the penis when urinating. Has passed blood from time to time. For the past two years he has been confined to his bed through his great suffering.

Condition on Admission.—Is a tall, emaciated, large-boned man, once evidently of powerful frame. Has lost all his teeth, and looks much older than he really is, but attributes this latter fact to the privations he has undergone. Has to make water every half-hour both night and day. The act of urinating is always accompanied by great tenesmus, and his condition is one of almost continual suffering. Frequently passes blood. Much pus and albumen in urine.

April 15.—To-day Mr. Teevan passed a lithotrite, and found the stone too large to crush. Pulse 120. Tongue rather dry.

18th.—At 3 p.m. the patient was put under the influence of chloroform by Dr. Aspray. Mr. Teevan passed a rectangular staff, and then gave it to Mr. Walter Coulson to hold. A free incision was made into the bladder, and an oxalate of lime calculus, weighing two ounces, and measuring four inches and three-quarters in circumference, was extracted without any difficulty. But little blood was lost at the operation. The patient was ordered tinct. opii ℥xx. at bedtime, and a pint of port wine daily.

19th.—The pulse, which had risen to 140 last night, has fallen to 80 this morning. The patient feels much better, and is free from all pain. Urine passes freely through the wound, which looks very healthy. From this date the patient went on very well.

On May 7 the wound looked healthy, and was fast contracting; urine was also beginning to come through the penis. Unfortunately, however, the weather, which had hitherto been temperate, with cool breezes, became very hot, and the patient lost the good appetite he had enjoyed since the operation, and began to lose ground rapidly each day.

On the 15th he sank from the combined effects of exhaustion and diarrhœa, the wound, which was nearly closed, looking healthy to the last.

Post-mortem twenty-four hours after death.—Bladder greatly contracted and very thickened. The mucous membrane is absolutely free from any ulceration or denudation. The wound just admits a quill-pen. Right kidney is only a large sac full of urine; left one enlarged, but tolerably healthy. Heart not in any way diseased.

Mr. Teevan remarked that all his cases of lithotomy, seventeen in number, had, with this single exception, made good recoveries, notwithstanding that many of them were of a very aggravated description. In the present instance the patient had died of sheer exhaustion, following loss of appetite from a sudden rise in the temperature of the weather, and it showed how simple a cause might alter the final result in a feeble old man, when everything was apparently going on well. He always made it a rule to open the bladder by an incision sufficiently free to permit the finger to slip in without the slightest force being used, and, when he had grasped the stone, he introduced a probe-pointed bistoury to cut outwards and downwards till it glided out without any traction being exerted. It was thus clear that his incision passed completely through the prostate into the substance of the bladder; and it was to this method of operating that he attributed all his success. Now, this manner of operating was entirely opposed to the rules laid down by English teachers of Surgery, who advocated, erroneously, that the incision ought never to go beyond the capsule of the prostate.

for, if it did, the patient would probably die of infiltration of urine; and they recommended, if it were necessary to enlarge the incision to get out the stone, it was to be done by dilatation. Professor Ellis had, many years ago, conclusively proved that there was no such thing as dilatation of the prostate, and that those surgeons who professed to extract a stone by dilating the prostate, really did so by tearing it to pieces. Mr. Teevan stated that those who operated by means of a limited incision, and the subsequent so-called process of dilatation (rupture), did so upon the supposition, which was purely imaginary, that if they cut through the deep pelvic fascia the patient would get infiltration of uriue. Now, infiltration of urine after lithotomy was a physieal impossibility, for, so long as the urine had a free escape, it could not be infiltrated into the tissues; and those so-called cases of infiltration of urine were really cases of cellulitis in bad constitutions, caused by the surgeons smashing the prostate in the pseudo-process of dilatation. But after all, *the proof* of the fallaciousness of the present method of operating was to be found in results. Those surgeons who operated in accordance with all the known laws of anatomy, physiology, and pathology, and *cut* the stone out of the bladder, had usually a brilliant success, whilst those who preferred to *tear* out a calculus had but indifferent results.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
,, ,,	*Six* ,,	0 14 0
The Colonies and the United States	*Twelve* ,,	1 10 0
,, ,,	*Six* ,,	0 15 0
India	*Twelve* ,,	1 15 0
,,	*Six* ,,	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, SEPTEMBER 7, 1872.

MEDICINE AND PHYSIOLOGY.

The relation of Physiology to Practical Medicine is a subject which has been brought prominently into notice by the address delivered by Dr. Burdon-Sanderson, as President of the subsection Anatomy and Physiology, at the recent meeting of the British Association. That address may be considered as the first authoritative and public announcement made in this country that it is the aim and intention of the physiological school of thought and work to separate themselves more and more from the school of Practical Medicine; no longer to consider themselves auxiliary to it, except as other sciences—for instance, chemistry and botany—may be considered auxiliary to it, but to win a place in public estimation for their science as one, like astronomy or geology, which shall be cultivated for its own sake; and which, although it is very unlikely to bring any tangible or practical gain to its oultivators, is still, as education and progress go on, likely to attract a snfficient amount of the intelligent and energetic English to regain the place which this country formerly held in the vanguard of biological research. Dr. Burdon-Sanderson, indeed, allows that, for himself, he is inclined to believe that the relation between Physiology and Medicine is likely to be an enduring one, on the general ground "that any science is likely to be studied with more earnestness by those who have to practice an art founded upon it than by others;" and also because "the kind of education which a man requires in order to be a physiologist is best obtained through a course of medical study"—that is, because both the physiologist and the medical man require some knowledge of anatomy and chemistry, and this knowledge is at present most easily obtained at the medical schools. But that this is not the most perfect or desirable condition, in his opinion, is proved by the remainder of his address, which is intended to establish the point that the existing state of things is the very reason why this country has fallen behind in the race of physiological experiment, and that, to use his own words, "as regards English schools, an ordinary medical course is not a very good preparation for scientific work."

Whether the contemplated divorce between Physiology and Practical Medicine be for the benefit of the former, is even, we think, yet an open question. The great triumphs in Physiology have been won by those who instituted their experiments with the hope of discoveries which would enable them to alleviate human suffering and cure disease; and it may be a question whether, amongst so practical a race as the English, sufficient recruits will be found to pursue a science for its own sake, without any ulterior hope or intention, which has only attraction for a certain and limited class of minds. But the question, whether Practical Medicine will suffer from such a separation, is one of much greater importance to us as a profession, and must affect us closely. As it is, we think we may look at the line which the physiologists are taking without any dismay. We would not for one moment be supposed to underrate the services of Physiology to Medicine. The great discovery of the circulation of the blood; the ascertained facts in relation to absorption, secretion, nutrition; the functions of the brain and nerves and respiration; the microscopic appearances of the tissues and products of the human body in health and disease—are all parts of the very foundations of modern Medicine. But when we come to examine into the influence of physiological theories—the opinions of physiologists, based, it may be, on experiments on the lower animals in unnatural conditions, or upon theories of health and disease, derived from the study of the former rather than of the latter—we believe that we shall find that such influence has been by no means an unmixed benefit. We can quite endorse the confession of Dr. Sanderson—"Physiologists are not yet in a position to advise the doctors." He goes on to say—"They (the doctors) resting on the more reliable teaching of experience, are quite willing to do without us."

It is the fact that the teaching of experience is more reliable than physiological theories and opinions—which we think is especially taught by the history of modern Medicine. The history of the advance of the cure of disease is the history of empiricism in the best sense of that much-abused word. The history of retrogression in the art of curing disease is that of so-called physiological schools of Medicine. The school of Physiological Medicine, of which the late Dr. Todd(a) may be considered the representative, introduced, in opposition to all accumulated experience, that routine practice of over-stimulation in acute disease from which the Profession is only now freeing itself. Physiological theory has been one great agent in practically depriving us of the most powerful of our weapons for the subjugation of disease—the abstraction of blood under suitable conditions. Physiological theory, based on experiments on dogs, wishes us to believe that

(a) See a very able review on the "Abuse of Alcohol in the Treatment of Acute Disease," republished from the *Dublin Quarterly Journal of Medical Science*, by T. P. Heslop, M.D., pp. 39. J. and A. Churchill. 1872.

mercury does not excite a flow of bile; but here the common sense of the Profession, educated by experience, has refused to be led by physiological theory. Physiological theory, observing the effects of mercury on animals in health, has led to the partial abandonment of mercury in the cure of syphilis, because the drug in a healthy animal will produce disease of the bones. Whereas the experience of Lee, Langston Parker, to say nothing of Ricord and older writers, would recount numberless cases where syphilitic nodes have disappeared as if by charm under the use of the calomel vapour-bath or of mercury introduced in some other way. Physiological theory has asserted that because antiphlogistic treatment depresses and reduces vital and nervous power in health, therefore it must necessarily do so in disease—an assertion refuted by the experience of all clinical observers, not of the physiological school, since the time of Hippocrates.

That the progress of physiological research may be of enormous use to practical Medicine we most firmly believe, and for that reason we hope that, although the physiologists may separate themselves from the profession of Medicine, the cultivators of Medicine will never fail to watch narrowly the progress of Physiology, and not only to forward but to apply it as far as in them lies. But physiological theory, and much of so-called physiological experiment, are not physiological progress. Dr. Burdon-Sanderson hopes that education in Physiology will tend to make the public more ready to take the advice of the doctor in the regulation of their life, and less credulous about the efficacy of drugs. In the sense in which Dr. Sanderson expressed this hope we most cordially join in it. But we must remind physiologists that all the knowledge that is necessary for the ordinary regulation of life may be summed up in a comparatively very small space. Modern physiological science has taught us little more than the necessity for pure air, water, and food, good clothing and shelter, moderation in eating and drinking, and the regulation of the passions —things, in fact, which are as old as the Pentateuch. If we go beyond these, we get into the domain of Practical Medicine. We may safely assert that all the experiments made on luckless animals since the time of Majendie to the present, in France, America, Germany, and England, have not prolonged one tithe of human life, or diminished one tithe of the human suffering, that have been prolonged and diminished by the discovery and use of Jesuits' bark and cod-liver oil. Until modern physiologists, therefore, can do more for modern physicians than they have lately accomplished, we cannot blame the latter if, in Dr. Sanderson's phrase, "they rest on the more reliable teaching of experience, and are quite willing to do without us."

CORPSE WORSHIP.

Most of our readers remember the description which the veracious Captain Lemuel Gulliver gives, in his "Voyage to Laputa and Balnibarbi" of the Struldbrugs—a kind of personage in that remote part of the world who lived for ever. These immortals were very mouldy and tiresome, and their constant wish was to die. They spoke an obsolete dialect, and could not learn the modern vernacular; they were deaf and blind, had no affection for remote descendants, and, in a word, were a good deal in the way.

It would be pretty much the same if nature, or religion, or custom, compelled us to preserve and take care of the bodies of our ancestors. Suppose that in every house there were a dozen or twenty mummified corpses—(stuffed birds are bad enough)—which had to be dusted and varnished and kept free from moth and dirt! What a tax we should think it! Suppose a widower who takes a new wife (for the sake of his dear children) had to provide a handsome cabinet in which to keep the mummy of his first love! How we should pray for some fresh legislation, or revelation, or revolution, which should enable us to burn, or bury, or otherwise hide our dead out of our sight! How we should argue that, as life is extinct, and the soul is in the hands of God, so the body should be left to resolve itself into its elements, and earth return to earth, ashes to ashes, and dust to dust! How we should say that to leave human remains exposed in their decay is an act of sacrilege, and that when the generation has passed away which knew them in life the dead could not expect especial reverence!

The solemn truth is, that death is a dissolution, decay, and disfigurement of the body, which it is an act of charity to hide until the operation of natural forces has rendered the human form indistinguishable, and therefore no longer subject to insult. The morbidly affectionate, who think they cannot resign themselves to the laws of nature; and the rich, who think that their gold can buy a remedy against corruption, and who attempt to secure especial exemption from decay, do but expose their bodies to contemptuous neglect when the mourners have followed those they mourn, and riches have passed into other hands. Mr. Edward Beckett Denison has one or two good remarks on this matter in his memoir of Bishop Lonsdale, some time Principal of King's College, London. He remarks that we do not commit the departed, but only his *body*, to the ground; and he denounces the miserable and unchristian superstition of corpse worship.

We are led to these remarks by noticing the tendency there is to revive corpse worship. We read in the *Times* of Saturday of a very offensive instance in America. We are told that "Mrs. Mary Owens, milliner, having ornamented her lot in the cemetery, and erected a beautiful monument thereon, concluded to remove to it the remains of her mother, Mrs. Anna Rees. Accordingly she had the grave opened. On attempting to raise the coffin, which was but slightly decayed, it was found to be very heavy, and the front part of the lid was removed, so as to make a partial examination. The face was round and full, and almost as natural as when placed in the coffin ten years before. It was determined to make a full examination, and on Monday last relatives, with Dr. Ham, the editor of this paper, and one or two others, proceeded to the cemetery, raised the coffin, and removed the entire lid, when, to their amazement, the whole body was found to be in a perfect state of preservation, and almost as natural in appearance as when first buried; not the least visible diminution in size had taken place, while the weight had considerably increased. Not the least unpleasant odour could be detected, nor was there anything to cause a repulsive feeling, but, on the contrary, the appearance was more like that of a quiet sleep. The doctor made several incisions in as many parts of the body, and thus found that petrification had not taken place, but that the flesh had changed to *adipocere*."

Thus the corpse worship in this case ended in the gratification of repulsive curiosity and the mutilation of the poor woman, whom they would not let rest in her grave after ten years burial.

Anyone who has visited the cemetery of Père-la-Chaise must have noticed the little chapels raised over some graves; and how some that are new bear the marks of care and affection, whilst many older ones are in a state of great dilapidation—bouquets of artificial flowers dropping in decay, and candlesticks rusty with verdigris. In some of the suburban London cemeteries similar chapels may be seen with plate-glass doors, and showing in the interior a newly polished and sumptuous oak coffin with polished brass ornaments. During the life of the widower all this will no doubt be well kept up, and so will his own coffin be cared for; but when it comes to grandchildren, grandnephews, or cousins, our experience is that very few people are to be found who will dip their hands into their pockets for the tomb of a relative they never saw.

Corpse worship always leads to corpse sacrilege; and the more care people take to preserve bodies from decay, the more sure are they to be exposed to insult hereafter, to adorn perhaps the museums of some now barbarous island.

THE WEEK.

TOPICS OF THE DAY.

THE daily papers have recently contained statements of the draining operations which are now being carried on at Windsor Castle and town. Extensive works are in progress for draining Windsor Castle and Frogmore House. The sewage, which is to be separated from the rainfall, will be conveyed from the Castle, the buildings in the Home Park, and Frogmore House to a receptacle at the Royal Dairy, Frogmore, and thence for about a mile across the Home Park and Manor Farm to the pumping-station at Old Windsor, where it will be received in the straining-chamber, and thence pumped through an iron pipe to the irrigation plot—a field of fifteen acres, situated upon the Ham at Old Windsor. But the land to which it is distributed is in close proximity to the Thames, and is liable to frequent inundation. It is described as poor, gravelly, and damp. We may well ask if the choice of this site has been made with the intention of seeming to comply with the provisions of the Thames Conservancy Act. To pour the sewage of a vast establishment on a plot of ground close to the Thames, and subject to constant inundation, is, we should think, only one way of polluting the river. The townspeople of Windsor have rejected a scheme for utilising their sewage by irrigation because of its expense, and are now in negotiation with a company who undertake to precipitate it. The precipitation of sewage we believe to be a delusion and a snare; and as the precipitating works are to be close to the works connected with the Castle sewage on the Ham at Old Windsor, we think that the residents at Old Windsor will not have much reason to congratulate themselves.

The University of Munich have conferred the honorary degree of Doctor of Medicine on Mr. Simon, the Medical Adviser of the Local Government Board, "*Propter præclarissima de sanitate publicâ tuendâ atque augendâ merita.*"

Surgeon-Major De Renzy, writing to the *Times*, attributes the recent outbreak of cholera in Meean Meer to the use of contaminated well-water. He states that when Surgeon Skeen was at that station, in medical charge of a European regiment, he had great difficulty in preventing the use of the well water for drinking purposes, although he was thoroughly impressed himself, and warned the men, as to the danger of so doing. He used to examine the water in the men's jars, testing it with nitrate of silver, to see whether the skins had been filled from the wells or canal. He found them frequently filled from the former, and it was only by unceasing watchfulness that mischief was prevented.

The letter of the Calcutta correspondent of the *Times* contains the following tribute to the value of the English teaching of Medicine, both as a great means of scientific enlightenment and a civilising agent in that country:—

"A report on the medical schools of Bengal has just been issued, with a brief summary of their history. The crisis was some six-and-thirty or seven-and-thirty years ago, when Lord William Bentinck decided that the instruction was to be in the English tongue. A severe battle had been fought between the Orientalists (led by Dr. Lytler, Superintendent of the Native Medical Institution) and the Anglicists (led by Dr. Duff, the well-known Free Church Missionary). I was led by this report into some of the pamphlets on the subject, and was amazed at the clearness and tenacity with which that undaunted missionary held to his point. 'You will offend some of the best men in the country,' his opponents said. 'We will lay the foundations of science,' Dr. Duff replied; 'which we never shall lay till the myths and charms of Orientalism are cut away, and the knowledge of Europe opened up to India in the English tongue.' Never was scientific prophecy more literally verified. Medical science alone is effecting a revolution in India. Every day it is making fresh progress, fresh converts and disciples. There are no more cheering reports than those of the Medical Colleges, and we may date it all to that victory won a generation ago under Lord William Bentinck. If Medicine had been taught in the Oriental languages, it would to this day have been a mass of charms and jargon. Now it is a science, and some native practitioners are among the most eminent of its votaries."

A telegram from our own correspondent with the "Southern Army" engaged in the Autumn Manœuvres, dated Semley Railway Station, September 5, 11 a.m., runs thus:—"Volunteers healthy; food and water good and plentiful; many regulars sick."

At a Court of the Governors of Guy's Hospital, held on September 4, Mr. Arthur E. Durham was appointed Surgeon to the Hospital, in the place of the late Mr. Poland.

SANITARY CONDITION OF ST. GILES'S.

DR. ROSS, in his report on the St. Giles's district during the year 1871, gives some very interesting details as to the health and sanitary condition of the district. The mean rate of population to houses in St. Giles's district is 11·76 per house. This is much larger than the rate for the whole metropolis, which is 7·79, whilst for England and Wales it is 5·3. The following remarks on the mortality amongst infants are of much interest:—

"The reiteration of the fact, year after year, of the excessive mortality among infants in this district, fulfils but imperfectly the duties of a Medical Officer of Health, and almost forces upon him the consideration of the causes of that mortality. These are various, but the chief of them may be ranged under four heads.

"*Causes of Infant Mortality.*—First, degeneracy of constitution at birth, arising either from natural parental defects or from syphilis; 2nd, zymotic diseases; 3rd, mal-nutrition, from 'want of breast-milk,' or from insufficient or improper food; 4th, neglect or violence; 5th, pulmonary affections.

"The first, second, and third causes come immediately within the sphere of duty of the Medical Officer of Health, who is empowered to advise your Board concerning them, and to deal with them under various Acts of Parliament. The fourth cause is less subject to his intervention, and the events are usually registered as 'suffocated in bed,' 'suffocated in the mother's arms,' 'convulsions'; or they become the subject of legal inquiry.

"*Syphilis.*—With reference to the first cause, and more particularly syphilitic poisoning, it is certain that a large amount of infantile mortality is caused by it, notwithstanding the fact that only a small comparative number of deaths (seven) among children is registered this year under that head. One reason of this is that medical practitioners do not like to write such a designation on the face of a certificate that is put into the hands of parents for transmission to the Registrar. This disinclination operates in other cases as well as in syphilis, and should be obviated under a good system of registration.

"*Zymotic Diseases.*—Secondly, zymotic diseases carried off ninety-four children under one year of age. . . . . The only one that requires notice now is diarrhœa; this affection having caused a large number of deaths. As nearly the whole of these deaths occurred in the months of July, August, and September, it is obvious that the temperature, and other associated atmospheric conditions, had an important influence in producing them. This high temperature, however, operates less prejudicially in the open air than in the close and vitiated atmosphere of the dwelling-houses.

"*Mal-nutrition.*—Thirdly, mal-nutrition, from 'want of breast-milk,' and from improper artificial feeding, is undoubtedly another cause of infant mortality. The 'want of breast-milk' indicates a fault in the mother, either of structure, health, or secretory function, or possibly of neglect and its consequence,—inadequate nourishment. These matters come more particularly under the care and direction of the personal medical attendant."

After some remarks on milk, and an analysis of eighteen specimens obtained from retail shops in the district, Dr. Ross proceeds to show how injurious diluted milk is to infant life. The following account of the composition of various farinaceous foods is instructive, as are the practical remarks appended. Dr. Ross's report is an able production, and contains a large mass of useful information.

"*Dr. Ridge's Food* contains *wheat*-starch granules, with small

portion of cellulose. It is said to be partially cooked before sale, but the wheat granules are not perceptibly injured.

"*Brown and Polson's* is composed of *Indian maize*-starch granules, with some cellulose.

"*Colman's British Corn Flour* is composed of *rice*-starch. There was no 'British corn' of any sort in the specimen I examined. I have noticed that in some advertisements the manufacturer states that it is made from rice; but it is not so stated on the wrappers, and the public are consequently likely to be deceived. The article is, however, very carefully prepared.

"*Robinson and Belleville's Prepared Groats* contain *oat*-starch, both large and small (the large ones like wheat, but not apparently compound), cellulose, and portions of inner lining of husk.

"*Robinson and Belleville's Prepared Barley* contains *barley*-starch, with cellulose in good proportion.

"*Oatmeal*—(one pennyworth, bought at a retail shop)—adulterated with about one-fifth of barley-meal rubble; it also contained cellulose, with inner and outer husk; in fact, it was simply the oatmeal ground and adulterated.

"*Ground rice* contained rice-starch and cellulose, but more cellulose than rice-starch.

"Several specimens of wheat-flour were examined: all were found genuine.

"Farina or starch is the chief ingredient of these various descriptions of food; all should therefore be mixed with milk. The nitrogenous elements, as well as the potash—salts in which the wheat-flour is deficient—would thus be provided. Colman's 'British Corn Flour' could not support life without milk. The oatmeal (bought at a shop, and such as is ordinarily made into gruel by poor persons to feed their infants) containing, as it does, a large proportion of coarse husk, would be sure to irritate the bowels, and cause diarrhœa. Yet it is supposed to be 'soothing' in such cases. The barley, which is commonly used to adulterate oatmeal, is less digestible and nutritious than oatmeal. It contains less oil and protein, about half the quantity of lime, less phosphoric acid, potash, and soda, and about ten times the quantity of silica. It is therefore less calculated to make bone and tissue, and is more irritating to the digestive organs, particularly those of an infant. I do not, however, intend to enter upon these minute and yet most important points, as to the suitability of food for infants. I have said enough to indicate how it is possible to heap up heavy bills of mortality through an improper and insufficient dietary."

PARIS UNDER THE SIEGE.

As time progresses, further revelations of the horrible condition of Paris during the siege are made. The *Bulletin de Statisque Municipale* has reached the month of December, 1870, the fourth of the siege. It states that the amount of deaths was fearful—12,885, being treble the usual figure. Small-pox alone carried off 1695 victims; typhus fever, 843; bronchitis, 835; pulmonary consumption, 1419; pneumonia, 700; enteritis, 661; wounds received in battle, 1058. Of cholera there were only four cases. The arrondissement in which the mortality was greatest, in proportion to the inhabitants, was the 5th (Panthéon), 17 per 10,000; next in order were the 8th (Elysée) and 9th (Opéra)—nearly 14 per 10,000. The *Bulletin* is wanting in several interesting details, owing to the destruction of the register by the Commune. Thus, for instance, the deaths at different ages have had to be omitted, and the proportions per quarter have been reduced to those by arrondissements. Again, the deaths that occurred in the hospitals swell the regular figure of those municipal divisions in which those establishments lie, it having been impossible to refer each individual to his real domicile. This irregularity will naturally recur in the *Bulletins* of the following five months.

SICKNESS AND MORTALITY IN THE ARMY.

The Report of the Army Medical Department for the year 1870, just issued, states that the weekly returns of sick forwarded to the Army Medical Department for the fifty-two weeks ending December 30, 1870, show an average strength of 75,305 non-commissioned officers and men, among whom there occurred 60,906 admissions into hospital and 697 deaths, and the average constantly non-effective from sickness was 2905. These numbers give the proportion of 809 admissions, 2·25 deaths, and 38·58 constantly sick per 1000 of mean strength. But, in addition to these, the Adjutant-General's returns show an average strength of 6730 men detached from their corps on various duties, furloughs, etc., exclusive of invalids from foreign stations at Netley, and amongst these there were eighty-one deaths during the year. The average strength, therefore, of the troops in the United Kingdom throughout the year was 82,035, and the deaths amongst them were 778, being in the ratio of 9·48 per 1000.

CHOLERA.

Grodno town and district, amongst other places of equal renown, have been heard of this week as having sustained a severe attack from cholera. It is not worth while to repeat to the reader all the obscure names, from which nothing but occasional alarums depart, and which do not add the smallest item to our knowledge of the epidemic. Regular and true statistical accounts, and the benefits which are derived from them, are an unknown boon in those parts of the world. Let it be observed, however, that the places mentioned are situated along the southern parts of the western frontiers of the Russian empire, in the very track where cholera has carried on its depredations for months past. Much importance, therefore, cannot be attached to tidings from that quarter at all, and we still may hope that the cholera tragedy is well-nigh drawing to its close this year. If we may be allowed already to review the course of this year's epidemic, although its history is not quite known yet, we have to observe that by it none of the leading theories of the day have gained any support. Pettenkofer's ground-water hypothesis will equally fail to explain to satisfaction all the phenomena we have witnessed during the cholera of 1872, as will Professor Hallier's rice-fungus (*Urocyetis oryzæ*), which he makes to bear all the responsibility. There must exist a whole summary of laws, by which the propagation, the intensity, and extensibility of the disease are guided and regulated, which we do not even guess. But cholera is no exception; it is the same case nearly with all the known diseases to which mankind is liable. Diseases most familiar to everyone, known since olden times, are directed by regulations we can conceive no idea of; they change their manners, get more insidious, are losing their violence,—we do not know why. It is much more public anxiety which invites the investigation of the problems connected with cholera, than the greater obscurity of the questions of the topic.

MEDICAL WITNESSES IN AMERICA.

It appears that medical testimony is as little valued in America in some cases as in our own country. Indeed, in the late trial of Stokes for the murder of Fisk, the *Philadelphia Medical Times* says:—

"According to the reports published in the daily papers, Dr. J. M. Carnochan, being called as a witness, took the opportunity to attack the character of Dr. Lewis A. Sayre, who had attended Fisk after the shooting, and who was called for the prosecution. Dr. Sayre, perhaps not unnaturally, but certainly at a great sacrifice of personal and professional dignity, retaliated with vigour when his chance came. Other medical witnesses gave testimony of a curiously conflicting character, and the upshot of the matter was that all the medical evidence was very properly thrown out, the question turning on the proof of the shooting being done in self-defence. We can conceive of few graver or more responsible positions in which a man can find himself than on the witness-stand, as a medical expert, in a trial for murder. Such was Dr. Carnochan's relation to the Stokes case; and yet he seems to have forgotten everything except the chance that offered itself for him to attempt to injure a rival practitioner."

Really the only way in which a judge or a jury can deal effectually with conflicting medical testimony—such as we

witness, for instance, in cases of railway accidents—is to "throw it" all out. Nothing is more discreditable to us as a profession, nothing more injurious to us in the eyes of the public, than the unseemly conflicts of evidence given by medical practitioners in our courts of law.

HEAT AND CRIME.

THE *Philadelphia Medical Times* says it seems that the "heated term" each year brings with it a great increase, in the cities, of crimes of violence. This the writer attributes to the fact that men are more thirsty, and drink more; are out on excursions, where drink circulates; there are more outings and congregation of neighbours, and consequently more quarrels. Long-continued heat appears to demoralise the population, the discomfort of the body and the relaxing and enervating influence of the atmosphere engendering an irritability which has shown itself not only in crimes by individuals, but in riots.

IMPURE WATER AND DISEASE.

IT is worth while to compare Dr. Menzies' account of the distressing outbreak of diphtheria at Naples with what Surgeon-Major A. C. C. De Renzy states of the danger of foul water, and the enormous difficulty there is in forcing servants to fetch pure water from a distance, if foul water can be got nearer home. At Meean Meer the native water-carriers will get it from cesspool-polluted wells, instead of going further to a canal. Doubtless it may be difficult to account for every case of cholera; but until foul water is quite disused, and its influence eliminated, it is childish to talk of the cause of cholera as an inscrutable mystery.

DR. DEWAR ON THE POTATO DISEASE.

DR. DEWAR, of Kirkcaldy, whose researches on the parasiticide and disinfecting virtues of sulphurous acid are well known, has been trying his favourite remedy on diseased potatoes. The tubers are rubbed to a pulp, which is then treated with water containing a small quantity of sulphurous acid, and dried. The specimens sent us are in the form of brittle cakes, which are quite sweet, and well adapted for cooking with other food for cattle.

THE CHINESE IN SAN FRANCISCO.

THE July number of the *Journal of the Gynæcological Society of Boston* has some passages which show that the Chinese are evidently no favourites. Dr. Logan, of Sacramento, says—

"Most of us are familiar with the crowded, filthy, and abominable condition of Chinese life in California; but none who have never witnessed the midnight orgies of this hebetated people in San Francisco can imagine the depths of depravity into which they are sunk. 'Down many a winding step to dungeons dark' we followed our able conductor, sometimes in Indian file, sometimes stooping—almost creeping through foul labyrinthine passages. Every now and then these dark passages would open into dimly lighted rooms, wherein were to be seen dusky human beings, lying on tiers of broad shelves, like the berths of a ship, each with a foul opium pipe, and dirty little oil-lamp used for lighting the pipe at his side. At times we would encounter the daughters of the 'flowery land,' each sitting, or standing, in a little tawdry room, or rather box, and, with painted lips and rosy-tipped fingers, beckoning us to enter. Suddenly we would light upon a gambling saloon—for John Chinaman likes the excitement. . . . . I allude to the almost absolute absence of ventilation. In the underground purlieus there is no means whatever for the admission of air, save through the common cellar opening or entrance. The domiciles above ground are no better, because the windows are too few and small in proportion to the occupants, and besides they are never left open. The consequence of this is that the stench of the premises is horrible. We felt ourselves enveloped in a physical atmosphere as tainted and disgusting, from superadded stale opium smoke, as the moral one was degraded. . . . . Some houses have 500 lodgers, some 1000; and in the Globe Hotel—standing on ground sixty by sixty, and three storeys high—there are 2500 tenants. In some places they say Chinamen have burrowed dens, even beneath the streets—holes that would 'not admit a coffin. There are innumerable subterranean dens where gambling is carried on, and where crimes that cannot be named are habitually committed.' They add that the Chinese here carry out their laws independently of ours; they hold subterranean courts, have judges and executioners, and inflict the death penalty on any of their race who may reveal their secret doings to the Americans."

FROM ABROAD.—LADY MEDICAL STUDENTS AT ZURICH—MORTALITY AT NEW YORK—DR. SQUIBB ON MATERIA MEDICA.

A RECENT number of the *Indépendence Belge* supplies an interesting account of the "Medical Woman Movement at Zurich," where it seems to be assuming considerable dimensions. Prior to 1864, two Zurich ladies had been authorised to attend the lectures of the Faculty of Philosophy, under the title of *auditeurs*—that is, without taking out a regular *inscription*. During that year a Russian young lady requested of the Rector permission to attend the lectures on anatomy and microscopy, and this being accorded, during the next six months another Russian entered herself at the Faculty of Medicine. The Senate of the University now thought that the time had arrived for making regulations concerning these *étudiantes*, and for deciding whether in future women should be considered as possessing a formal right of admission to all the courses of the different faculties, or whether this should be accorded to them as a special favour, dependent upon the consent of the professors. In the former case it followed that they might present themselves for examination for the doctor's diploma. In May, 1865, an animated discussion took place, when it was found that the advocates and the adversaries of the innovation were well-nigh balanced; and it was agreed to defer coming to any decision, especially as there was nothing to show that the two ladies who had been provisionally admitted to the lectures intended to pursue their studies to the end, or that their example would be much followed. One of them, in fact, disappeared in 1867; but the other, who had arrived in Zurich well fortified with sound preliminary knowledge, exhibited an amount of zeal and perseverance that captivated the professors, and she found herself, in February, 1867, sufficiently advanced in her studies to undergo her examination. In order, however, to aspire to the doctor's degree, it was necessary to be a regular matriculated student, and the Rector, after some hesitation, consented to take upon himself the desired matriculisation. In this way a precedent was established, and the lady, admitted to her examination, was declared Doctor of Medicine of the Zurich Faculty.

In the following years the number of women-students was at first not so great as might have been expected. Towards the end of 1867 two Englishwomen made their appearance, and in 1868 a Swiss and an American. In 1870 Austria and Germany supplied each a contribution, but Russia has always been the country that has furnished the largest contingent. In 1869 nine Russians inscribed at the Faculty of Medicine, while at the end of 1871 they were seventeen in number. At the present time the number of *étudiantes* at the University amounts to sixty-three, of which number fifty-one belong to the Faculty of Medicine (forty-four Russians, one English, three Swiss, and three Germans), and twelve to the Faculty of Philosophy (ten Russians, one Austrian, and one German). The great preponderance of Russians is explained by the fact that for long since the superior grades of instruction have been accessible to women in Russia. Gymnasia for women have been opened for them in all the chief seats of Government and the universities, where, without being admitted on the same footing as men, they have special courses of lectures delivered for them, which continue during two years.

Adding the seventeen students who had quitted the University by 1867 without having completed their studies,

and six who have been created Doctors of Medicine, we have a total of eighty-nine women inscribed on the registers of the school during eight years. The number of men-students has also greatly increased at this University since 1864. Then it was 232, and is now 354. As the Faculty of Medicine has at the present time 208 students, the women contingent amounts to about a fourth of the number. The six doctors already made have embraced the medical career with success. One of them is the wife of a physician at St. Petersburg, and another has also acquired a considerable practice in that city; a third is attached to Mrs. Dr. Garrett Anderson's Dispensary in London; while another is only awaiting the completion of a woman's hospital in Birmingham, to which she has been appointed; a fifth has been elected physician to a children's hospital at Boston, U.S.; and the last has accepted the post of Under-Assistant in the Medical Clinic of Professor Biersner, of the Zurich Hospital.

In a note to the *New York Medical Record*, August 1, Dr. Charles Russell, Chief of Records of Vital Statistics, calls attention to the extraordinary mortality which took place in that city during the week ending July 6. This amounted to 1591 deaths, or 229 more than had ever before been registered, the next largest number having been 1362, in the week ending July 21, 1866, when Asiatic cholera had been for some time prevailing. Moreover, the maximum mortality of any year has never before occurred so early in the season—that is, if this prove to be the maximum of this year. Both the mean temperature and humidity were exceptionally high in this week—the former being 83·97° and the latter 75° (saturation being represented by 100°). There is no doubt of the deadly effect of a very high temperature in this city, particularly in conjunction with an excessive atmospheric humidity, and their simultaneous occurrence at an unusually early period of the season accounts for the extraordinary mortality of the week.

Many deaths, ascribed to various obvious affections, were mainly due to the operation of meteorological phenomena. Throughout the whole category of diseases there was a very general increase, in which all ages participated, but which was more manifest among the very young and very old. There were cut off 1007 children under 5 years, and 45 persons of 70 years and upwards. Of the children 618 fell victims to diarrhœa, 499 being less than 1 year and 604 less than 2 years of age. The children above 2 years of age enjoyed great immunity from fatal diarrhœa. The total mortality from this disease was 653, or 41 per cent. of the deaths from all causes. No less than 212 persons succumbed to the direct effects of solar heat (either exhaustion or sunstroke). Of these 132 were cases of true insolation. The greatest number of deaths from solar heat (68) occurred on July 2, when the maximum temperatures in both shade and sun (97° and 128°) were recorded, as also the maximum humidity, 84°. Forty of the sunstrokes on this day proved fatal within eight hours. The majority of persons affected were between adolescence and middle age, while children and old persons were the chief sufferers from exhaustion by heat. Habitual drunkards were returned as the victims of sunstroke in 39 instances. On the same day the greatest mortality occurred—viz., 351 deaths, 140 of which were caused by diarrhœa and 102 by diseases of the nervous system.

In his report for last year Dr. Russell states that the death-rate for 1871 was 28·6 per 1000. The total number of deaths caused by zymotic diseases amounted to 8364. Small-pox carried off 805 persons. During the year there died 70 persons (27 men and 43 women) above 90 years of age. Of the total deaths 1071 were due to accidents. There were 65 murders, but only one murderer was hung. There were 114 suicides, the greater part being Germans.

During the year 1871 there were 21,532 treated at the public hospitals, 17,717 at the Bureau for the out-door sick, and 5645 at their homes.

Dr. Squibb, who is a high authority on such topics, in a recent paper addressed to the New York Academy of Medicine, entitled "The Current Materia Medica," adverts to the present estimation of various articles of modern introduction. Among his remarks are the following:—

Bromide of potassium is more under the control of the Profession than it was, and has its proper place in the Materia Medica. Many times it is given in too small doses, and no good effect is produced. They should be large enough to produce bromism. Sometimes fifteen or twenty grains will do this, but he has found from forty to sixty grains called for. As a hypnotic twenty-five grains are essential. Professor Van Buren has remarked that to get iodism he has had sometimes to give even one-ounce doses of the iodide; and the same rule applies to the bromide. *Alkaloids:* No one expects to get from the salts of morphia the same relief as from pure opium—although one grain of morphia equals six of opium. The chemical processes in use for abstracting the alkaloids deteriorate the anodyne properties. If practitioners were better satisfied to use the pure original anodynes, without being tortured, the results would be more satisfactory. It has been a great fashion to have fine-looking white alkaloids, which are made at the expense of medicinal qualities. Every time these are bleached by the chemist a portion of the valuable property is lost.

Among articles that have taken a firm hold in the Materia Medica is *pepsine*. Generally, however, patients have been in the habit of taking starch rather than pepsine. Once getting a reputation concerning a certain variety of this agent, the manufacturer has a good start for making money. Some specimens may be good, and others bad; for the name of the maker is no guarantee, as it may be good at one time and bad at another. The pancreatic emulsions and preparations of bismuth and pepsine, so fashionable now, cannot be recommended; and the mixtures of beef and iron, as vinum cibi et ferri cum cinchona, etc., are gross frauds.

Hardly any *cod-liver oil* will pass muster now except it is tasteless; and Dr. Squibb's impression is that many of these preparations are not cod-liver oil at all, but only oil made for the market. Good oils should neither be too light nor too dark, but of a medium colour. The dark are made of livers in a state of decomposition. The reason that the Norwegian oil is less rancid than others is because it is never made at a lower temperature than 50°. Oil, when in use, should be kept in a cool place, as a refrigerator, and the glass thoroughly washed. Small pieces of ice put into the dose of cod-liver oil and other disagreeable substances render them almost tasteless.

Physicians are very anxious to get solutions of phosphorus into the stomach, but before it gets there it becomes oxidised. A popular fallacy of the day is the use of sugar-coated pills or medical confectionery. Such pills have been found after death in the stomach and intestines undissolved. It is not an easy matter to get the hard coat off the pills. Glycerine should be used in compounding pills, to render them soft, and such pills are readily dissolved in the stomach. Medicines in capsules are not to be advocated, these being difficult of solution. *Nitrite of amyl*, first recommended by Richardson, is a useful remedy. Cases of hemicrania, spasmodic asthma, etc., have been relieved by its inhalation.

In reply to some queries put to him after the conclusion of his paper, Dr. Squibb stated that chloral should be given in a solution of water, and not suspended in syrup, when decomposition would be likely to occur. Also as to whether the bromide of sodium possesses any advantage over that of potassium? It had not had a sufficient trial to determine the point; but when acne is produced by the bromide of potassium it should be substituted for this. Dr. Squibb also observed that a combination of dilute phosphoric acid and the hypophosphites, which was said to be very useful in practice, was not a bad chemical combination. He had himself prescribed a phosphoric lemonade, which had been found very popular and useful among the Wall-street gamblers and other persons who were worn out in body and mind.

HEAT AND THIRST, AND SOME OF THEIR POPULAR ANTIDOTES.

(By the Author of a "Report on Cheap Wines."

(Continued from page 103.)

NATURAL MINERAL WATERS FOR USE AT MEALTIMES: SALINE AND CHALYBEATE — SELTZER, SCHWALHEIM, CONDILLAC, OREZZA, SCHWALBACH, AND BUSSANG.

THERE are some personages of a dogmatical and categorical frame of mind, who are always perplexing their neighbours with classifications and distinctions, and who are pleased to draw a line between food and physic, or between food and stimulants. The difference, however, really lies in the application rather than in the absolute nature of things. A dietary should embrace all that is needful, not only for life, but for health, and comfort, and (above all things) for the exhilaration and enjoyment of soul and body; and this whether the circumstances be ordinary or extraordinary—in rest and idleness, or in great fatigue and exhaustion. Hence it is not enough for the quenching of thirst to have water merely. We want that which shall make water pleasant to the palate, and we may make it the means of introducing those supplementary and occasional forms of food which we vulgarly call physic.

In the shape of mineral waters, we have such things ready to our hands, whether they come from some "Deus," or "Melior natura," as Ovid says, or whether due to the fortuitous concourse of atoms. If medicine be a supplement to food, then it ought to be taken with food, if sufficiently palatable and congenial to the stomach not to interfere with the enjoyments of the table.

Of table waters in common use, it is unnecessary to reckon up the common soda-water and the real soda-water, such as is made by Ellis or Hooper, the common Brighton seltzer of the pastrycook and that which is made by scientific chemists, at Brighton and elsewhere. The German (real Nassau) seltzer-water is also well enough known, but not so much prescribed as it deserves to be, from its mild, soothing, milky, nourishing taste, and sedative effects on the throat and lungs. The objection commonly raised against these waters is, that they are debilitating, that they tend to wash people out. But it must be borne in mind that the most debilitated persons may be thirsty, that dryness at the mouth may be caused by tonics, and that the skin may be dry and unrefreshing and the kidneys overloaded, and that some such remedy as the seltzer-water, which unites the gently piquant with the sedative in an admirable manner, may make the patient very grateful to the practitioner who recommends it. Seltzer-water and milk, equal parts, suit well in cases of irritable throat-cough, acute bronchitis, etc. But it is not everybody that likes seltzer-water, and they who do may like a change, and no practitioner is ever the worse for two strings to his bow.

Amongst table waters of the decided alkaline sort, I need not mention the *Vichy*, which is a whit too powerful for general use. The *Vals* (*Précieuse*) is a delicious water—cool, sparkling, and light. The *Apollinaris* is remarkable for the tenacity of its aëration, so that, however exposed, it does not get flat. The *St. Galmier* is simply delicious. The *Condillac*,(a) described on the label as "*la reine des eaux de table*," seems to be in great favour at Smyrna, Alexandria, and Gibraltar, and is a palatable, refreshing water. The *Schwalheim* water is highly diuretic; more so, it appears to me, than those of *Ems* and *Fachingen*, as imported. If I may venture to advise my medical brethren, it would be to study these waters as they would so many kinds of wine, and the only available way is to have a few bottles and drink them. They would then know instinctively what patients each was likely to suit.

The above waters are alkaline and aërated, containing chiefly bicarbonates of soda and lime, with minute quantities of common salt, iron, etc. But iron itself, in my judgment (if it is, according to the prevalent hypothesis, to act on the blood, and not merely as an astringent on the digestive mucous membrane, which is the truer explanation of its *modus operandi*), is best given at meals. A few drops of tincture of steel in a glass of cold water is not to be despised, but it has not the subtlety and virtue of a really good aërated iron water. The Spa water is hard, heavy, and headachy. As for the cold, flat English waters, as those of Tunbridge Wells, etc., practitioners on the spot generally prefer to give steel as a medicine. But of steel waters fit for table use at mealtimes there are three chief ones. The *Orezza* I have recommended to several patients labouring under diseases of chronic debility, who have described it as very exhilarating and tonic; the *Schwalbach*, less alkaline, highly invigorating; and the *Bussang* (which is said also to contain arsenic) may be recommended to any patient who likes to take his food and his physic at one operation.

(a) I am indebted to M. Gallais, of Margaret-street, for specimens of this and many other waters.

MORE NOTES ON WINE.

HUNGARIAN WINES OF MESSRS. HUDSON AND COLLINS.

THE wines of Hungary have won for themselves a position as nutritive and stimulant agents which they are not likely to lose; and the fact that a fresh house is beginning to deal largely in them is an instance of the competition which is sure to follow popularity. The more the Faculty congregate in Savile-row or Wimpole-street, the more they seem to flourish; and it will be the same with importers of Hungarian wine as they become more numerous. Messrs. Hudson and Collins, of No. 9, Victoria-chambers, Victoria-street, have sent us specimens of an extensive assortment of Hungarian wines, many of which bear the brand of the well-known firm of Jalics, of Pesth. There are white and red, and we give the precedence to the white, because of the two they seem to excel. There is the *Tokayi Aszu* in pints, which probably from its price must remain a mere curiosity;—it is curious how much some specimens of Tokay have the flavour of tea. The *Szamorodny*, at 48s., is a remarkably good wine, full of delicate vinosity, and cheap at the price. The *Ruszter Auslese*, at 36s., is another wine of prime quality—quite a medicine for nervous exhaustion. The *Œdenburg* and *Somlau* are both good wines. Of the *Pesther Steinbruch*, we noticed that it was a strong, vinous, *sub*-astringent wine, not acid nor artificially flavoured. In the *Villanyi Muscat*, with its strong musky flavour, we seem to get a good deal for our money; whilst the *Neszmèly* and white *Erlau*, at 24s. and 18s. respectively, are remarkably good and cheap. The red series includes Erlau, Carlowitz, and Ofner. The *Erlau* has the curious raspberry smell which we have noticed in many red wines; but we pitch upon the *Carlowitz* at 24s. as a wine very likely to be popular amongst the large class who resort to these wines in phthisis and other conditions of debility.

We must take the opportunity of commending the very excellent wines of Messrs. Wingrove, 18, St. Mary Axe, samples of which they sent us for the purpose of criticism some short time ago. There were ports, sherries, champagne, hock, and claret. The general characteristics were great delicacy and wholesomeness, with moderate price. The sherry was fine, soft, and not fiery; the claret good and cheap; and altogether it appeared to us that the wines were well adapted to persons of refinement and invalids.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

MEMORANDUM.

Medical Society of London—Medley's Picture—The London University.

Apropos of my description of Medley's celebrated picture in the Medical Society of London in my last paper, Sir Henry Thompson, now in the Highlands of Scotland, writes me as follows:—

"I am quite struck with the accuracy of the details you give of my grandfather and the picture. Let me add an interesting fact or two. Touching the grouping, it had to be altered to meet the tastes and the sense of proprieties, etc., of the members, and is not altogether what the artist wished. But more remarkable is the fact that Jenner came into great notice during the painting, or rather after the picture had been completed; so that he was a subsequent addition. The plate was partly engraved before the decision to put him in was arrived at, and a piece of copper had to be let in, as the background details had been worked at the spot at which his

head and shoulders were subsequently placed. I have seen the plate, and observed this fact, of which I had been informed by my grandfather.

"One word let me add about the painter. He continued his profession a few years after this, exhibiting pictures every year at Somerset House, the locality of the Royal Academy annual displays at that time. He attained much greater power with the brush, as several of his pictures now in my possession testify; but the confinement to a studio in London air—it was in Threadneedle-street (I just remember its existence in the year 1827, although it had long been disused)—injured his health so severely that his medical friends advised him to relinquish art as a profession, and he did so. He then went on the Stock Exchange, made a comfortable competency, and retired to an active social and literary life for the last twenty years. But here comes the fact to which I wish to draw your attention. Always excessively energetic in body and mind, he was a foremost man in the early part of the century in agitating for a free education for all, without reference to sectarian influence, and he played a very prominent part in the foundation of the 'University of London,' as it was then called (what is now University College); and I have a large number of documents relating to its early history in my possession—among others, a letter from Lord Brougham to him, inviting him to come and spend the evening, and talk over a scheme for a London University, and to see whether it was possible to 'set matters a-going.' Mr. Medley lived to see the institution flourish—a matter of the greatest interest to him; and he, as proprietor, nominated myself as a student there. This double relationship of the painter with our profession might, I thought, be interesting to you; and if anything here stated is of any use, it is at your service. I don't know, however, that it can be so; only I was a little anxious to explain why he discontinued his profession, as there can be no doubt, had he been able to devote his active and enthusiastic intelligence to art during the middle portion of his life, instead of ceasing when young, he would have become a great painter."

TWO CASES OF MUSCULAR ANÆSTHESIA.

By ALFRED CARPENTER, M.D., Croydon.

On Monday, November 13, 1871, Dr. Alfred Carpenter, of Croydon, brought before the Medical Society of London the following cases of Muscular Anæsthesia. The cases were two intelligent young ladies, the daughters of a City gentleman. The elder, M. H., aged 28, of average good general health, every function of organic life being properly performed, all the natural functions of the body being in a healthy state, has been under the care of Dr. Carpenter for the last three years without material alteration, except a gradually slow, but decided decrease in muscular power. Now she cannot rise from her chair without assistance; the attempt when made with aid is clumsily and awkwardly performed. When she has gained the erect position she staggers, and is uncertain in her gait, her movements corresponding with those observed in intoxicated persons. The foot being raised from the ground, there is an uncertainty as to where it will be placed, and it goes down with force, the heel first reaching the ground with a blow; as she cannot see the foot she cannot tell how far it is from the ground. She can only retain the upright position as long as she knows assistance is at hand. She has more difficulty in starting than in continuing her movements. If she stands, and is told to shut her eyes and move, or if she is in the dark, she cannot remain upright, but at once falls. There is, however, no material loss of power, for the individual muscles are still strong, and some force is required to bend her joints against her will, though the muscular power is much less than it was two years ago. She can still lift a considerable weight, and carry it if her eyes are fixed upon it. Her sight is good; the pupils act equally and freely, and there is no defect in the co-ordinating power of the optic muscles; there is no congestion of the conjunctiva, no amblyopia. There is no want of association in the muscles of expression, but there is a slight effort required in speaking. There is clumsiness of movement in the upper extremity, for she cannot button a button or put in a shirt-stud unless she looks at it. She cannot use her fingers with any precision when out of sight, but can execute drawings of considerable merit. She used to play on the piano very well, but for the last five years the requisite movements have become unsteady and imperfect. Her memory and hearing are quite right. She never suffers from pain of any kind; there are no starts or jerks or muscular tremors. Urinary organs and secretion normal. She has a lateral curvature of the spine, with some flattening of the ribs on the right side in the middle of the dorsal region; the distortion, which is considerable behind, does not alter the shape of the chest in front. There is no cutaneous anæsthesia; the neighbourhood of the joints is naturally sensitive; no numbness or formication in ordinary position, but if she sits up in bed with the knees drawn up before her, and a weight is kept on her knees, there is a feeling of numbness and deadened sensibility in the lower limbs, but there is no marked reflex action, and no effect follows upon irritating the soles of the feet. She is able to localise sensations excited by the use of a pair of compasses in a normal manner, though the tactile sensibility of the lower extremities is, if anything, rather lessened. She is the second of eight children; her parents are healthy; at 12 her shoulder was said to have "grown out." Dr. Little ordered a supine position with no mental work, and daily muscular exercise. Iron supports were used for four years. The catemenia appeared at 14; at 18 the supports and treatment were omitted. Her general health was good, but the unsteadiness of gait continued, and, as she developed into a young woman, increased. She was placed under the care of a leading physician six years ago, kept perfectly recumbent for fourteen months, and treated with steel after that time, without benefit. She came under Dr. Carpenter's care in 1868. The condition of the younger sister, E. H., aged 26, is very similar, but the symptoms are not so advanced, neither is she so helpless as her sister was three years ago. She has followed similar plans. The irregular gait was observed when she was 14. She is now well-developed, with a healthy, rosy face. When she speaks, it is with hesitation, and as if she had something in her mouth; she is able to thread her needle, but could not touch the tip of her nose if her eyes were shut; she walks more nervously than her sister, and her progression is more sudden, amounting to a half run. Dr. Carpenter summed up the points upon which he asked the opinion of the Fellows under four heads—viz.: (1) The cause for the development of the disease; (2) its nature; (3) its pathology; (4) its treatment. He referred the first point to some hereditary defect in nutrition of nerve-matter; that the curvatures were coincident in point of time with development of disease, and were effects of a common cause—viz., degeneration of nerve-matter; that they were not cases of locomotor ataxy at present. He combated the opinion of the translator of Trousseau's "Clinical Medicine," that the pathognomonic sign of locomotor ataxy "was the peculiar deficiency in the power of co-ordinating voluntary movements," basing his objection on the absence of pain, of urinary disturbance, or ocular complication, as well as the fact implied by their youth and sex; the want of co-ordinating power being the most prominent symptom, but the other necessary symptom being absent. He considered that in these cases the mischief was limited to the cord, or, more correctly, to the connecting links between the great sympathetic and the posterior roots of the cord, and that there was no cerebellar complication: this idea being supported by the absence of subjective symptoms of brain disturbance and the presence of superior intellectual power. He referred to the experiments of Linget and Bernard, which prove that when the posterior roots of the spinal marrow are divided there is less co-ordinating power, and that the harmony of movement is interfered with, and that Dr. Lockhart Clarke had distinctly made out that the posterior roots of the spinal cord were diseased in locomotor ataxy. The author concluded that in cases where the posterior columns were diseased the irritability of the muscles was found to be depressed, whilst their sensitiveness to pain was increased, electric currents excited violent pains. This was not the case with these patients; moderate galvanic currents were not distressing—a point which assisted to prove that the disease had not yet extended to the cord itself. The author also submitted to the notice of the Society a typical case of locomotor ataxy, pointing out the different manner of progression as compared with the gait of these young ladies.

At the next meeting, Dr. Thorowgood read the report of a Committee appointed by the Society to examine Dr. Carpenter's two cases, brought forward at the last meeting, which was as follows:—Drs. Richardson, Hughlings-Jackson, and Carpenter, members; Dr. Lockhart Clarke, Dr. Broadbent, and Mr. Brudenell Carter, visitors.—The following points were fixed upon as the subjects of the report to be made: (1) Facts ascertained by inspection; (2) the state

of the cutaneous sensibility as shown by points at graduated distances; (3) as shown by electricity with carbon point; (4) the state of muscular contractility and sensibility to induced (faradaic) and continued (galvanic) currents; (5) the degree of vascular resistance to freezing by ether spray. In the case of the elder sister, aged 28, there was found, (1) on inspection, a very marked lateral curvature of the lower dorsal spine to the hip, as described by Dr. Carpenter. In walking, the toes were turned in, and the feet were thrown forward with a slight jerk, and brought suddenly and heavily to the ground. She walked worse with the eyes shut. Says that when her eyes are shut she does not know whether she is in the upright position or not; but when her eyes are opened she could advance, and draw back either feet, and know exactly where the feet were. Although she never walked without assistance under ordinary circumstances, she walked a short distance alone, and made one or two steps with the eyes closed. She stood for some time, the eyes being shut, without falling. In these experiments she was assured by the observers that she should not be allowed to fall. 2. Cutaneous sensibility, as tested by points, Dr. Lockhart Clarke found to be about normal over back and at various points on leg. It was observed during the investigation that red spots quickly appeared when the points had been applied; and the mother stated that bites or stings of insects produced great irritation, which lasted many days. 3. Cutaneous sensibility, as tested by the induced and continued current, with carbon points (Dr. Richardson's). Interrupted current, at eight points, caused gentle sensation at outer side of thigh; lost at six powers; on inner side, seven powers felt, lost at five. Continuous current of thirty powers not felt on outer part of thigh; caused burning sensation at inner aspect. Similar results from comparative experiments by Dr. Carpenter; muscular contractility and sensibility tested by faradaic and galvanic electricity with moist sponges. Induced current of full power caused no contraction, and little sensation in muscles of calf or anterior aspect of leg, powerful contractions, in muscles of thigh; with some pain, but much less than in comparative experiments on observers, and on muscles of arm of patients. Continuous current (fifteen cells): no effect on muscles of calf or front of leg, either in making or breaking contact; burning pain when contact made. Conclusions made by Drs. Richardson and Clarke: Great impairment of muscular contractility; no loss of muscular sensibility. This patient resisted powerfully flexion or extension of the knee-joint. *Case* 2.—(1) Inspection: Curvature of spine slighter, and lower down. Stronger than her sister. Requires guidance, but not much support in walking. Gait unsteady and feeble; no jerking of limbs. Says that, when eyes shut, she does not know whether she is in the perpeddicular position or not, and would not know whether she were leaning on one side. She walked the length of the room alone, and for about six steps with the eyes closed. Stood for some time with the eyes shut, the body swaying slightly to and fro. Can move legs into any position when eyes shut, and knows exactly where they are. (2, 3) Cutaneous sensibility normal. (4) Muscular contractility much below normal standard; but strong induced currents caused decided contractions in the muscles of the calf and front of the leg. Experiments with ether spray: —*Case* 1: Freezing took place on outer side of leg with three strokes, $2\frac{1}{2}''$; in Dr. Carpenter, six strokes in $9\frac{1}{3}''$; patient's forearms, eight strokes, $8''$; outer side of thigh, eleven strokes in $15''$. *Case* 2: Outer side of leg freezing by three strokes, $2{\cdot}75''$ (repeated several times with similar results); lower down, above outer malleolus, six strokes in $10''$.

The cases have been under frequent observation since they were produced at the Society's rooms. There is no decided change in their condition—certainly not for the worse—but a younger brother, who has distinguished himself at one of the public schools, and has carried off high honours at one of the universities, shows signs of incoördinated movements of the lower extremities. The general health of the girls has been improved by the course of treatment they have undergone, and they have passed through the winter without any further loss of power. The peculiar action of ether spray in producing a freezing state much more rapidly than in healthy persons still continues, and the muscular contractility is much below the normal standard (August, 1872).

THE Parliamentary return of the railway accidents during the past year shows that no less than 404 persons have been killed and 1261 have been injured upon the railways of the United Kingdom in 1871.

DIPHTHERIA AT NAPLES.

IN a paper in the September number of the *Edinburgh Medical and Surgical Journal*, Dr. Menzies, of Naples, gives the full particulars of some fatal cases of diphtheria which occurred in an English family there, and which peculiarly affected some of our readers and contributors. One great value in Dr. Menzies' paper is the clear and definite doctrine he gives as to the cause. He does not hesitate to ascribe the origin of the cases to impure water; and we need scarcely speak of the comfort of knowing a cause, if we are ever called upon to exercise preventive measures. The importance of the matter is so great that we take the liberty of making a pretty long quotation; but we must refer anyone to the *Edinburgh* who desires to see Dr. Menzies' remarks on the relation of diphtheria to cerebro-spinal meningitis, and of the share which myelitis and neuritis take in the mechanism of fever.

"Last spring and summer this complaint was exceedingly prevalent at Posilipo, near Naples. On June 6 I was called to see the children of an English medical man, who were suffering from diphtheria. I found the family consisted of father, mother, five children, English nurse, and Italian manservant, who, with his family, occupied rooms in another part of the house. The family actually in residence, however, only consisted of the five children and nurse; as the father and mother only spent a part of the day there, but the last night or two they had remained in attendance on their children. There was also a younger child, who, with another nurse, remained in the town residence. Of these five children at Posilipo, I found four suffering from the disease. The nursemaid was also attacked, and died; as was the father, who recovered. The mother, who was in the seventh month of her pregnancy, showed symptoms of the disease, gave birth to a dead child, and expired almost immediately afterwards. The symptoms which presented themselves in the children who died, fair and very delicate girls of 6 and 7 years of age, were—severe epistaxis; a most offensive discharge from the nostrils of a muco-purulent character, with a very strongly characteristic odour; an eruption, which was most abundant between the metacarpus and the end of the lower third of forearm and on the neck, and more sparsely on the forehead, thorax, abdomen, and lower extremities. This eruption was characteristic and peculiar. It was subcutaneous, did not disappear on pressure, did not cause elevation of the epidermis, was otherwise of the shape and general appearance of the typhoid rash; but the colour was intermediate between that and the petechia of typhus, and was calculated to lead a casual observer to attribute it to mosquito-bites. The pharynx was full of exudation proceeding from well-marked patches (which in only one of the cases took the form of false membrane), and the discharge from the nares; but although the respiration was very much marked in the supra-clavicular spaces, it did not appear to be difficult. The little sufferers could with difficulty be roused, and passed away peacefully and without apparent suffering.

"The nursemaid was removed to the British and American Hospital, where, as I was informed, she died comatose; and a patient, about 40, who was in hospital in an advanced stage of phthisis, died very shortly afterwards under circumstances which led me to believe that she suffered from a form of cutaneous diphtheria. In the case of the other two children who were attacked, one, a girl aged 14, got well rapidly without any subsequent bad symptoms; but the other, a very delicate boy, had a certain amount of pharyngeal paralysis for some weeks, as well as very great depression of the nervous system. The little daughter of the matron of the Hospital was attacked, but slightly. She had some smart attacks of epistaxis, threw out a few spots, but recovered rapidly on treatment. In the case of the father, who recovered, there were only some well-marked patches of exudation, and I was only able, after very careful examination, to discover one spot. His recovery was not very rapid, but of course, after such a crushing affliction, it would not be fair to attribute this entirely to the effects of the disease. In his case, as well as in that of the child of the matron of the Hospital, it must be kept in mind that the infection was secondary—*i.e.*, from contact with the children or from fomites from the nursemaid—and not primary from the source of the disease, which I shall now describe.

"My unfortunate *confrère*, on putting his children into the

house, desired his servant to get water from one or other of two wells which he pointed out, and above all to avoid another which he also indicated. Of these two wells the nearest is only accessible at certain states of the sea. It is situated immediately above the sea-level at the base of a rock, and cannot apparently suffer from contamination. The other is the well-known public fountain called 'Lione.' The one to be avoided is used for filling water-carts for watering the streets, and is unfortunately of too easy access. For a few days the man fulfilled his instructions, until he was assured by a person resident in the locality that the water of the last-mentioned well was used by everyone in the house, and that nobody suffered. He allowed himself to be over-persuaded, and hence some, but not all, of the consequences I have already narrated. I have said that there were five children resident in the house, and that four of them were attacked. How was it, then, that the fifth, an equally delicate girl with the two who died, escaped? *She drank no water.* She alone of the children, on account of her health, drank wine, and she alone escaped.

I have now described some of the consequences which resulted from the non-fulfilment of orders by the Italian manservant, and hinted at others, which I shall now describe. Another English *confrère* met me in consultation on these cases. As the mother of the children had not then shown symptoms of the disease, and the father was still unaffected, it was agreed that I should take charge of the children, while he attended the mother, who was suffering severely from whitlow and from the effects of the shock caused by the deaths of her children.

"On June 14 the father was so far convalescent that I could leave him, as I was summoned into the country to attend another patient.

"On June 20 I received a telegram from my friend whom I had met in consultation, saying that he had been ill for five days with fever, and asking me to see him. It is necessary to premise in his case that two years previously he had been attacked by '*fièvre pernicieuse*,' which he caught in Rome. I found him suffering from fever to a very great extent, and the physiological action of quinine also caused much discomfort. The *characteristic rash* which I have described above was well marked at this time, but not so widely diffused on the body. It was confined to the wrists and lower third of forearm, head, and neck. A few spots were also visible on the thorax. There was diarrhœa, but the stools were not offensive, nor had they any resemblance to those of typhoid fever. He was very much depressed. . . . . On my visiting him on the morning of July 19, I was informed that he had been delirious during the night. His temperature was 106° Fahr., and I detected in his (for him) somewhat voluble conversation a very slight degree of aphasia, which gave me an unfavourable impression, when taken in conjunction with the other symptoms. . . . . While leading him across the room, I became, for the first time, aware of the smell of the nasal discharge which characterised the cases before mentioned. As he leant upon me, it seemed to pour over my head like a cloud of dense vapour. He begged me to leave him on the chair, and to send his attendant, with whom I left him. I then requested the family to remove at once to another house for fear of infection. Returning three hours later with another *confrère*, I was shocked to find that what he had passed when he got out of bed was blood, and that he had subsequently passed some more. . . . .

"I think that I have shown that this outbreak arose from the use of water drawn from a contaminated well; but I hope to show still more conclusively the actual material of contamination, by reference to another set of cases occurring in a house where I personally observed the method of contamination. I hope that by this I shall be able to throw light on some outbreaks of diphtheria at home. Those who have travelled in Italy are familiar with the flat-roofed houses in that country. But, except in rare cases, the tourist does not ascend to the roof of private houses, and perhaps when there he does not see what is very common in Italian houses, a colony of turkeys, fowls, and pigeons. The droppings of these birds are washed by the rain into the well which supplies the house, and this is consequently poisoned. Dr. Carpenter, in a paper in the *Lancet*, traces the origin of scarlet fever, in some instances, to the presence of fowl-houses, and also, but more particularly, to decomposed blood. Another feature which may have struck those who have visited Naples is that the ground-floor of houses which are occupied by the better classes is very frequently used as stabling. In the immediate vicinity of the well which I have mentioned as the source of the outbreak there are very many stables which are occupied by cab proprietors who are of a very low class indeed, and amongst whom cleanliness cannot be looked for. It cannot, therefore, be a matter of surprise that any well liable to contamination in their immediate neighbourhood should be so. In one house I observed a very large colony of pigeons, and every atom of their droppings went into the well. In that house a lady and four or five children had diphtheria, and two or three of the children died. An English boy of about 7 died of diphtheria in a house close to the first house I have mentioned, and the water supply was undoubtedly from the infected well. I have been thus particular in calling attention to the nature of the contaminating agent, as I shall endeavour to show that this has been the source of what is called cerebro-spinal meningitis elsewhere. In our country districts the water supply is, in most instances, above suspicion. Still it may be affected. I think that in all cases of diphtheria we should look for the source in the vicinity of fowl-houses, heaps of manure (more especially stable manure), and depôts of guano. Can it be possible that a well used for drinking purposes from which disease has arisen can have been contaminated by guano spread on neighbouring fields? Has any outbreak or solitary case ever been observed soon after it has been spread; or soon after the arrival of a quantity at a farmstead; or after the sweeping out of a fowl- or pigeon-house?"

DEAN SWIFT'S ATTACK OF SHINGLES IN 1712.

A CORRESPONDENT writes:—"I was delighted at seeing in the *Medical Times and Gazette*, some time since, your notice of Swift's satire on the prophecy-mongers, for I am always glad of an excuse for taking down the Dean's works of an evening, and forgetting my fatigues of the day as I devour each well-known sarcasm. In turning over old writers, I am often struck with their mention of diseases, and how often little points are mentioned incidentally which it has required a century or more of observation to show the full force of. For instance, I recollect reading in a Life of Cowper, the poet, how that his friend Mrs. Unwin was seized with a paralytic affection and loss of speech. It was stated distinctly that the side paralysed was the *right;* so here we have unexceptionable testimony from a past age of 'aphasia with right hemiplegia.' Another instance is Dean Swift's own account of an attack of shingles which he suffered from in 1712, and described in his 'Journal to Stella.' Here are the successive bits:—'March 21: Weather warm and gloomy. 23rd: A good deal of lightning. 28th: Rainy and very cold. 29th: I am plagued with pain in my shoulder; I believe it is rheumatic. The weather is abominably cold and wet. I have got into bed, and put some old flannel to my shoulder for want of new, and rubbed it with Hungary water. 30th: I was not able to go to church or to court to-day. The pain has left my shoulder and crept to my neck and collar-bone. Urge, urge, urge, dogs gnawing. It has rained hard all day, and is extremely cold. I am very uneasy, and such cruel twinges every moment. March 31 to April 8: All these days I have been extremely ill, though I twice crawled out a week ago; but am now recovering, though very weak. The violence of my pain abated the night before last; I will just tell you how I was. The pain increased with mighty violence in my left shoulder and collar-bone, and that side my neck. On Thursday morning (April 3) appeared great red spots in all these places where my pain was, and the violence of the pain was confined to my neck, behind or a little on the left side; which was so violent that I had not a minute's ease, nor hardly a minute's sleep in three days and nights. The spots increased every day, and red little pimples, which are now grown white and full of corruption, though small. The red still continues too, and most prodigious hot and inflamed. The disease is the shingles. I eat nothing but water-gruel; am very weak, but out of all violent pain. The Doctors say it would have come out in some violent disease if it had not come out thus. I shall now recover fast. I have been in no danger of life, but miserable torture. P.S.—I must purge and clyster after this.' 'April 24: I had yours two or three days ago. I can hardly answer it now. Since my last I have been extremely ill. 'Tis this day just a month since I felt the pain on the tip of my left shoulder, which grew worse and spread for six days; then broke out all by my collar and the left side of my neck

into monstrous red spots inflamed, and then grew to small pimples. For four days I had no rest for a pain in my neck; then I grew a little better; afterwards, where my pains were, a cruel itching seized me, beyond whatever I could imagine, and kept me awake several nights. I rubbed it vehemently, but did not scratch it; then it grew into three or four great sores like blisters, and run. At last I advised the Doctor to use it like a blister; so I did with melilot plasters, which still run, and am now in pain enough, but am daily mending. I never suffered so much in all my life. I have taken my breeches in above two inches. May 10: My pain still continues in my shoulder and collar. I still itch terribly, and have some pimples. I am weak, and sweat. The Doctors say they never saw anything so odd of the kind; they were not properly shingles, but *herpes miliaris*. May 31: My pains continue still, but with less violence. June 17: My shoulder is a great deal better; still I feel violent pain in it. July 1: My shoulder is not well yet, for I have still a few itching pimples and a little pain now and then. July 17: My shoulder is not yet right—itchings, and scratchings, and small achings.'

"Now, Mr. Editor, consult any of the ordinary books on Medicine, and, though it is true they do not omit to state that the shingles or herpes zoster is attended with 'constitutional' disturbance and irritation and pain in the chest, yet there are few descriptions in any author so complete, and giving so vivid a picture of nervous disorder, as this of Dean Swift's. In sending it to you, I venture to bespeak for it the notice of Professor Laycock, whose views of the operation of the nerves will find an undesigned corroboration. Here, in this so-called local affection and vesication of the skin, we have a week of precursory rheumatic pain, or neuralgia; and after it full fifteen weeks of pain and irritation. The young Practitioner who is accustomed to look upon shingles as an affair of a week or ten days may get a hint from the minute description which Swift gives of his own case."

SANITARY REPORT OF BENGAL, 1870.

The Sanitary Commissioner with the Government of India has recently published his Seventh Annual Report, containing the returns of sickness and mortality among the British and native troops; also among the prisoners in the Bengal Presidency, for the year 1870. As our readers must by this time be aware, a complete analysis or abstract of the various and voluminous sanitary and statistical reports from the three Presidencies of India in the small space at our disposal would be quite impossible. We have, however, been in the habit of noticing the more important of them, as time and space admitted of doing so. We have always expressed a high estimation of the value of these annual reports. No one who has ever undertaken the study of them could avoid being struck with admiration, and perhaps even amazement, at the amount of mental and clerical labour which each of them must have cost. As an annual task, the compilation of such vast statistical tables entering into such minute relative details on the various points under consideration, and the composition of the explanatory observations, must be a very serious addition to the current and pressing sanitary business of the year. It has frequently occurred to us that it would tend to the reduction of this amount of labour if merely the general statistical results of each year were annually published, leaving minor details for compilation at longer intervals—say, every ten years. We are glad to observe that a step in this direction is now being taken, and that the very valuable statistics which Dr. Bryden has collected and tabulated for the ten years from 1860 till 1869 are now being arranged so that the important data which they contain may be classified and presented in the form in which they will prove most useful and convenient for reference. Dr. Bryden divides Bengal into groups of stations occupying areas subject to similar geographic and climatic conditions, and which appear to be governed by like epidemic influences. It is admitted that on this latter point difference of opinion may exist, as it may be questioned whether we are yet in a position to map out the natural provinces of disease with any accuracy. It therefore appears to us that, meanwhile, no great advantage is likely to arise from the adoption of what may be termed a nosological partition of Bengal, as distinguished from the already existing division, into separate military commands or districts—which is more likely to be intelligible to military as well as to Medical readers of the Statistical Reports. Dr. Bryden's groups of stations are five in number—1st, Bengal Proper; 2nd, the Allahabad and Oude Districts; 3rd, the Meerut and Rohilcund Divisions; 4th, Agra and Central India; 5th, the Punjaub. A sub-division of No. 4, known as 4a, embraces that portion of the Central Provinces south of the Nerbudda, and is represented only by the gaol population. The hill stations and convalescent depôts have also been separated, and formed into distinct groups; formerly they were included in the provinces to which they belonged. The number of regiments quartered in the hill stations has so considerably increased of late years that it is very important to show their health-returns separately The sickness of men at convalescent depôts, however, more correctly represents the injurious influences of the plain stations from which the men have come; but as the men are generally drawn from more than one group of plain stations, their health-returns cannot be correctly taken in connexion with the statistics of any particular area. On the other hand, it is of great importance to be able to judge of the beneficial effects of the convalescent depôts; it is, therefore, well that they should be formed into a special group by themselves. This, we may observe, has for some years past been done in the Statistical Reports of the Army Medical Department, while the returns of men in health, or working parties, or on duty at hill stations are included in the divisional returns; but as each station is given separately they can be easily compared.

In the hill stations there were 3400 men, and in the convalescent depôts about 2000 more. It may thus be stated generally that of the total of 33,300 there were 27,600 men in the plains, and 5400 (or about one-sixth) in the hills. This, although an improvement in the proportion of men stationed in the hills, is far below the number which we yet hope to see deriving the advantages of the salubrious influences of the mountain ranges of Bengal, and is much less than the number which must be there stationed before any decided and permanent improvement, as regards sickness, and loss by deaths, and invaliding among British troops, can reasonably be expected.

That the occupation of the hills as military stations can no longer be considered as merely tentative, in respect of their beneficial influences on the health of the troops, is now universally admitted. During 1870 their results present generally a very favourable contrast to those of the other groups. The admissions were at the rate of 1042, the daily sick 40, and the deaths 11·17 per 1000. Much of the sickness was no doubt due to previous residence in the plains, yet the ratio of admissions at the hill stations as a whole does not very much exceed that among troops on home service, among whom, in 1868, it equalled 894, and in the period from 1860 till 1867 it had averaged 963 per 1000. The ratio constantly sick is less than that of troops serving in the United Kingdom, among whom, in 1868, it was 43, and from 1860 till 1867 it was 49 per 1000. Dr. Bryden gives the admissions per 1000 at all the hill stations in Bengal as averaging 1069, the daily sick 49·5, and the deaths 14·78 for the ten years from 1860 till 1869. Dugshai shows for 1870 a smaller ratio as regards sickness and mortality than any English station of which the statistics from 1860 till 1868 are given in the Army Medical Reports: the admissions were 641, the deaths 6·13, and the constantly sick 29·4 per 1000. The returns from Darjeeling are, however, very unfavourable, and the death-rate at Chuckrata is also high, having been 18·73 per 1000, but of these 4·99, or more than one fourth part, were due to accidental causes. The total force at Darjeeling was so small (only 64 men) that the high admission- and death-rates may probably be classed among the accidental variations to which small numbers are liable.

Taking the British troops in Bengal as a whole, the sickness in 1870 was very great, and surpassed that of 1869—a year which was remarkable for its unhealthy character. The mortality, however, was not so high as might have been expected from the amount of sickness, this being accounted for by the remarkable absence of cholera. Taking the rate of admissions into Hospital as a standard of comparison with the preceding year, a slight increase is observed, the rate having been 1731 per 1000 in 1870, and 1729 in 1869—ratios which are higher than in any year since 1863. The Punjaub presented the highest rate of admissions—namely, 2323 per 1000. The sickness in that district was, however, very unequally distributed. In five of the stations it was under a ratio of 2000 per 1000; in seven of them it varied between 2000 and 3000; while in Peshawur, notwithstanding the temporary occupation of the Cherat Hill by a portion of the garrison, it

amounted to the very large proportion of 4061 per 1000. In other words, at Peshawur every man throughout the year was, on an average, admitted four times into Hospital. This very high rate of sickness was almost entirely attributable to malarious fevers. Excluding the group of hill stations, Bengal Proper presents the lowest admission-rate, or 1179 per 1000.

Of every hundred admissions into Hospital, 48 were from fevers, and 12 from venereal diseases. The next highest rate of admissions was from wounds and injuries, and they caused a fraction less than 5 per cent. of the total number. Hepatitis, dysentery, and rheumatism each appear slightly lower in the scale. Cholera is charged with only ·09 per cent. of the total number. Two conclusions of no small importance are thus forced upon our notice—first, that the great mass of sickness has been due to a very few forms of disease; and, secondly, that these diseases are beyond all question to a very great extent preventible.

The mortality for the year amounted to 21·90 per 1000. Compared with former years, this mortality is not high, nor is it so great as might have been expected from the amount of sickness. It is only slightly greater than the lowest mortality observed during the previous ten years, and very little more than half that of 1869. The average mortality for the ten years from 1860 till 1869 was 29·98 per 1000. The results, therefore, of 1870 in this respect may be regarded as comparatively favourable. The general average for the whole army has been raised considerably by the number of deaths in the Punjaub, where they amounted to 24·48 per 1000. The highest death-rate in the district, 39·73, occurred at Fort Attock; the next highest, 39·06, at Umritsur. The death-rate at Peshawur was 33 23. The highest-death-rate in the whole presidency occurred at Jubbulpore, in the Central India district. In a strength of 627 there were 25 deaths, equivalent to 39·87 per 1000. Remittent and continued fevers, hepatitis, and dysentery caused the larger proportion of this mortality.

Cholera caused only 49 admissions and 21 deaths in all Bengal among European troops. The admissions were at the rate of 1·5, and the deaths ·63 per 1000 of strength. Seven of the deaths occurred at Fyzabad, 6 at Hazareebagh, 3 at Dinapore, and 1 at Chunar, all in the Gangetic provinces; 2 in Fort William, at Calcutta; 1 in Jhansi, and 1 in Jubbulpore, Central India.

There was no marked prevalence of small-pox. Twenty-one admissions and 6 deaths occurred from this disease, being in the relative proportions of ·6 and ·18 per 1000 of the strength.

The loss by invaliding for change of climate and discharge amounted to 52·50 per 1000—a high ratio compared with that of former years. It may be stated generally that during the last ten years the loss from invaliding of British troops in Bengal has gradually risen from 28 to 53 per 1000. Examination of the details shows, however, that this marked increase is due entirely to the large number of men who have been sent home of late years for change of climate. The proportion of men so sent has risen steadily, and without intermission, from from 15·14 per 1000 in 1861, to 44·13 per 1000 in 1870. It is also a noteworthy fact that the proportion of men invalided for discharge, instead of increasing, has materially decreased. Of men sent to the convalescent depôts, 212·85 per 1000 were sent to England—that is to say, in between one-fourth and one-fifth of the total number sent to the hills the change failed to produce the desired result. It is suggested that more marked benefit might be produced if the men were kept up in the hills during the winter months, as great and permanent good might in many cases be anticipated from the bracing climate of the winter months.

The Dundee authorities are about to erect a fever hospital on the Dudhope estate.

Artificial Food for Young Infants.—Dr. Putnam terminates a paper upon this subject by observing—"Let us, then, bear in mind that the only proper food for a new-born baby is the milk of its mother; that her place is best supplied by a wetnurse; that the great obstacle to the use of cow's milk is not the insolubility, but the irritating character of its coagula; that this may be avoided, to some extent, in many ways, and among others by the addition of a little starch or gelatine, for the purpose of effecting a mechanical separation of the particles of the coagula; and, finally, that for any other purposes starch or gelatine are never to be used."—*Boston Journal*, August 1.

SIXTEEN CASES SHOWING THE EFFECTS OF ATROPINE AS AN ANTIDOTE TO OPIUM.

By JAMES JOHNSTON, M.D.,
Medical Officer to the Chinese Hospital, Shanghai.

Further experience of the use of atropine in opium poisoning proves most conclusively its value as an antidote, and I now give a short outline of sixteen cases in which it was injected subcutaneously—the result being that ten recovered and six died.

1. A woman, aged 30, took four drachms of the extract of opium at 11 a.m. on June 18, 1870. On admission, at 11 a.m., she was deeply comatose, and could not be roused in the slightest degree; limbs and body powerless, pupils firmly contracted to a pin's point, face pale; lips, eyelids, and nails livid; respiration 14, stertorous; pulse 110, very weak. The contents of the stomach were evacuated by the stomach-pump, and two drachms of spt. sal volatile injected. At 11.30 a quarter of a grain of atropine in solution was injected. 12.30.: Little change observed; pupils slightly dilated, pulse weaker. Injected half a grain of atropine subcutaneously, and administered coffee and brandy per rectum. 3 p.m.: Pulse 140; respiration 10, tranquil; face flushed, pupils widely dilated, extremities cold. Applied hot bottles to the limbs. 5 p.m.: Pulse 115; respiration 10, soft and regular; skin warm; sleeping tranquilly. 6 p.m.: Very drowsy, still asleep; able to swallow when raised. Discharged cured the following day.

2. A shopman, aged 23, took three drachms of the extract of opium at 6 a.m. on June 24, 1870. On admission, at 1 p.m., he was in a state of the most profound coma; utterly insensible to a douche of iced water; pupils firmly contracted to the smallest point; surface of cornea and conjunctiva quite insensible to touch. Pulse 120, weak; respiration 14, stertorous. The contents of the stomach were removed by the stomach-pump. 1.30: Injected half a grain of atropine subcutaneously. 3 p.m.: Pulse very weak, 130; respiration embarrassed; pupils slightly dilated. Kept up artificial respiration at intervals, and injected coffee and ammonia per rectum. 6 p.m: Pulse 120, respiration 12, lips and eyelids still livid. Injected half a grain of atropine. 7.30 p.m.: Pulse 100; respiration 9, soft and regular; skin hot, face flushed, ocular conjunctiva slightly sensitive. 8.30: Sleeping tranquilly. 10 p.m.: Very drowsy still, but could be waked up; ordered coffee every hour. 2 a.m.: Quite conscious, complains much of fatigue, pupils very much dilated, has double vision. Discharged the following day.

3. A coolie, aged 24, took a drachm and a half of the extract of opium at 11 a.m. on August 26, 1870. On admission, at 2.30 p.m., he was deeply comatose, and incapable of being roused. Pulse 100, weak; respiration 12, stertorous. The contents of the stomach were removed by the stomach-pump, and strong coffee and ammonia were administered by the tube into the stomach. 3 p.m.: Injected half a grain of atropine subcutaneously, and applied sinapisms to the extremities. 5 p.m.: Pulse small and weak, 115; respiration 10; pupils slightly dilated; still thoroughly comatose, but general appearance improved; breathing more tranquil, lips more florid. 8 p.m.: Pulse 100, respiration 8. 8.30 p.m.: Pulse very weak; extremities cold; respiration more embarrassed. Injected coffee and brandy per rectum, and applied hot bottles to the limbs. 9.30: Injected a quarter of a grain of atropine. 10.30: Pulse stronger, 100; face flushed; pupils widely dilated; respiration tranquil. 11.30: Sleeping, breathing soft and regular. 1 a.m.: Conscious, and able to swallow; ordered coffee every hour. Discharged cured the following day.

4. A woman, aged 22, the wife of a carpenter, took three drachms of the extract of opium at 9 a.m. on October 6, 1870. On admission, three hours afterwards, she was partially comatose, but capable of being roused; pupils slightly contracted, pulse regular, respiration slightly stertorous, 16. The contents of the stomach were thoroughly evacuated by emetics of sulphate of zinc, and the patient was kept moving about between two attendants. 11 p.m.: In a state of complete coma; limbs powerless; pupils firmly contracted; pulse 102, weak; respiration stertorous. Injected half a grain of atropine, and applied heat to the extremities, and administered coffee and ammonia per rectum. 3.30 p.m.: Pupils slightly dilated, respiration improved. 4.30 p.m.: Pulse very weak, lips and eyelids still livid. Injected one-third of a grain of atropine. 6 p.m: Skin hot, face flushed, pupils widely dilated, pulse 100, respiration 10, sleeping soundly. 8 p.m.: Lips florid, pulse

100, respiration 12. 10 p.m.: Able to articulate, but still very drowsy; ordered coffee every hour. Discharged cured the next day.

5. A shopman, aged 24, took two drachms of extract of opium at 5 p.m. on October 29, 1870. On admission, two hours afterwards, he was able to speak and walk about without difficulty although very drowsy; pupils slightly contracted, pulse 84, respiration natural. Administered sulphate of zinc, which acted freely; kept him walking about between two attendants. 8.30 p.m.: Quite comatose, unable to move, pupils firmly contracted, respiration slow and stertorous. Injected half a grain of atropine, and made attempts to drag him about. 9.30: Further attempts to move him were useless; pulse very weak. Applied heat to the extremities and administered brandy and coffee per rectum. 10.30: Pulse very weak, 124; respiration slightly stertorous. Injected one-third of a grain of atropine subcutaneously, and ammonia and coffee per rectum. 12 midnight: Skin hot, face flushed, lips florid, respiration 9, soft; pulse 100. 1 a.m.: Sleeping tranquilly. 3 a.m.: Slightly conscious; swallowed some coffee. 5 a.m.: Awake and perfectly conscious. Discharged in the afternoon, cured.

6. A woman, aged 29, took two drachms of extract of opium at 5 p.m. on December 21, 1870. On admission, at 8 p.m., partially comatose, but capable of being roused up; pupils small; respiration 20, stertorous; lips slightly livid; pulse 100. The contents of the stomach were removed by the stomach-pump, the cold douche used, and the patient moved about between two attendants. 9 p.m.: Profound coma setting in, pupils firmly contracted, lips and eyelids livid, respiration slow and stertorous, pupils weak. Injected half a grain of atropine, and administered coffee and ammonia by the rectum. 10.30 p.m.: Pulse 120, weak; respiration 12, slightly stertorous; lips still livid. 11 p.m.: Injected a quarter of a grain of atropine. 12 midnight: Pupils widely dilated, face flushed, lips more florid, pulse 100; respiration 10, soft and regular; sleeping tranquilly. 1 a.m.: Ocular conjunctiva and cornea sensitive to touch; pulse 90, respiration 12. 2 a.m.: Can be aroused and made to swallow coffee. Discharged cured the following day.

7. A shopman, aged 28, took one drachm of the extract of opium at 5 p.m. on February 8, 1871. On admission, at 8 p.m., he was in a state of torpor from which he was easily roused. Pupils small, face pale, pulse weak and irregular, respiration slightly stertorous. Sulphate of zinc was administered, and the stomach thoroughly washed out, as the emetic failed to act promptly. 8.30 p.m.: Injected half a grain of atropine and walked him about between two attendants. 9.30.: Very drowsy; if left for a moment he became quite insensible. 10.30 p.m.: Deeply comatose; pulse 120, very weak; pupils firmly contracted. Injected half a grain of atropine, and administered coffee per rectum. 11.30 p.m.: Pupils slightly dilated, skin hot, face flushed; respiration 12, soft. 1 a.m.: Lips florid; pulse 90, stronger; respiration 12; slightly conscious and sleeping very quietly. Ordered coffee every hour. Discharged on the evening of the same day, cured.

8. A woman, aged 23, took four drachms of the extract of opium at 6 p.m. on June 24, 1871. When admitted into Hospital, at 8.30 p.m., she was deeply comatose, limbs powerless, pupils small, conjunctiva and cornea slightly sensitive to touch, lips livid, respiration slow and stertorous, 14; pulse 100, weak. The stomach was thoroughly washed out by the stomach-pump, and half a grain of atropine injected subcutaneously. 11.30 p.m.: Still thoroughly comatose, pulse 120, respiration 14. Injected a quarter of a grain of atropine subcutaneously, and administered ammonia and coffee per rectum. 1 a.m.: General appearance improved; pulse 110, respiration 12, skin hot, face flushed, pupils dilated, lips and nails florid, the patient now slept tranquilly for two hours, the respiration varying from 7 to 10. 4.30 a.m.: Slightly conscious and able to swallow a little. 6 a.m.: Able to take nourishment and sit up. Discharged cured on the afternoon of the same day.

9. A Ma-foo, aged 28, took two drachms of extract of opium at 2 p.m. on August 12, 1871. On admission into Hospital, at 7 p.m., pupils small, pulse 80; respiration 12, slightly stertorous; very drowsy, can scarcely be roused. An emetic of sulphate of zinc was administered, which acted freely, and the patient was walked about between two attendants. 8 p.m.: Deeply comatose, pupils firmly contracted, limbs powerless, ocular conjunctiva and surface of cornea barely sensitive to touch; pulse 120, weak and irregular; respiration slow and stertorous. Tried the cold douche from a height without producing the slightest effect; also galvanism without any result. Rubbed the skin dry and applied hot flannels. 8.30 p.m.: Injected half a grain of atropine subcutaneously, and kept up artificial respiration at intervals. 10.30: Still in profound coma; pupils slightly dilated; respiration still embarrassed. Injected a quarter of a grain of atropine. 12 midnight.: Face flushed, skin hot, pupils widely dilated, pulse 110, respiration 10, soft; sleeping tranquilly. The patient continued in a quiet slumber until 4.30 a.m., when he was conscious, and complained of severe pains in his limbs and great lassitude. Discharged on the afternoon of the same day, cured.

10. A married woman, aged 37, took one drachm and a half of the extract of opium at 4.30 p.m. on September 3, 1871. On admission, at 6 p.m., conscious and able to move about, pupils natural, pulse and respiration normal. Sulphate of zinc was injected, and followed by copious vomiting. From 7.30 to 11 a.m. she was kept moving about, and made to drink strong coffee and ammonia every hour, and during that time the symptoms were drowsiness and slight contraction of the pupils; at 1.30 coma set in severely, pupils became firmly contracted, pulse weak, 120; respiration stertorous. Half a grain of atropine was injected subcutaneously at once, sinapisms were applied to the extremities, and brandy administered per rectum. 3 a.m.: Pulse 100, respiration 12, patient sleeping quietly. 5 a.m.: Still asleep, but can be roused up. 9 a.m.: Perfectly conscious and able to take nourishment. Discharged on the evening of the same day.

11. A shopman, aged 31, took four drachms of the extract of opium at 6 p.m. on October 6, 1871. On admission, at 8.15 p.m., he was able to walk about and reply to questions, and the pupils were slightly contracted. Sulphate of zinc was administered without acting freely. The stomach was then thoroughly washed out by the stomach-pump, and the patient was walked about between two attendants. 9.30.: Patient more comatose; tried the cold douche without producing the slightest effect. 10 p.m.: Injected half a grain of atropine subcutaneously; patient now in the most profound coma, insensible to everything, respirations stertorous, pulse weak and irregular. 11.30 p.m.: Pupils slightly dilated; injected a quarter of a grain of atropine. 1 a.m.: Pupils widely dilated, face flushed, skin hot, pulse 100, respiration 10, soft; sleeping tranquilly. 3 a.m.: Still asleep; respiration 12, soft. 5 a.m.: Still very drowsy, but capable of being roused, and made to swallow coffee. 7 a.m.: Complains of fatigue and lassitude. Discharged cured, in the evening.

12. A hawker, aged 37, took three drachms of the extract of opium at 8 p.m. on July 24, 1870. On admission, at 11 p.m., he was in a state of the most profound coma, pupils firmly contracted, respiration stertorous and slow, pulse weak and irregular, 124; conjunctiva and cornea quite insensible to touch, lips and nails livid, tongue cold. The contents of the stomach were evacuated by the stomach-pump, and three drachms of spirit ammonia injected, and coffee and ammonia administered by the rectum. 1.30 a.m.: Still in profound coma, pulse weak and intermittent; injected a quarter of a grain of atropine and applied sinapisms to the extremities. 3.30 a.m.: Face slightly flushed, and pupils dilated; pulse 130, very weak and intermittent. Administered brandy per rectum. 6 a.m.: Respiration embarrassed and frequent, pulse very weak; injected a quarter of a grain of atropine. 9 a.m.: Respiration softer, pulse still very weak; could be roused slightly; swallowed a little spirit sal volatile and coffee. 12 noon: Respiration slow and slightly stertorous; pulse very weak, almost imperceptible; applied sinapisms to epigastrium and extremities, and administered brandy by the rectum. 2 p.m.: Patient moaned feebly, and exhibited signs of consciousness, limbs cold and pulse imperceptible. Died at 5 p.m.

(*To be continued.*)

PARACENTESIS EXTRAORDINARY.—Drs. Haymaker and Graham, of Oregon, Indiana, communicate the following extraordinary case:—Mrs. Gyer, 61 years of age, and mother of three children, was tapped in 1854 for ascites, ten gallons of fluid being removed. Since that time she has been regularly tapped by her husband, at intervals of from six to twelve weeks, an average of five gallons being removed at each operation. She has now had paracentesis performed 130 times in less than eighteen years, and the enormous quantity of 685 gallons has been thus removed. She takes no medicine, does all her household work, and bids fair to live long. This is certainly a remarkable history. More than twenty-one barrels of fluid from the peritoneal cavity, or, putting it by weight, some 6850 lbs. in less than eighteen years! . . . . Cann reported a case to the Paris Academy of Medicine, in which a woman was tapped during fifteen years 886 times, and was cured. Our Indiana case must yield to this.—*American Practitioner*, July.

REVIEWS.

Pharmacopoea Norvegica. Editio Altera. Regiâ auctoritate edita. Christianiæ, 1870. Impensis Alb. Cammermeyer. Typis, H. J. Jensen. 8vo, pp. 320.

When reviewing the seventh edition of the "Swedish Pharmacopœia" (now nearly three years ago—*Medical Times and Gazette*, October 23, 1869), we alluded to the proposed compilation of a Scandinavian Dispensatory, and to the fact that a meeting of representatives of the Medical Profession in Denmark, Sweden, and Norway had already been held with a view to the accomplishment of that desirable end. A further step in the same direction has since been taken in the publication of a revised edition of the "Norwegian Pharmacopœia," a work which bears the impress of the great ability, scientific zeal, and extensive information of those engaged in arranging it—Messrs. E. F. Lochmann, O. M. N. Lund, F. P. Moeller, and H. H. Hvoslef.

The "Pharmacopoea Norvegica," which resembles our own in not separating the drugs from the preparations made from them, contains about 500 remedies, of which sixty are innovations in the present edition. As the work is—like its Swedish compeer—in Latin, foreign readers will find but little difficulty in reading it. The vernacular is not, however, entirely discarded, for the Norwegian synonyms of all the drugs and their preparations are given. In the present edition the metric system of weights and measures has been substituted for the old Norwegian medical pound. That the eulogium we have already paid to the compilers of the work is not undeserved is shown by the attention they have devoted to a study of foreign pharmacopœias. Synonyms extracted from those of Sweden, Denmark, Prussia, Germany, Austria, Great Britain, the United States, and France are inserted after the Latin title of each drug or preparation; and in many instances the respective strengths of the preparations in the formularies of those nations are given.

Our Norwegian brethren have adopted a middle course in the matter of stating the doses of the different preparations, having ventured on the insertion of the extreme dose only of the more powerful remedies. Thus we read, under the head of Carbolic Acid, "*Dosis maxima* = guttæ tres." In several instances the maximal dose allowed or suggested is rather under that given in the British Pharmacopœia, though the preparations are of equal strength—for example, the highest dose of dilute sulphuric acid is set down at twenty drops, that of dilute nitro-hydrochloric acid at fifteen drops, that of santonin at about two grains, and that of dilute hydrocyanic acid at three drops. Other doses are equal to those of our English posological tables, as that of acetate of morphia, which is given at three centigrammes (nearly half a grain), that of croton oil at one drop. A few doses are larger than ours, as corrosive sublimate, which is allowed to be given in a maximal dose of three centigrammes, and digitalis-leaf to the amount of twenty centigrammes.

Passing on to consider the chief points in the formulæ which appear to demand attention, we find four spirituous extracts, all of them containing sugar of milk in the proportion of one part in four. The extracts in question are those of aconite, belladonna, hyoscyamus, and nux vomica. The first three are all prepared in the same way, as follows:—Four parts of a rectified spirit (specific gravity ·901 to ·905) with one part of the drug are macerated for five days and expressed; three parts of the same spirit are poured on the residuum, and the mixture is again treated as before; five parts are then distilled from the two liquors, mixed together, and filtered; the residuum is evaporated to dryness over a water bath; the dried extract is, finally, thoroughly mixed with a third of its weight of sugar of milk. These preparations are ordered to be kept in a well-closed vessel and in a dry place, or over calcium, oxide or chloride.

A very agreeable form for camphor mixture is met with, though it has the drawback of being perishable. One part of powdered camphor is rubbed up with nine parts of mucilage, ten parts of syrup of raspberries (!), and eighty parts of water are then added.

A novel set of formulæ, under the heading *Species* (Spices), partake a little too much of the prolixity of the French Pharmacopœia to satisfy us. They include the so-called *St. Germain tea.*

The preparations of opium are indifferently termed *tinctura opii* or *tinctura thebaica*, and so on. This we regard as better than the Swedish nomenclature, which does not recognise the word *opium* at all.

Among the ointments we come upon a form for "unguentum sulphuris compositum," or "unguentum ad scabiene Viennense." There are many other points we should like to dwell on did space permit. Suffice it to say that this well-printed volume concludes with a series of useful tables, out of which we would select one for especial commendation. It is that which gives the solubility in cold water of certain remedies, chiefly from among the acids, salts, and others. Touching solubility, we may state that santonin is mentioned as being freely soluble in castor oil. This solvent is omitted in the English list.

While congratulating the compilers of the second edition of the "Pharmacopoea Norvegica," we may be allowed to express a wish shortly to see the first edition of a truely national work, the "Pharmacopoea Scandinaviensis."

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Hospitals Empty—Hôpital St. Louis—Bureau Central—French Teetotalism—Berceau de Croissance—Temperature of Paris—New Taxes on Pharmacy—Electric Light—M. Chevreul.

Paris, September 3.

The hospitals are being kept as empty as possible, as advantage is taken of the fine weather to execute the necessary repairs, and to cleanse and purify the interior of the wards. The Hôpital St. Louis is undergoing thorough repair, which it stands much in need of, and another building is to be added to it, as the present hospital is far from sufficient to meet the requirements of the poor and populous district in which it is situated. The new building is to be composed of three stories, each to contain twelve beds; and other improvements are to be made, such as the reconstruction on a new model of the bath set apart for diseases of the skin, and the opening of another garden.

The Hôpital St. Louis, though originally intended for the treatment of skin diseases only, has gradually been converted into a general hospital; for we find in it medical and surgical wards, and a pavilion devoted to lying-in women. It still retains, however, its special character, and affords a wide field for the study of dermatology. It is an old-fashioned building, and from its style would be taken for the oldest hospital in Paris, but it only dates from the reign of Henri IV., and was opened in 1702. It is nominally intended to contain 800 beds, but the hospital authorities take in any number, and as many as 1000 patients have been crammed into the wards in utter disregard of the first principles of hygiene. It covers, with the offices, baths, etc., an immense space of ground, which besides is occupied by groves of trees, and pleasant walks, adorned with fountains, where those who can move about take their daily recreation, and by way of encouragement are allowed to work in the garden at one sou (or a halfpenny) per hour. The general aspect of the place is interesting and healthy; but when one enters the wards the same evils resulting from overcrowding are noticeable here as in the other hospitals of Paris, such as pyæmia, erysipelas, puerperism, etc. Two of the courts are occupied by wooden huts designed for particular medical and surgical cases; but these, too, are so crowded that I cannot help thinking that the patients are thrown "out of the frying-pan into the fire."

While on the subject of repairs and improvements, I may mention the addition to the School of Medicine of a pavilion, intended as a laboratory of pathological chemistry—a building much needed. It is to be attached to the Ecole Pratique, a block of buildings used by *agrégés* who aspire to professorships and by private professors authorised to give lectures on special or general subjects. The Ecole Pratique, which adjoins the Musée Dupuytren, is a kind of supplementary school, where dissections are performed, and where many of the courses are gratuitous, while for others a small fee—from 10 fr. to 30 fr.—is required.

You are aware that most of the appointments under the professorships are obtained only by *concours*, and that for the Bureau Central, from which the hospital physicians and surgeons are recruited, has resulted in the nomination of MM. Martineau, Hayem, and Ferrand.

The Academy of Medicine has been authorised to accept the sum of 10,000 fr. (£400) left by will by Dr. Farlet, who died in 1867. The interest of this amount is to be applied to the

foundation of a prize for the best work on mental and nervous diseases, the choice of the subjects being left to the Academy.

Competitions seem to be the order of the day. A prize of 500 fr. is offered by the Société de Secours aux Blessés de Terre et de Mer for the best ambulance carriages and apparatus for the use of the sick and wounded in time of war. The examination of the specimens will take place from December 10 to 15 next, at No. 11, Rue Matignon.

The "Association contre l'Abus des Boissons Alcoöliques" has fixed upon the following subjects for prizes for 1873-74:—

1st Question.—A prize of 500 francs will be awarded to the author of the best work, which under the form of a story of familiar sentences, or of illustrated publications, will present the most striking tableau of the dangers of drunkenness. It is to be written in a manner that it may be put into the hands of persons of all ages and of both sexes.

2nd Question.—To investigate the practical means of substituting, according to the habits of the population of France, the use of drinks, not only inoffensive, but also salutary—such as tea and coffee—for that of alcoholic liquors. The prize for this will also be 500 francs.

3rd Question.—To determine, by aid of chemical analysis and of clinical observation and experiments, the analogies and the differences which, under the double bearing of the composition and the effects on the organism, exist between spirits of wine and the alcohols extracted from other sources, which are delivered to the commerce of drinks and liquors. For this the prize is 1500 francs.

The two classes of distinct facts which the third question embraces can be treated of separately.

The essays on the first two questions must be forwarded at the latest on March 31, 1873, and for the last on December 31, 1873, to the Secretary-General of the Association, 52, Rue Jacob, at Paris, where are also received the names of those who wish to join in the efforts of the Association in the contest undertaken against drunkenness.

For the information of your readers, all of whom I feel convinced are deeply interested in this great social and sanitary question, I wrote to the Secretary of the Association to know whether foreigners of both sexes would be admitted to the competition, and whether the essays were to be restricted to the French language, to which I got the following reply:—"The competition is open to all, without distinction of nationality or sex. For the first question it is necessary that the essays be written in French; but for the other two this is not required. The essays may be in manuscript or print."

In the Medical Section of the Exhibition being held in the Palais d'Industrie is to be seen a cradle which also serves the purpose of weighing infants at the breast. It is exhibited by Dr. Groussin, superintendent of the hydrotherapic establishment at Bellevue, who is also the inventor, and which he styles "Berceau de Croissance"—a designation, he *naïvely* says, he has given the apparatus, "not because it possesses the marvellous virtue of conducing to the infant's growth, but because it serves to verify the increase or decrease of its weight." It is a very ingenious apparatus, consisting of an ordinary cradle, and the scales are so adapted that the child can be weighed without being disturbed. I need hardly dwell upon the importance of having children, and in some cases even adults, periodically weighed, as it is the only sure way of ascertaining whether a child is or is not progressing as it ought to be; but this operation is generally neglected, even by medical men, owing to the means of weighing being up till now defective and inconvenient. The cradle under notice obviates these difficulties, and the child can be weighed whether awake or asleep.

The weather, from being tropical, has become rather mild; and in connexion with atmospheric temperature I may mention a curious phenomenon that was noticed not many days ago in this city. The workmen who are employed in the repairs of the Panthéon noticed a marked difference between the temperature of the air at the summit of the dome and that on a level with the ground; those working at the top were obliged to wear warm clothing, while those below were in shirt-sleeves—the thermometer marking in the former 7° to 8° C., and in the latter from 25° to 27° C. The dome of the Panthéon, you are aware, is calculated to be 143 metres above the level of the sea, and is the highest point of Paris.

Whatever may be the amount of scepticism that prevails in the minds of some medical men as to the efficacy of drugs, pharmacies are springing up on all sides in Paris, and they seem to vie with the public-houses, which are nearly as numerous as the dwelling-houses. The present Government, taking advantage of this, are levying heavy taxes upon both species of trade. The National Assembly have recently voted a duty of fifteen centimes on each litre of mineral waters imported. They have also established a tariff of duty upon certain drugs, which, although not much felt by the *pharmaciens*, will fall heavily on the sick public, and indirectly upon the doctors. But one of the most important measures in contemplation is a general revision of the legislation concerning the teaching and practice of Medicine and Pharmacy.

A small wooden tower is being raised on the Buttes Montmartre of about three metres in height, and designed to receive an electric apparatus of very great power, intended to light by night the whole quarter of the 18th Arrondissement, of which Montmartre is the chief seat.

I cannot conclude without referring to a very imposing ceremony which has just taken place at the last meeting of the Academy of Sciences on the occasion of the fifty-sixth anniversary of the nomination of M. Chevreul as member, when his colleagues presented him with a medal as a token of their respect and affection for his person, and of admiration for his works. M. Dumas, the celebrated chemist and permanent Secretary to the Academy, in a most eloquent speech recalled the numerous services rendered by the venerable Dean of the Academy, who modestly styles himself "le doyen des étudiants français." It was in 1806 that M. Chevreul published his first most important work. He was collaborator of Vanquelin; and he has just completed a volume, entitled "Memoires de l'Academie," a most interesting work, which throws light upon many of the most obscure scientific questions of the day. M. Chevreul has not only enriched science, but he has endowed industry with several new products. It is to him that we are indebted for the substitution of wax for the old tallow candles; also for the fabrication of artificial essences which form the bases of Parisian perfumery, and for the dyes of different stuffs. In short, it is to M. Chevreul that we are indebted for the most important progress that has been made in the arts and sciences during the last half-century. M. Chevreul is one of the most distinguished chemists of the age; and, besides being Dean of the Academy of Sciences, is Director of the Museum of Natural History at the Jardin des Plantes.

GENERAL CORRESPONDENCE.

BRANDY IN PLEURO-PNEUMONIA.

LETTER FROM Dr. J. M. WINN.

[To the Editor of the Medical Times and Gazette.]

SIR,—I think, in spite of all that has been said against the use of alcohol in disease, that the following case affords a striking instance of its utility in some forms of pleuro-pneumonia.

On the 21st inst. I was requested to see, in consultation, Miss ——, aged 21, a dressmaker. She is a delicate girl, but fairly nourished. She was suddenly seized, after exposure to cold, about a fortnight before I saw her, with pleuro-pneumonia of the right lung. A few days after the attack she spat up prune-coloured expectoration. I found her in an extremely prostrate condition—breathing laboured, pulse exceedingly small and rapid, skin burning hot; complete dulness of the lower lobe of the right lung, with absence of respiratory murmur; tongue clean; bowels, which had been much relaxed, were then quiet. She was taking eight ounces of port wine daily. We ordered a small blister to the side, a dessert-spoonful of brandy every four hours, in addition to the wine, and beef-tea or milk every two hours. On the following day the improvement was very striking—pulse full, skin moist, and breathing less frequent. When I last saw her there was every prospect of her recovery: her appetite was excellent, breathing tranquil, expectoration copious and mucous. There was still some dulness of the right lung, and a slight *frottement* over the same spot.

It is a singular fact that her father died of pleuro-pneumonia, and that her brother had a similar attack at 21, her present age.

I think that the strongest opponent to the use of alcohol must admit its virtue in the above case.

I am, &c.,

31, Harley-street, August 26. J. M. WINN, M.D.

WE learn from Hong-Kong to July 30 that the heat at Shanghai during the past few weeks had been intense; many cases of sunstroke had occurred.

LEGAL INTELLIGENCE.

HOMICIDAL MANIA.—IMPULSIVE INSANITY.

At the Central Criminal Court, on August 21, before Mr. Justice Hannen, James Daniel Rogers, 37, a barber, was arraigned for the wilful murder of his wife. Prisoner pleaded "Not guilty."

Mr. Poland and Mr. Beasley conducted the prosecution; Mr. de Michelé (with Mr. M. Williams) the defence.

The prisoner and his wife had been married ten years, and had two children, the eldest of whom was a girl about 8 years old. They lived together at Bermondsey. On more than one occasion the deceased had aroused the jealousy of her husband; nevertheless, he always appeared to be very fond of his wife and children. He was also a peaceable man except when the worse for drink. On April 17 he took the pledge, and had not broken it. He had latterly become eccentric. On June 16 he went with his wife and children to Victoria Park, where they had tea, were on friendly terms, and returned home by omnibus. Before going to the park the prisoner had a few angry words with his wife, but only about her dress being dirty. On the morning of the 17th the prisoner's daughter, an intelligent child, who slept in a bed adjoining that of her parents, was awoke by her mother calling out, "Eliza! your father is cutting my throat!" She saw her father lay down a razor on the table. He was then sitting on the foot of the bed in his shirt. She saw her father on a former occasion cut her mother's head open, and she thought she once heard him say he would cut her throat. They were all friendly at supper after returning from the park.

Robert Duffy, at whose house the prisoner and his wife had lodged for about two months, deposed that they occasionally quarrelled. The prisoner and his wife were sober in their habits. About half-past two he heard deceased shriek, and went downstairs, when the wife begged the witness to come and help her, as her husband had cut her throat. The prisoner was also bleeding from a wound in his throat. The prisoner's brother also came, upon which the prisoner said to him, "You know all about this; you have given her drink, and sent her home to beat me." The brother asked him what he meant, when he repeated the statement, and added, "She knifed me once before; she has done it." Both the deceased and the prisoner were at length taken to Guy's Hospital. Being asked by a lodger, Dight, who had inflicted the wound in his wife's throat, the prisoner said, "She has cut her own throat, and then cut mine." This witness spoke to the prisoner's strange manner and childish ways during the three months that he had known him.

Mr. Joseph Moore, the surgeon who was called in at the time, deposed that the woman, in reply to the prisoner's statement that she had done it, said—"If I'm to die this moment, it was he that did it." He saw nothing in the prisoner's demeanour to induce him to believe him to be insane.

Mr. G. H. Deeping, the House-Surgeon at Guy's, described the prisoner's wound as a superficial one, about three inches long, partially dividing one of the large muscles of the neck, but not dangerous. He was discharged in about a week or ten days. Nothing struck him as remarkable in the prisoner's manner. The woman had a deep wound on left side of the neck about four inches long and an inch and a quarter deep. It was a clean-cut wound, and of a dangerous character. She died on June 27. Witness heard her say in presence of her husband—"I am a dying woman; don't let me go out of the world without having you retract the charge that I had cut your throat." She also said that her husband was at times very strange, and she had said he ought to be taken care of.

Mr. Gibson, Surgeon of Newgate Prison, saw nothing to induce a belief that prisoner was insane, but he admitted that he had met with many cases where crime had been committed under delusions or sudden impulse. The delusion might be jealousy, or the jealousy might be a delusion. He had known cases where the victim had been a person most tenderly loved by the person committing the crime, and it was not an infrequent occurrence for attempts to be made to commit suicide afterwards.

No medical evidence was called for the defence. In the result the jury, after deliberating for half an hour, found a verdict of "Not guilty" on the ground of insanity.

The prisoner was thereupon directed to be kept in custody during her Majesty's pleasure.

CHARGE AGAINST AN UNREGISTERED PRACTITIONER OF SIGNING A CERTIFICATE OF LUNACY.

Mr. Alexander Ogilvie, of 4, Lime-grove, Shepherd's-bush, was summoned at Bow-street, yesterday, at the instance of the Commissioners in Lunacy, to answer the charge of having unlawfully signed a certificate without the necessary medical qualification.

Mr. Poland conducted the prosecution on behalf of the Commissioners, and explained the legal bearing of the case. By the 16th and 17th Victoria, c. 96, s. 4, it was provided that a person can only be confined in a lunatic asylum upon an order signed by a relative of the patient, accompanied by two medical certificates signed by persons duly qualified as physicians, surgeons, or apothecaries. By later Acts the qualification was more fully defined, and all persons registered under the Medical Act are required to set forth the College of Physicians, or Surgeons, or University, from which their qualifications were derived, and this medical registry formed in reality the test of a person's legal right to practise. The charge against the present defendant was that he had signed the certificate in question without being a legally qualified practitioner; and a gentleman, whose name he hoped it would be unnecessary to mention, because he was now happily in a fair way of convalescence, had been consequently confined for several weeks in the Peckham Asylum. Great benefit had been, no doubt, derived by the patient from the skilful treatment of Dr. Stocker, but it was obviously the duty of the Commissioner in Lunacy to see that the provisions of the Lunacy Act should be fully complied with, and, above all, that these certificates should be signed only by duly qualified practitioners.

Dr. Stocker, Medical Superintendent of Peckham House Asylum, proved that a patient was admitted on July 20 last upon the order produced, and upon certificates signed by "Dr. Stewart" and "Alexander Ogilvie," the qualification of the latter being set forth as "Surgeon R.N." Copies of the order and certificates were sent, as usual, to the Commissioners, and that of Mr. Ogilvie was sent back to be amended. It was returned to defendant, who added "M.D. St. Andrews, 1828." In consequence of communications subsequently received the patient was discharged on August 6, having recovered sufficiently to remain since unconfined.

The defendant's signature was proved by another witness, and a clerk in the office of Messrs. Vandercour, Law, Hardy, and Aston, solicitors to the Commissioners in Lunacy, proved that the defendant's residence was a private house, having his name on the door, and a lamp in front, with the words, "Mr. Alexander Ogilvie, established 1847," in front, and "Surgery" and "Midwifery" on the right and left sides of the lamp.

Dr. Hawkins, the Registrar to the General Medical Council, proved that the defendant's name was not in the registry kept in accordance with the Medical Act of 1858. There was a person of the name of Alexander Ogilvie on the registry in 1859, described as a Licentiate of the Royal College of Surgeons of Edinburgh, 1811; M.D. Edinburgh University, 1822; and Deputy-Inspector General of Royal Artillery, on half-pay. This person died at Plumstead on May 16, 1868, aged 79, and the name was then erased.

The defendant addressed the Court. At the time when he thus foolishly committed himself, the patient was in an extremely violent state, requiring five persons to restrain him. But for the extreme urgency of the case, he would never have signed such a certificate, although he had practised for forty-two years, having been fully educated for the profession by his father at a time when it was not compulsory to be entered upon the Medical Register.

Mr. Flowers said he had no power to deal with this charge, except to commit the defendant for trial, but he should be satisfied with his personal recognisances in £100 to appear at the Central Criminal Court.

The St. Pancras Guardians have accepted the resignation of Dr. Cant, the Medical Officer of the Leavesden Schools.

The winter session of the London Medical Schools commences on October 1. Inaugural addresses will be delivered at the London Hospital by Mr. Jonathan Hutchinson, at Guy's by Dr. H. Pye-Smith, at St. George's by Mr. Rouse, at Charing-cross by Dr. J. Watt Black, at St. Thomas's by Mr. Croft, at St. Mary's by Mr. A. T. Norton, at University College by Mr. Christopher Heath.

OBITUARY.

FREDERICK JOHN MULLINGER, M.R.C.S., L.S.A.

Mr. F. J. Mullinger was born at Bishops Stortford, Herts, in the year 1833, and was articled to the late Mr. George Rugg, of Sittingbourne. Mr. Mullinger entered as a student at St. Thomas's Hospital in 1851, and was soon known as an earnest worker and a man of peculiar ability. He possessed a most tenacious memory: what he once learnt he scarcely ever forgot. He was a profound anatomist; and the writer of this (who was a teacher of anatomy) remembers, years after Mr. Mullinger had left the hospital, trying, but unsuccessfully, to puzzle him on minute and difficult points. Not only was Mr. Mullinger well up in the essentials of his profession, but he was a really learned comparative anatomist, botanist, and geologist. He was an amiable and gentlemanly character, with very modest and retiring manners. This caused him to shrink from the vexations and routine of general private practice, and induced him, almost as soon as he had passed his examinations, to become surgeon to a ship, and voyage to distant parts of the world, where he enriched his mind with the wonders of tropical countries. When you got him alone, Mr. Mullinger was a most delightful companion, and would charm you with accounts of his microscopical researches in oceanic animalcules, etc. Save a few short spells on shore, he continued voyaging, generally in Green's service. About two years since he discovered himself to be the subject of aneurism of the aorta. Of this he did not acquaint his relatives, but struggled on through much suffering, bravely and manfully doing his duty. On his last voyage home from India he had a great many patients under his charge, and the heat being also excessive, he arrived in England, on June 27 last, thoroughly exhausted. From this time he became worse; an immense aneurism rapidly extended itself across the right chest, even into the axilla; he was anasarcous, and the attacks of dyspnœa were most distressing; he was unable to lie down, and only obtained slight snatches of sleep night or day. Yet he endured all cheerfully, and without the least repining. So passed away a kind, gentle, learned, unassuming man, whose memory will long remain dear to all who knew him. During his last illness he was greatly solaced by the brotherly care of his old fellow-student, Dr. William Ord, of St. Thomas's Hospital.

THOMAS BALLE FORSTER, M.D.,

Died at Plymouth on August 25, aged 47 years. Dr. Forster entered the Royal Navy as an Assistant-Surgeon in October, 1847, and served on the Pacific station successively in H.M.S. *Asia*, *Nereus*, and *Dædalus* until September, 1851, when he joined H.M.S. *Plover*, at that time engaged on active service. On his arrival in England he volunteered to return to Behring's Strait, and was appointed to H.M.S. *Rattlesnake*, to which ship he was attached for upwards of three years. In April, 1857, he was appointed Assistant-Surgeon of her Majesty's Dockyard at Keyham, Devonport, which position he held until March, 1870, when he retired from active service.

ROBERT BERNARD, M.D., B.A.,

Deputy Inspector-General of Hospitals and Fleets, died at Spa, Belgium, on the 25th ult., aged 55 years. He became an Assistant-Surgeon in the Royal Navy May 9, 1838, Surgeon December 22, 1845, and Deputy Inspector-General July 1, 1865. He was employed at Hong-Kong from the latter date until December 8, 1868, since which time he has been attached to the Royal Hospital at Plymouth.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 29, 1872:—

Blake, John Ffrench, Galway, Ireland.
Eagar, Robert Taylor Sumner, Sheffield.
Paterson, Robert Haldane, Brigg, Lincolnshire.
Waghorn, Albert Richard, Anerley.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Highton, Thomas, St. Thomas's Hospital.
Knowles, Edmund, St. Mary's Hospital.
Squire, William, St. Bartholomew's Hospital.
Travers, Otho Robert, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bonthron, C. C., L.R.C.S.E.—Medical Officer for the Eastern Division of the Parish of Wemyss, Fifeshire.

Clarke, J. Lockhart, M.D., M.R.C.P., F.R.S.—Honorary Consulting Physician to the Provident Medical Institution and Lying-in Charity, 20, Pimlico-road, S.W., *vice* C. T. B. Aldis, M.D. Cantab., etc., deceased.

Durham, Arthur E., F.R C.S. Eng.—Surgeon to Guy's Hospital, *vice* Alfred Poland, Esq., deceased.

Matthew, Alex., M.A., L.R.C.P., and L.R.C.S.E.—Medical Officer to the Parish of Kinross.

O'Neill, James Patrick, L.K. & Q.C.P.I., L.R.C.S.I., L.S.A.—Medical Officer to the Provident Medical Institution and Lying-in-Charity, 20, Pimlico-road, S.W., *vice* Charles Beviss, M.D., retired.

Watson, E. A., M.D.—Medical Officer for the Western Division of the Parish of Wemyss, Fifeshire.

BIRTHS.

Barwell.—On August 1, at 32, George-street, Hanover-square, the wife of Richard Barwell, F.R.C.S., of a daughter.

Bonavia.—On July 8, at Kalka, the wife of E. Bonavia, M.D., Surgeon Bengal Medical Service, prematurely, of a daughter.

Freeman.—On September 3, at 2, Marine-terrace, Southsea, the wife of Alfred John Freeman, M.D. (of San Remo), of a daughter.

Ince.—On July 29, at Ráwalpindi, Punjaub, the wife of Dr. John Ince, Civil Surgeon, of a daughter.

Keelan.—On July 30, at Rosean, Dominica, West Indies, the wife of Nicholas Walter Keelan, M.D., of a son.

Savery.—On August 30, at 12, York-buildings. Hastings, the wife of J. Charles Savery, M.R.C.S. Eng., L.S.A., of a daughter.

MARRIAGES.

Gubbins—Budd.—On August 29, at Wembworthy, Devon, George Stainer Gubbins, of Miltown House, county Limerick, late Captain 56th Regiment, to Catherine Rider, third daughter of Richard Budd, M.D., of Barnstaple, Devon.

Livesay—Shapter.—On September 3, at St. Sidwell's, Exeter, William Livesay, M.B., Sudbury, Derbyshire, to Elizabeth, daughter of T. Shapter, M.D., Exeter.

Lowe—Stubbs.—On August 29, at the parish church, Wallasey, Cheshire, the Rev. William Lowe, incumbent of Fermough, Derry, to Eva Gwendoline Maria, second daughter of the late John H. E. Stubbs, M.D., of St. Asaph.

McDonald—Pogson.—On July 2, at St. John's Church, River Ouse, Tasmania, Wallis McDonald, M.R.C.S. Eng., L.R.C.P. Edin., only son of T. W. McDonald, Esq., Inspector-General of Hospitals and Fleets, Teignmouth, Devon, to Jane Anna Louisa, second daughter of the late George Thomas Pogson, Esq., Rotherwood, Tasmania.

Morris—Watson.—On August 20, at the parish church of Stand, Manchester, Joseph Morris, M.R.C.S. Eng., L.S.A., of Leamington, to Gertrude Hannah, youngest daughter of the Rev. J. W. Watson, M.A., Vicar of Christ Church, Folkestone.

Simcocks—Elderton.—On August 29, at the parish church of Llangollen, North Wales, William J. Simcocks, Esq., son of the late Jonathan Simcocks, Esq., of Southampton, to Caroline Henrietta (Amy), youngest daughter of the late Charles Augustus Elderton, M.R.C.S., of the Bengal Medical Staff, and stepdaughter of John Hodgson, Esq., of Argoed Hall, Llangollen.

Wildes—Jones.—On August 31, at St. Michael's, Cornhill, Charles, son of the late H. A. Wildes, Esq., Clerk of the Peace for Kent, to Mary Sarah, daughter of William Jones, M.D., of Finsbury-square, London.

DEATHS.

Anderson, Thomas, eldest son of the late Alexander Anderson, M.D., Jedburg, at Blairgowrie, Emittsburg, Iowa, U.S.A., from the effects of a fall, on August 12, aged 27.

Blandford, Elizabeth, sister of the late Silas Blandford, Surgeon R.N., of 9, Chester-square, at her residence, Wincanton, Somerset, on August 25.

Hare, Caroline Lavinia, beloved wife of R. W. Hare, Staff Assistant-Surgeon, at Asseerghur, on July 12.

Howell, Thomas Lewis, M.R.C.S., at Llanelly, Carmarthenshire, after a long and painful illness, on August 24.

Pearson, Herbert F., son of Dr. F. Pearson, Bengal Medical Service, at Welton-le-Wold, near Louth, on August 27, aged 14½ years.

Roscow, Thomas Tattersall, M.D., A.B. Cantab, M.B., L.M., M.R.C.P. Lond., late of Brussels, at Ivy Cottage, near Rochdale, on August 29, aged 59.

Walker, Alexander Macnamee, M.D., F.R.C.P.E., at Tunbridge Wells, on September 1, in his 60th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Evesham Union.—Medical Officer for the Workhouse; Medical Officer for the First District of the Union; and Medical Officer for the Second District of the Union. Applications, with testimonials, to the Clerk, at Evesham, on or before September 21.

Metropolitan Dispensary, 9, Fore-street, Cripplegate.—Physician. Candidates must possess a Degree from a British University, and also be Fellows or Members of the Royal College of Physicians of London, or undertake to become so within six months after election. Applications, with testimonials, to the Secretary, on or before September 8.

PARISH OF ST. GEORGE'S, HANOVER-SQUARE.—Medical Officer of Health. Candidates will be required to strictly carry out the duties as laid down in the 132nd Section of the Metropolis Local Management Act, from time to time to test the gas, and to analyse the water supplied to the parish, to carry out the duties of Analyst under the Adulteration of Food Acts, and to superintend the Inspector of Nuisances in the exercise of his duties. Applications, with testimonials, to the Vestry Clerk, at the Board-room, Mount-street, W., on or before October 16.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Candidates must be registered as Members of one of the Colleges of Surgeons of the United Kingdom, and as Licentiates of the College of Physicians of London or of the Society of Apothecaries of London. Applications, with testimonials, to the Hospital, on or before September 11.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Alderbury Union.—Mr. William Lait has resigned the Third District; area 6310; population 1541; salary £130 per annum.

Leyburn Union.—Mr. George Wright has resigned the Leyburn Western District; area 13,707; population 2571; salary £20 per annum.

APPOINTMENTS.

Beverly Union.—Thomas J. Thompson, L.R.C.S. Ire., L.R.C.P. Edin., to the Workhouse.

Bideford Union.—Louis R. Cooke, M.R.C.S. Eng., to the Clovelly District; Eusebius Rouse, M.R.C.S. Eng., L.S.A., to the Hartland District.

Glanford Brigg Union.—Thomas Baron, M.R.C.S. Eng., L.S.A., to the Ulceby District.

Newtown and Llanidloes Union.—William Pratt, L.R.C.P. Lond., to the Newtown District.

North Surrey District School.—Allen A. Duke, M.D. Edin., L.R.C.S. Edin., L.S.A., to the School.

Tetbury Union.—William Wickham, M.R.C.S., L.S.A., to the Tetbury District and the Workhouse.

Whitby Union.—John V. Laverick, L.R.C.P. Lond., L.F.P. & S. Glasg., to the Lythe District.

THE QUEEN has been pleased to appoint Robert Little, Esq., M.D., to be a member of the Legislative Council of the Colony of the Straits Settlements.

THE Metropolitan and Metropolitan District Railway Companies have declined to accede to the request of the Kensington Vestry to grant free passes over their lines to the Sanitary Inspectors and Inspectors of Nuisances.

WE understand that the Committee of the Brompton Consumption Hospital have determined to appropriate the money left to them by the eccentric old lady in Stamford-street in erecting a new hospital, immediately opposite the old one, to be subsidiary to it.

WE regret to state that on Thursday night week, Regimental Surgeon-Major Thompson, who had distinguished himself in the Crimea and in India, was fatally injured at Bullwell Railway-station, near Nottingham, by attempting to get into a train whilst in motion.

PORT OF LONDON SANITARY AUTHORITY.—This new Committee has been appointed, and at their first meeting, held in the Guildhall, Mr. G. S. Pedler was elected chairman.

SMALL-POX as an epidemic, according to the Registrar-General, may now be said to have disappeared from the metropolis. Only eight deaths were recorded last week against sixteen and fifteen in the two previous weeks. Four occurred in the small-pox hospitals. Six were unvaccinated cases and two vaccinated.

SMALL-POX IN AUSTRALIA.—Small-pox broke out in the colony (says the *Melbourne Argus*) about the beginning of July. It appears to have been introduced by some passengers who arrived by the *Nebraska* from San Francisco at New Zealand, and thence came to Melbourne. In consequence, however, of the vigorous measures taken by the Government, the disease seems to have been stamped out.

TESTIMONIAL TO DR. BASHAM.—A general meeting is to be held in the Library of Westminster Hospital, on Tuesday, the 17th inst., for the purpose of determining upon the form and manner of a testimonial to Dr. Basham, the money for which has been subscribed.

FRENCH DOCTORS AND JURIES.—A curious lawsuit has just been settled in France. A lady having taken into her mouth a morsel of the cartilaginous part of a calf's ear, it went the wrong way, and lodged in her œsophagus. It was extracted by the nearest medical practitioner, who charged £20 for his services. The lady refused to pay, and said that Dr. Nélaton himself would not have demanded such a sum. Dr. Nélaton, on being appealed to by the medical practitioner, said he considered the charge moderate. The jury split the difference by awarding £12, which, it would appear, bears a small proportion to the costs.

THE DUNDALK BOARD OF GUARDIANS have, with the sanction of the Poor-Law Commissioners, increased the salaries of all the dispensary medical officers, as follows:—Dundalk district, from £120 to £140 per annum; Barronstown, from £120 to £140; Ravensdale, from £100 to £120: Carlingford, from £100 to £120; Louth, from £100 to £125; and Dromiskin, from £50 to £75.

MEDICAL MICROSCOPICAL SOCIETY.—As none of the existing microscopical societies meet the wants of the student of Medicine, it is proposed to establish a new society, which shall devote itself solely to microscopical subjects in intimate relation with man, both in health and disease. The objects of the proposed society will be—the reading and discussion of papers, the exhibition of specimens, the formation of a cabinet, the exchange of specimens, etc. A preliminary meeting, of which due notice will be sent to the various hospitals and medical journals, will be held early in October, for the formation of the society, the enrolment of members, the drawing-up of rules, the election of officers, and for other business; and it is hoped that all qualified medical gentlemen and registered students interested in the movement will attend. All questions with regard to fees, hour and place of meeting, subjects admissible for papers, etc., will, of course, be settled at the preliminary meeting. The promoter is Mr. J. W. Groves, St. Bartholomew's Hospital, Smithfield, E.C.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN AUGUST, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	...	...	...	...	...	...
West Middlesex .	17·70	0·055	0·131	0·000	13·7	3·3
Southwark & Vauxhall . . .	17·13	0·085	0·111	0·003	13·2	3·3
Chelsea . . .	...	...	...	...	...	...
Lambeth . . .	...	...	...	...	...	...
Other Companies.						
Kent . . .	27·47	0·017	0·217	0·000	20·1	5·5
New River . .	17·10	0·038	0·147	0·000	13·2	2·4
East London . .	17·20	0·051	0·166	0·001	13·2	3·6

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 119,856,157 gallons; and the number of houses supplied was 497,845. This is at the rate of 36·7 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 26·8 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

The returns of the Grand Junction, Chelsea, and Lambeth Companies have not been received.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. William Henry Hewitt's letter has been received, and shall appear as soon as space will permit.

E. R. M.—Emphatically, No.

An Irishman.—Yes. Dublin Hospital Reports, vol. v.

G. Foster.—So called in compliment to the Italian anatomist of that name.

Pharmaceutist.—"Chloralum" is a very good word, as an abbreviation for chloride of aluminium; everybody knows what it is, and there is no earthly harm in the word, or in propagating the use of the disinfectant by advertisements. It is a good disinfectant and antiseptic of solid and liquid organic matter.

An Army Surgeon writing from Hastings on remedies for phthisis, under the signature "O. J. Aselli," says—

"I regret much that the old-fashioned remedy, 'syrup of saffron,' has fallen into disuse, for it well merits its title as the 'soul of the lungs.' It should be prepared at home, and the plant, where practicable, grown in private gardens, as many other flowers, etc., are substituted, through fraud."

Dr. Alfred Carpenter —Thanks. We shall be glad to have the more detailed report.

Vindictive Punishments.—Mr. W. Lovett circulates a bill in which he says that there should be an absence of all vindictiveness in punishment—that it should be only reformatory and deterrent. Mr. Lovett will find himself wrong if he will but study the subject. Vindictiveness, or the feeling that a punished man has got what he deserves, is a stern but valuable part of our mental constitution, and an instinct that ought to be obeyed. If the roughs don't like the cat, let them keep their paws off women. As a Frenchman said of the abolition of capital punishment—"Que Messieurs les Assassius commencent?"

C. J. T., Swinforde.—Plato cautioned against allowing wine to youths at an earlier age than 18 years, and against becoming intoxicated before 40. No doubt the vice increased amongst the ancients with the diffusion of luxury.

Hydrophobia.—Canine rabies is more prevalent in dogs than bitches. Professor Coleman stated in evidence, in 1830, that on rabies entering foxkennels the mad dogs bit dogs, but spared the bitches.

Case of Mr. Croft, of Snitterfield.—The *Birmingham Daily News* of Friday last has a long and elaborate leading article on the committal of Mr. Croft for giving false certificates of the death of Henry Need. It will be recollected that the deceased was the illegitimate child of a young married woman. The child was seized early in the morning of its death with convulsions. Mr. Croft was sent for three times, but before he could reach the house the child was dead. The description given to Mr. Croft tallied with what he observed, and accordingly he gave two certificates of the child's death, stating that the child had died of "a convulsive fit, from which he never rallied." Mr. Croft struck out in the certificates the words "*I last saw him on* ——." Now, the *News* declares that it is a great hardship for Mr. Croft to be put upon his trial for what it considers scarcely an offence at all, inasmuch as it was not a *false* certificate; that a coroner's inquest was held on the child; and, in fact, it was not "uttered," as it were, as a legal document, inasmuch as the coroner's certificate was the one acted on by the burial society. The *News* then enters into an elaborate argument to show that there was no legal definition of the word "attending," and that Mr. Croft omitting the words in italics above showed that at most he had only acted indiscretely and thoughtlessly.

Does She Drink?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am attending a lady for a "nervous illness," following the loss of her husband some years ago, and not a whit better now than she was at first. The chief thing is, that she lies in bed all day, rises in the evening, and sits up reading novels half the night; is sick in the morning, vows that she eats *nothing, absolutely nothing*, except something at night, such as two or three oysters, or an anchovy and bread and butter; says she takes one tablespoonful of brandy (no more) with a little iced water daily, and otherwise lives on barley-water, oranges, ices, and tea, and very little of these. Now, she does not *waste;* she is at times very excited and talkative, and at times loses *immense* quantities of bile by vomiting and purging. She is quite unmanageable—my attendance is a mere sham; and, though she denies it, I cannot help asking, Does she drink? I am, &c., G. P.

Projected Medical Poem.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I venture to lay before you a scheme of a medical didactic poem. Such poems are of high antiquity and authority, as witness the maxims of the School of Salerno, the "Zoonomia" of Darwin, and the "Art of Health" of Armstrong. The present age is absorbed in sensual Swinburneism, and needs recalling to the poetic aspect and beauty of common things, and especially of the influence of the seasons on health. My poem is in four cantos, in the style of Thompson's "Seasons," and, like him, I take spring, summer, autumn, and winter as my subjects, and under the head of each season I give the pathological and climatological character, with episodes relating various cases—some pathetic, some humorous. I enclose the canto on summer as a specimen, and should be glad if you will put me in the way of getting a publisher and subscribers.

I am, &c., Hesiod, Jun.

*** Our readers must judge for themselves. Here is a passage describing London lasses out of town in August:—

"Forth on the breezy down we step, rejoicing
In Sol's glorious brightness - unconscious, Cockney-like,
Of his most dangerous power to burn, to tan, or scorch.
Sudden he darts his fiery ray, and soon
The tingling skin and smarting brow bear witness
To his touch; for quickly mounts the burning blush,
And spreads o'er cheeks and foreheads fair; whilst freckles gather,
Settling in dusky clusters on our nose's bridge."

Balmforth *v.* Buckley and Fletcher.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—With regard to the first part of Mr. Wm. Cobbett's letter, which appeared in your impression of the 31st ult., and to which we trust you will allow us to reply, we think it only necessary to state that, having in our former letter freely admitted an offer of reference before action commenced, it is clear it must have been refused, or why should we ask to reopen the question? and it was not necessary for us to put it in so many words. The first offer was declined mainly because it did not come through the proper and ordinary channel—the plaintiff's attorneys—and because no examination of plaintiff had then been made for defendant. With regard to the remainder of Mr. Cobbett's letter, it should be stated that, after the action was commenced, Mr. Hewitt and Mr. Edmund Whitworth saw Mr. Cobbett on July 2, and although the object of our visit was to try to refer, the question of examination was ostensibly the object; for, if we had shown any strong desire to refer, it would have been misconstrued. We cannot admit with Mr. Cobbett that the examination was the main subject of conversation; but on the contrary, for the examination was assented to at once. We said our client was willing to refer (not because we doubted our case, but because the mere mention of negligence would be injurious); but Mr. Hewitt said he had then no instructions to refer. We left with the understanding that Mr. Cobbett would ask the plaintiff if he would refer—in fact, he said he would see him on the Friday or Saturday following on that subject, and then communicate with us. As we got no reply as to the reference, we, on July 6, and again on the 12th, called upon and asked Mr. Cobbett (or his clerk, Mr. Pratt) as to referring, but they would say nothing. On July 23, as the time for trial was near, we called again at Messrs. Cobbett and Co.'s specially and for a definite reply as to referring, and after waiting some time talking to Mr. Pratt (who had the conduct of the case under Mr. Cobbett) with the hope of seeing Mr. Cobbett, we left our message. Just after leaving the office we met Mr. Wm. Cobbett in the street: we told him we had been waiting for him, and our object, and he told us distinctly that he had seen Mr. Southam during the week, and that that gentleman would not then advise a reference unless negligence was admitted; and the writer remarked to Mr. Cobbett that he (the writer) was surprised at Mr. Southam's proposal. On July 26, in the office of the prothonotary of the Court of Common Pleas, the writer again asked Mr. Pratt whether plaintiff would refer, but he said nothing could be done. Mr. Cobbett's letter of July 19 to Mr. Southam is simply inexplicable, and we should like to know what, in Mr. Hewitt's letter, can be construed into a refusal of reference, or to justify such a letter, for we were pressing repeatedly for a reference. With regard to the question of expense, all that had been prepared for the trial would have been wanted for the reference: therefore that excuse fails. We cannot agree with Mr. Cobbett that the facts are as he has stated, and we confidently repeat that the plaintiff and his advisers had no desire to refer, and their action throughout confirms this view. We are, &c.,

2, St. James's-square, Manchester, Sept. 3. J. and E. Whitworth.

Certain Optical, Electric, and Magnetic Phenomena in relation to Health and Sickness.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Popular opinions, the result of accumulated observation, are not to be altogether despised, although we may not be able to explain them at present. They may serve as hints for future investigation, or at any rate may be recorded, to lie on our shelves until a place in our store of knowledge is discovered, into which they may fit. Of such popular opinions I would lay these before your readers:—

1. That jewels sparkle more when worn by sick people than by the healthy. Some of my patients assure me that it is only during illness that they notice the sparkle of rings habitually worn.

2. That the hair is more electric, and sparkles when brushed during seasons of illness and exhaustion.

3. That some persons lose their health unless the bed they sleep in lies due north and south.

4. That some vermin, as lice, prefer to breed and feed on the sickly; others, as bugs, prefer the sound and healthy for their prey.

I am, &c., A. W.

Operatic.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Mrs. Smith (who occasionally has her little tempers) *insisting* on going to Covent Gardeu, tired and worried, yet anxious to keep the peace—anything for a quiet life—I consent, taking also one of the girls. What with incidentals—gloves, fans, conveyance, hair-dye, etc.—a *foramen magnum* is made in a £5 note. The stalls are close to the big drum; the powerful glass mounted in ivory and gold, gratefully presented by Mrs. Major-General Morris, C.B., as a small token of professional appreciation, has been left in an unknown cab; and a notice circulates that in consequence of indisposition the *prima donna* will not sing. Should the melancholy necessity arise, the next matrimonial venture *most assuredly* shall be either a "Sister of Mercy," whose food and raiment will cost but little, or, still better, a lady doctor, who, instead of gadding about, will spend her evenings reading the *Lancet* and *Medical Times and Gazette*, accurately dispensing prescriptions, besides bringing grist to the mill by attending to the night work, especially when the snow is on the ground.

Every doctor should be married. Only last evening heard of one in large practice without an *alter ego*—a second self—to double his joys and divide his sorrows. Now, through fatigue aud anxiety, his mind has given way; and, to restrain acts of violence, keepers constantly coax him to write prescriptions, when the poor lunatic becomes perfectly docile. Harking back, who does not enjoy the "Jewel Song," the garden scene, the waltz, the "Soldiers' Chorus"? Seated in his surgery, favourably reviewing "Heath on the Jaw" (with numerous illustrations), Faust wishes, like a great many others, to be a medical student again. Give me back my youth!—who does not re-echo the sentiment? In a private box, up on the grand tier—do my eyes deceive me?—it cannot, it must not be—alas! it is, Mrs. Tallyho Jones!

O Mr. Editor, these women, these women! A little child lies ill in a certain house suffering from measles, associated with the worst of all complications—diarrhœa; yet the relations will not realise the danger until too late, when all the physicians in the universe can do nothing. Let us be gentle on a young and thoughtless mother—resembling the awkward chamberlain at a coronation, she will know better next time. Having started medical subjects, although in the flesh seated amidst beauty and fashion in the finest opera-house in the world—as regards the company, the audience, the music, and the *mise en scène*—our thoughts are elsewhere, —in the comfortable, well-appointed nursery of the rich, and in the miserable lodging, we stand in fancy at the cradle and the bedside; else sit, waiting for fees, at the consulting-table recording notes.

What an amount of hæmorrhage after labour women *will* stand! A case to-day, cold, deathlike, pulseless, vomiting; yet iced champagne given *ad libitum* tided over, and Lombard-street to a China orange she will recover. I know a lady, a grandmother, who had transfusion performed, and have read Dr. Aveling's ingenious suggestions, yet wonder if these cases could not have been pulled through without. Several times the misfortune of broken cords has occurred, and fishing for the placenta required. Sometimes the attachments are as a limpet to the rock, and the whole mass cannot immediately be removed. When this happens, allow an old man to advise the Simpsons of the future—Don't delay; work hard with hot carbolic acid injections to remove every shred. If you do *not*, fever, peritonitis, phlegmasia dolens, embolism, phlebitis, puerperal mania, abscesses in the joints, may kill the patient and ruin your reputation. Anticipate fever, rub in mercurial ointment to groins and arm-pits, pounce down on a tender spot with a few leeches, apply abdominal fomentation

of turpentine, or, still better, poultices containing opium, aconite, and belladonna; ice to the head, hypodermic injections of morphia at night, charcoal poultices to the vulva—all useful; but, above everything, keep up the patient's strength, common sense dictating diet. Bear in mind the value of injections per anum of turpentine, or starch and opium, as circumstances require. Always keep a look-out as to the skin, bedsores, and the bladder. A lady for two days said nothing about retention of urine. During a lingering labour, bang came down the child's head, pop went the bladder! In every case, after delivery, cock up your ears at any history of rheumatic or scarlet fever, epilepsy, chorea, erysipelas, or dropsy; examine the urine, pay the most minute attention to the most trifling symptoms; for the patient who meets you with a smile, feeling *so* well and eager to get up, may die suddenly whilst you are congratulating the anxious relatives in the drawing-room. There is a curious thrill in the pulse, a wandering look about the eye, a quivering tongue—symptoms familiar to the old practitioner as the red signal indicating danger—which the student will gradually recognise. Take again the diseases of children: notice how one slips through your fingers, then a second and a third, when scarlet fever runs riot in the house. The parents are frantic, the neighbours keep aloof, servants refuse to stay; the clergyman and the doctor remaining at their posts are but mortal men, who return to their homes sadly afraid to kiss their little ones. To-day received a letter from Sussex referring to a little boy who for more than a year has been suffering from general dropsy and albuminuria—the distension so enormous he more resembled a hippopotamus than a child, and when packed up in cotton-wool to travel, consoling neighbours said he would burst on the road. The change of air has wrought recovery, but then a cold winter may induce a relapse. Roused from reverie, turning to the stage, it appears "Valentine" has been stabbed. Send for Mr. Erichsen, Prescott Hewitt, Wood, Cooper Foster, Bryant, Timothy Holmes, etc. With a wholesome fear of the law—actions for malpraxis, defamation, etc.—I decline to be concerned in the case. Besides, what does a specialist know about SURGERY?

COMMUNICATIONS have been received from—

Dr. MOORE; Dr. MUTER; Mr. LAWRANCE; Mr. GRINDROD; Mr. WEIGHTMAN; Dr. LIDDELL; Dr. BAKEWELL; Mrs. FORSTER; Mr. HARRISON; Mr. GROVES; Mr. CAMERON; Dr. HOGG; E. R. M.; Mr. ALLINGHAM; Messrs. J. and E. WHITWORTH; Mr. VENMAN; Dr. STRANGE; Mr. HEWITT; Dr. A. CARPENTER; Mr. H. MORRIS; Mr. J. CHATTO; Dr. W. H. DICKINSON.

BOOKS RECEIVED—

The Vomiting of Pregnancy, by A. Munro, M.D.—On the Use of the Stethoscope in Obstetrics, by A. Munro, M.D.—Report on the Small-pox Epidemic 1871-72, by John Wilson, M.D.—Aids to the Diagnosis of Diseases of the Kidneys, by W. R. Basham, M.D., F.R.C.P.—On the Functions of the Sympathetic System of Therapeutics, by Edward Meryon, M.D., F.R.C.P.—The City Sanitary Organisation, its Aids and Obstacles, by Kenneth M. Macleod, Sanitary Inspector, City of Glasgow—Thermic Fever, or Sunstroke, by H. C. Wood, jun., M.D.—Sanitary Report of St. Giles's District, by George Ross, M.D.—Report of the Leeds Public Dispensary.

PERIODICALS AND NEWSPAPERS RECEIVED—

Nature—Pharmaceutical Journal—Medical Press and Circular—The Anti-Game Law Circular—Edinburgh Medical Journal—Philadelphia Medical Times—Birmingham Morning News—Practitioner—Food, Water, and Air.

APPOINTMENTS FOR THE WEEK.

September 7. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

9. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

10. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

11. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

12. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

13. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 31, 1872.

BIRTHS.

Births of Boys, 1096; Girls, 1092; Total, 2188.
Average of 10 corresponding weeks, 1862-71, 1983·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	646	590	1236
Average of the ten years 1862-71	687·4	633·8	1341·2
Average corrected to increased population	...	...	1475
Deaths of people aged 80 and upwards	...	...	35

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	3	1	1	6	...	6	3	24
North ...	751668	2	1	1	...	11	1	4	1	33
Central ...	333887	...	3	1	...	3	...	1	1	14
East	638928	1	4	5	...	9	1	5	1	30
South	966132	5	4	5	2	5	...	4	2	55
Total	3251804	8	15	13	3	34	2	20	8	156

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·834 in.
Mean temperature	60·1°
Highest point of thermometer	79·7°
Lowest point of thermometer	45·0°
Mean dew-point temperature	52·9°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·47 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 31, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Aug. 31.	Deaths Registered during the week ending Aug. 31.	Temperatur of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2188	1236	79·7	45·0	60·1	15·61	0·47	1·19
Portsmouth ...	115455	12·1	63	80	73·6	44·8	59·0	15·00	0·09	0·23
Norwich	81105	10·9	51	36	74·0	47·0	56·6	13·66	0·67	1·70
Bristol	186128	39·8	123	70	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	56	30	72·2	45·1	57·5	14·16	0·84	2·13
Birmingham ...	350164	44·7	264	198	72·0	48·0	58·3	14·61	0·88	2·24
Leicester	99143	31·0	73	75	...	...	...	...	...	...
Nottingham ...	88225	44·2	56	51	76·6	43·3	60·3	15·72	0·86	2·18
Liverpool	499897	97·9	352	286	72·2	49·9	59·0	15·00	0·41	1·04
Manchester ...	352759	78·6	294	207	75·0	46·0	59·1	15·05	0·39	0·99
Salford	127923	24·7	111	69	72·8	46·8	57·5	14·16	0·71	1·80
Oldham	84004	20·2	67	65	...	...	...	...	...	...
Bradford	151720	23·0	110	74	71·4	47·4	59·8	15·44	0·21	0·53
Leeds	266564	12·4	204	163	71·0	46·0	59·2	15·11	0·35	0·89
Sheffield	247847	10·9	173	110	74·0	44·0	59·4	15·22	0·10	0·25
Hull	124976	35·1	91	69	77·0	42·0	58·9	14·94	0·79	2·01
Sunderland ...	100665	30·4	74	43	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	107	87	...	...	...	...	...	...
Edinburgh	205146	46·3	119	70	63·0	45·7	56·2	13·44	1·35	3·43
Glasgow	489136	94·8	363	248	68·7	45·2	56·2	13·44	2·09	5·31
Dublin	310565	31·9	175	135	72·9	40·8	58·4	14·66	0·57	1·45
Total of 21 Towns in United Kingd'm	7393052	34·0	5114	3402	79·7	40·8	58·4	14·66	0·67	1·70

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·83 in. The highest was 30·15 in. on Wednesday morning, and the lowest 29·57 in. on Saturday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

RULES AND REGULATIONS

OF THE

EXAMINING MEDICAL BODIES IN ENGLAND.

SESSION 1872-3.

EXTRACTS FROM THE REGULATIONS OF THE GENERAL MEDICAL COUNCIL ON THE SUBJECTS OF REGISTRATION OF MEDICAL STUDENTS AND PRELIMINARY EXAMINATIONS.

REGISTRATION OF MEDICAL STUDENTS.

THE following Regulations have been adopted by the General Medical Council, in reference to the registration of students of Medicine:—

1. Every medical student shall be registered in the manner prescribed by the General Medical Council.

2. No medical student shall be registered until he has passed a preliminary examination, as required by the General Medical Council.

3. The commencement of the course of professional study recognised by any of the qualifying bodies, shall not be reckoned as dating earlier than fifteen days before the date of registration.

4. The registration of medical students shall be placed under the charge of the Branch Registrars.

5. Each of the Branch Registrars shall keep a register of medical students according to the subjoined form:—

Form for the Registration of Medical Students.

Date of Registration.	Name.	Preliminary Examination and Date.	Place of Medical Study.

6. Every person desirous of being registered as a medical student shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to the annexed form, which may be had on application to the several qualifying bodies, medical schools, and hospitals; and shall produce or forward to the Branch Registrar a certificate of his having passed a preliminary examination, as required by the General Medical Council, and a statement of his place of medical study.

7. The Branch Registrar shall enter the applicant's name and other particulars in the Students' Register, and shall give him a certificate of such registration.

8. Each of the Branch Registrars shall supply to the several qualifying bodies, medical schools, and hospitals, in that part of the United Kingdom of which he is Registrar, a sufficient number of blank forms of application for the registration of medical students.

9. The several Branch Councils shall have power to admit special exceptions to the foregoing regulations as to registration, for reasons which shall appear to them satisfactory.

10. A copy of the Register of Medical Students, prepared by each of the Branch Registrars, shall be transmitted, on or before December 31 in each year, to the Registrar of the General Council, who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an alphabetical list of all students registered in the preceding year, and supply copies of such authorised list to each of the bodies enumerated in Schedule (A) to the Medical Acts, and through the Branch Registrars to the several medical schools and hospitals.

11. The several qualifying bodies are recommended not to admit, after October, 1872, to the final examination for a qualification under the Medical Acts, any candidate (not exempted from registration) whose name has not been entered in the Medical Students' Register at least four years previously.

In the case of candidates from other than schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this recommendation.

PRELIMINARY EXAMINATIONS IN ARTS RECOGNISED BY THE GENERAL MEDICAL COUNCIL.

"That testimonials of proficiency, granted by the national educational bodies according to the subjoined list, may be accepted, the Council reserving the right to add to or take from the list." (A degree in Arts of any university of the United Kingdom, or of the colonies, or of such other universities as may be specially recognised from time to time by the Medical Council, is considered a sufficient testimonial of proficiency.)

LIST OF EXAMINING BODIES WHOSE EXAMINATIONS FULFIL THE CONDITIONS OF THE MEDICAL COUNCIL AS REGARDS PRELIMINARY EDUCATION.

I. Universities of the United Kingdom.—Oxford: Examination for a Degree in Arts; Responsions; Moderations; Local Examinations (Senior), certificate to include Latin and Mathematics. Cambridge: Examination for a Degree in Arts; Previous Examination; Local Examinations (Senior), certificate to include Latin and Mathematics. Durham: Examination for a Degree in Arts; Examination for students in their second and first years; Registration Examination for Medical Students; Local Examinations (Senior), certificate to include Latin and Mathematics. London: Examination for a Degree in Arts; Matriculation Examination. Aberdeen, Edinburgh, Glasgow, St. Andrews: Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery. Edinburgh: Examination of (Senior) Candidates for honorary certificates under the Local Examinations of the University of Edinburgh. Dublin: Examination for a Degree in Arts; Entrance Examination. Queen's University (Ireland): Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree.

II.—Other bodies named in Schedule (A) to the Medical Act.—Royal College of Surgeons of England: Examination conducted under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors. The Society of Apothecaries of London: Examination in Arts. Royal College of Physicians, Edinburgh, and Royal College of Surgeons, Edinburgh: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined. Faculty of Physicians and Surgeons of Glasgow: Preliminary Examination in General Literature. Royal College of Surgeons in Ireland: Preliminary Examination, certificate to include Mathematics. Apothecaries' Hall of Ireland: Preliminary Examination in General Education.

III.—Examining bodies in the United Kingdom, not included in Schedule (A) to the Medical Act.—Royal College of Preceptors: Examination for a First Class Certificate.

IV.—Colonial and Foreign Universities and Colleges.—Universities of Calcutta, Madras, Bombay: Entrance Examination, certificate to include Latin. M'Gill College, Montreal: Matriculation Examination. University of Toronto, King's College, Toronto, Queen's College, Kingston, Victoria College, Upper Canada: Matriculation Examination. King's College, Nova Scotia: Matriculation Examination, Responsions. University of Fredrickton, New Brunswick: Matriculation Examination. University of Melbourne: Matriculation Examination, certificate to include all the subjects required by the General Medical Council. University of Sydney: Matriculation Examination. Codrington College, Barbadoes: 1. English certificate for students of two years' standing, specifying the subjects of examination; 2. Latin certificate, or "Testamur." Tasmanian Council of Education: Examination for the degree of Associate of Arts, certificate to include Latin and Mathematics. Christ's College, Canterbury, New Zealand: Voluntary Examinations, certificate to include all the subjects required by the General Medical Council. The Examiners for Commissions in the Military and Naval Services of the United Kingdom: Certificate to include all the subjects required by the General Medical Council. Cape of Good Hope: Third Class Certificate in Literature and Science, granted by the Board of Public Examiners.

FORM OF APPLICATION FOR REGISTRATION AS A MEDICAL STUDENT.

I hereby apply to be registered as a student in Medicine, in conformity with the regulations of the General Council of Medical Education and

Registration of the United Kingdom, for which purpose I submit the following particulars:—

Name of Applicant. (To be written in words at length.)		Preliminary Examination.	Date of Preliminary Examination.	Place of Medical Study.
Surname.	Christian Name.			

Applicant's Signature, _____

Address, _____

Date of Application, _____

To the Registrar of the
Branch Council for _____

N.B.—The above form of application, duly and legibly filled up, must be forwarded to the Registrar, post free, and be accompanied by a certificate of the applicant's having passed a preliminary examination as required by the General Medical Council, and a statement of his place of medical study. The certificate of examination must testify that the student has been examined in—1. English Language, including grammar and composition; 2. Arithmetic, including vulgar and decimal fractions; Algebra, including simple equations; 3. Geometry—first two books of Euclid; 4. Latin, including translation and grammar. And in one of the following optional subjects: Greek; French; German; Natural Philosophy, including mechanics, hydrostatics, and pneumatics.

UNIVERSITY OF OXFORD.

DEGREES IN MEDICINE.

Every student in Medicine is required to pass all the examinations for the degree of B.M., and to reckon the time of his medical study from the final examination for Arts.

1. Candidates for the degree of B.M. are required to pass two examinations, each of which is held yearly in full Michaelmas Term, usually at the end of November, due notice being given, in the usual manner, by the Regius Professor of Medicine. Each examination is conducted by the Regius Professor of Medicine and three persons who have been admitted to Regency either as Masters of Arts or as Doctors, and who are nominated yearly by the Vice-Chancellor, subject to the approval of Convocation. Each examination is conducted partly in writing, partly *vivâ voce*, and part of each is practical. The subjects of the first examination are Human Anatomy and Physiology, Comparative Anatomy and Physiology to a certain extent, and those parts of Mechanical Philosophy, Botany, and Chemistry which illustrate Medicine. The subjects of the second examination are the Theory and Practice of Medicine (including Diseases of Women and Children), the Materia Medica, Therapeutics, Pathology, the Principles of Surgery and Midwifery, Medical Jurisprudence, and General Hygiene. Every candidate at this second examination is to be examined in two of the ancient authors, Hippocrates, Aretæus, Galen, and Celsus, or in one of those four, and in some modern author approved by the Regius Professor.(a) His knowledge of disease also is tested at the bedside, and he is required to make observations with the microscope or any other aids to diagnosis with respect to patients submitted to him.

Before a candidate is admitted to the first of these two examinations, he must have spent two years in professional studies after having passed the examinations required for the degree of B.A., unless he was placed in the first or second class in the School of Natural Science, in which case, if he received from the public examiners a special certificate of his attainments in Mechanical Philosophy, Chemistry, or Botany, he may be admitted to this examination at once, and need not then be examined again in any science specified in such certificate. Instruction in Natural Science is carried on at the University Museum, where there is practical instruction in Physics, Chemistry, and Anatomy and Physiology, together with courses of lectures by the professors in those and other subjects.(b) Large collections illustrate the several subjects; there is a pathological series, including the collection of Schröder van der Kolk, in the medical department, where there is also a medical laboratory. The Radcliffe Library, containing nearly 20,000 scientific volumes, is open daily to all students from ten till four, and on certain evenings during term. Before a candidate is admitted to the second examination, he must have completed sixteen terms from the date of the same *testamur* and two years from the date of his *testamur* in the first medical examination, and must deliver to the Regius Professor satisfactory certificates of his attendance at some first-class hospital. Everyone attending to be a candidate at either examination is required to give the Professor notice of his intention a fortnight at least before the week in which the examination is to be held.

No one from another University can be incorporated as a Graduate in Medicine without passing these two examinations.

2. A Bachelor of Medicine wishing to proceed to the degree of Doctor is required to read publicly within the precincts of the Schools, in the presence of the Regius Professor, a dissertation composed by himself on some medical subject approved by the Professor, and to deliver to him a copy of it.

(a) Such as Morgagni, Sydenham, Boerhaave.

(b) Regius Professor of Medicine, H. W. Acland, M.D., LL.D., F.R.S.; Professor of Geometry, H. J. S. Smith, M.A., F.R.S.; Professor of Natural Philosophy, Rev. B. Price, M.A., F.R.S.; Professor of Experimental Physics R. B. Clifton, M.A., F.R.S.; Professor of Chemistry, W. Odling, M.A.; Linacre Professor of Physiology, G. Rolleston, M.D., F.R.S.; Professor of Zoology, J. O. Westwood, M.A., F.L.S.; Professor of Geology, J. Phillips, D.C.L., F.R.S.; Professor of Mineralogy, N. S. Maskelyne, M.A., F.R.S.; Lea's Reader in Anatomy, J. B. Thompson, B.A.; Demonstrator in Anatomy, Charles Robertson, Esq.; Demonstrator of Chemistry, T. H. G. Wyndham, M.A; Professor of Botany at the Physic Gardens, M. Lawson, M.A., Magdalen College; Lecturer in Natural Science at Magdalen College, E. Chapman, M.A.; Lea's Reader in Chemistry at Christ Church, A. G. V. Harcourt, M.A., F.R.S.; Lea's Reader in Physics, A. W. Reinold, M.A.

UNIVERSITY OF CAMBRIDGE.

REGULATIONS FOR DEGREES IN MEDICINE AND SURGERY.

Degree of Bachelor of Medicine.—Before a student can become a Bachelor of Medicine he must have resided nine terms (three academical years).

Five years of medical study are required, of which time six terms (two academical years) shall be spent in the University after the student has passed the previous examination. In the case of those who have graduated with honours as Bachelor of Arts, four years of medical study are deemed sufficient, and four terms only of medical study in the University are required.

The previous examination may be passed in the Lent term (at the latter end of March) by those who commence residence in the University in October. In addition to the previous examination, the student is required to pass an examination in Algebra at the same time or in some subsequent term.

There are three examinations for M.B.

The first examination is in—1. Mechanics and Hydrostatics; 2. Chemistry, with Heat and Electricity; 3. Botany. Before presenting himself for it the student must have attended lectures on Chemistry, including manipulations, and Botany. (Students who have obtained honours in any tripos or passed the general examination for B.A. are not required to be examined in Mechanics and Hydrostatics; and those who have passed the special examination in Botany for B.A. are not required to be again examined in that subject.)

The second examination is in—1. Elements of Comparative Anatomy; 2. Human Anatomy and Physiology; 3. Pharmacology. The student must have completed two years of medical study, the time of medical study required to be spent in the University being included in these two years; and must also produce certificates of attendance on lectures on the Elements of Comparative Anatomy, Human Anatomy and Physiology, Materia Medica and Pharmacy, and Pathology; one year's hospital practice, and one season's dissections.

Students who have obtained honours in the Natural Sciences Tripos, and have passed with credit the examinations in Chemistry, Botany, or Comparative Anatomy, are not required to be again examined in those subjects.

The third examination is in—1. Pathology and Practice of Physic (two papers); 2. Clinical Medicine (in the wards of the Hospital); 3. Medical Jurisprudence. The candidate must have completed the course of medical study, and must produce certificates of attendance on one course of lectures on each of the following subjects:—Principles and Practice of Physic, Clinical Medicine, Clinical Surgery, Medical Jurisprudence, and Midwifery; and of having attended hospital practice during three years, and of having been clinical clerk for six months at a recognised hospital, or of having had charge of hospital, dispensary, or union patients under a qualified medical practitioner.

After the third examination an Act has to be kept, which consists in reading an original thesis, followed by a *vivâ voce* examination on the subject of the thesis, as well as on other subjects of the Faculty.

The degree of Doctor of Medicine may be taken three years after M.B. An Act has to be kept, with *vivâ voce* examination, and an essay has to be written extempore. A Master of Arts of four years' standing can proceed direct to M.D., provided he produces the same certificates and passes the same examinations as for M.B.

Degree of Master in Surgery.—The candidate must have passed all the examinations for the degree of M.B., and must produce certificates of having attended a second course of lectures on Human Anatomy, one course of lectures on the Principles and Practice of Surgery, one year's clinical surgical lectures, ten cases of midwifery, a second season of dissections, three years the surgical practice of a recognised hospital, and of having been House-Surgeon or Dresser at such hospital for six months. The subjects of the examination are—1. Surgical Anatomy; 2. Pathology and the Principles and Practice of Surgery; 3. Clinical Surgery; and 4. Midwifery.

All the exminations are partly in writing, partly *vivâ voce* in the dissecting-room and in the Hospital, and take place in the Michaelmas and Easter Terms, an interval of two days being allowed to intervene between the first and second examinations for M.B.

Attendance at the Hospital and lectures in Cambridge is recognised by the Universities of Cambridge and London, and by the College of Surgeons and the Society of Apothecaries.

UNIVERSITY OF LONDON.

BACHELOR OF MEDICINE.

Every candidate for the degree of Bachelor of Medicine shall be required—

1. To have passed the matriculation examination, or to have taken a degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided, in the last case that Latin has been one of the subjects in which he has passed).

2. To have passed the preliminary scientific examination.

3. To have been engaged in his professional studies during four years subsequently to matriculation or graduation in Arts, at one or more of the medical institutions or schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised institutions or schools in the United Kingdom.

4. To pass two examinations in Medicine.

PRELIMINARY SCIENTIFIC (M.B.) EXAMINATION.(a)

The preliminary scientific examination shall take place once in each year, and shall commence on the third Monday in July.

[Candidates for the degree of M.B. are strongly recommended by the Senate to pass the preliminary scientific examination before commencing their regular medical studies; and to devote a preliminary year to preparation for it according to the following programme:—*Winter session:* Mechanical and Natural Philosophy; Chemistry (especially Inorganic); Zoology. *Summer session:* Practical Chemistry (Inorganic); Botany.]

No candidate shall be admitted to this examination until he shall have completed his seventeenth year, and shall have either passed the matriculation examination (b) or taken a degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided, in the last case, that Latin has been one of the subjects in which he has passed); nor unless he have given notice of his intention to the Registrar at least fourteen days before the commencement of the examination.

The fee for this examination shall be £5.

Candidates shall be examined in the following subjects of the first B.Sc. examination(c):—Mechanical and Natural Philosophy, Inorganic Chemistry, Botany and Vegetable Physiology, and Zoology.

EXAMINATION FOR HONOURS.

Any candidate who has passed the preliminary scientific (M.B.) examination in all its subjects may be examined at the honours examination next following the preliminary scientific (M.B.) examination at which he has passed, in (1) Experimental Physics, (2) Chemistry, (3) Botany, and (4) Zoology; unless he have previously obtained an exhibition in either of these subjects at the first B.Sc. examination, in which case he shall not be admissible to the examination for honours in that subject.

If, in the opinion of the examiners, any candidate of not more than 22 years of age at the commencement of the pass examination, who shall have passed either the first B.Sc. examination or the preliminary scientific (M.B.) examination, shall possess sufficient merit, the candidate who shall distinguish himself the most of all the candidates in Experimental Physics,(d) the candidate who shall have distinguished himself the most in Chemistry, the candidate who shall distinguish himself the most in Botany, and the candidate who shall distinguish himself the most in Zoology, shall each receive an exhibition of £40 per annum for the next two years, payable in quarterly instalments; provided that on receiving each instalment he shall declare his intention of presenting himself either at the second B.Sc. examination within two academical years(e) from the time of his passing the first B.Sc. examination, or at the first M.B. examination within three academical years from the time of his passing the preliminary scientific (M.B.) examination, as the case may be.

Under the same circumstances the first and second candidates for honours in Experimental Physics shall each receive a Neil Arnott Bronze Medal.

FIRST M.B. EXAMINATION.

The first M.B. examination shall take place once in each year, and shall commence on the last Monday in July.

No candidate shall be admitted to this examination unless he have passed the preliminary scientific examination at least one year previously,(f) and have produced certificates to the following effect:— 1. Of having completed his 19th year. 2. Of having, subsequently to having passed the matriculation examination, or taken a degree in Arts in one of the before-named universities, been a student during two years at one or more of the medical institutions or schools recognised by this University; and of having attended a course of lectures on each of three of the subjects in the following list:—Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Obstetric Medicine and Diseases peculiar to Women and Infants, Surgery, Medicine. 3. Of having, subsequently to having passed the matriculation examination, or taken a degree in Arts, dissected during two winter sessions. 4. Of having, subsequently to having passed the matriculation examination, or taken a degree in Arts, attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the Materia Medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, etc. 5. Of having attended to practical pharmacy, and of having acquired a practical knowledge of the preparation of medicines.

These certificates shall be transmitted to the Registrar at least *fourteen days* before the commencement of the examination.

(a) Candidates who matriculated previously to January, 1861, will not be required to pass the preliminary scientific (M.B.) examination in any other subjects than Chemistry and Botany; and they will be allowed to pass the preliminary scientific examination and the first M.B. examination in the same year, if they so prefer.

(b) A certificate of age must be produced by every candidate who passed the matriculation examination in the preceding January or June.

(c) Candidates who shall pass in all the subjects of the preliminary scientific (M.B.) examination, and also *at the same time* in the Mathematics of the first B.Sc. examination, shall be considered as having passed both the preliminary scientific examination, and also the first B.Sc. examination, without being required to pay an additional fee; and candidates who shall pass in all the subjects of the preliminary scientific (M.B.) examination, and who shall have *previously* passed the first B.A. examination shall be admissible to the second B.Sc. examination.

(d) The Exhibition in Experimental Physics having been provided by the liberal endowment of Dr. Arnott, will be entitled "The Neil Arnott Exhibition."

(e) By the term "academical year" is ordinarily meant the period intervening between any examination and an examination of a higher grade in the following year, which period may be either *more* or *less* than a calendar year. Thus the interval between the *first* examinations in Arts, Science, and Medicine, and the *second* examinations of the next year in those Faculties respectively, is about sixteen months; whilst the interval between the second B.A. examination and the M.A. examination of the next year, or between the second B.Sc. examination and the D.Sc. examination of the next year, is less than eight months. Nevertheless, each of these intervals is counted as an "academical year." Candidates who had attained the age of 21 years before January 1, 1860, are admissible to the successive examinations for degrees in Science without the intervals between them prescribed by the Regulations. Candidates who have been admitted to the first B.Sc. examination within six months after passing the matriculation examination will be required to give evidence of having completed their 18th year.

(f) *See* footnote (a).

The fee for this examination shall be £5.

Candidates shall be examined in the following subjects:—Anatomy, Physiology,(g) Materia Medica and Pharmaceutical Chemistry, Organic Chemistry.

The examinations are by printed papers and *vivâ voce*.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the first M.B. examination may be examined at the honours examination next following the first M.B. examination at which he has passed, for honours in (1) Anatomy, (2) Physiology, Histology, and Comparative Anatomy, and (3) Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Anatomy, the candidate who shall distinguish himself the most in Physiology, Histology, and Comparative Anatomy, and the candidate who shall distinguish himself the most in Materia Medica, Pharmaceutical Chemistry, and Organic Chemistry, shall each receive an exhibition of £40 per annum for the next two years, payable in quarterly instalments, provided that on receiving each instalment he shall declare his intention of presenting himself at the second M.B. examination within three academical years(h) from the time of his passing the first M.B. examination. Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of £5.

SECOND M.B. EXAMINATION.(i)

The second M.B. examination shall take place once in each year, and shall commence on the first Monday in November. No candidate shall be admitted to this examination within two academical years(k) of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—1. Of having passed the first M.B. examination. 2. Of having, subsequently to having passed the first M.B. examination, attended a course of lectures on each of two of the subjects comprehended in the list previously given,(l) and for which the candidate had not presented certificates at the first M.B. examination. 3. Of having conducted at least twenty labours. Certificates on this subject will be received from any legally-qualified practitioner in Medicine. 4. Of having attended the surgical practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on Clinical Surgery. 5. Of having attended the medical practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on Clinical Medicine. N.B.—The student's attendance on the surgical and on the medical hospital practice specified in Regulations 4 and 5 may commence at any date after his passing the preliminary scientific examination, and may be comprised either within the same year or within different years, provided that in every case his attendance on surgical and medical hospital practice be continued for at least eighteen months subsequently to his passing the first M.B. examination. Attendance during three months in the wards of a lunatic asylum recognised by the University, with clinical instruction, may be substituted for a like period of attendance on medical hospital practice.(m) 6. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to Practical Medicine, Surgery, or Obstetric Medicine, with special charge of patients, in a hospital, infirmary, dispensary, or parochial union, during six months. 7. Of having acquired proficiency in vaccination. Certificates on this subject will be received only from the authorised vaccinators appointed by the Privy Council. The candidate shall also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. These certificates shall be transmitted to the Registrar at least *fourteen days* before the examination begins.

The fee for this examination shall be £5.

Candidates shall be examined in the following subjects:—General Pathology, General Therapeutics, and Hygiene. Surgery, Medicine, Obstetric Medicine, Forensic Medicine. The examinations shall include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. N.B.—Candidates will be expected to write prescriptions in Latin, without abbreviations.

The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

EXAMINATIONS FOR HONOURS.

Any candidate who has been placed in the first division at the second M.B. examination may be examined at the honours examination next following the second M.B. examination at which he has passed, for honours in (1) Medicine, (2) Obstetric Medicine, and (3) Forensic Medicine.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Medicine shall receive £50 per annum for the next two years, with the style of University Scholar in Medicine.

Under the same circumstances, the candidate who shall distinguish himself the most in Obstetric Medicine shall receive £30 per annum for the next two years, with the style of University Scholar in Obstetric Medicine.

Under the same circumstances, the candidate who shall distinguish himself the most in Forensic Medicine shall receive £30 per annum for the next two years, with the style of University Scholar in Forensic Medicine.

Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of £5.

BACHELOR OF SURGERY.

The examination for the degree of Bachelor of Surgery shall take place once in each year, and shall commence on the Tuesday following the fourth Monday in November.

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having passed the second examination for the degree of Bachelor of Medicine in this University. 2. Of having attended a course of instruction in Operative Surgery, and of having operated on the dead subject.

These certificates shall be transmitted to the Registrar at least *fourteen days* before the examination begins.

The fee for this examination shall be £5.

The examinations comprise Surgical Anatomy and Surgical Operations by printed papers; examination and report on cases of surgical patients; performance of surgical operations upon the dead subject; application of surgical apparatus; *vivâ voce* interrogation.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the B.S. examination may be examined at the honours examination next following the B.S. examination at which he has passed, for honours in Surgery.

If, in the opinion of the examiners, sufficient merit be evinced, the candidate who shall distinguish himself the most shall receive £50 per annum for the next two years, with the style of University Scholar in Surgery.

Under the same circumstances the first and second candidates shall each receive a gold medal of the value of £5.

MASTER IN SURGERY.

The examination for the degree of Master in Surgery shall take place once in each year, and shall commence on the fourth Monday in November.

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Surgery(n) in this University. 2. Of having attended, subsequently to having taken the degree of Bachelor of Surgery in this University—(*a*) to clinical or practical surgery during two years in a hospital or medical institution recognised by this University; (*b*) or to clinical or practical surgery during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession; (*c*) or of having been engaged during five years in the practice of his profession, either before or after taking the

(g) Any candidate shall be allowed, if he so prefer, to postpone his examination in Physiology from the first M.B. examination at which he presents himself for examination in the remaining subjects until the first M.B. examination in the next or any subsequent year; but such candidate shall not be admitted to compete for honours on either occasion; and he shall not be admitted as a candidate at the second M.B. examination until after the lapse of at least twelve months from the time of his passing the examination in Physiology.

(h) *See* footnote (e).

(i) Any candidate for the second M.B. examination who has passed the first M.B. examination under the former Regulations, will be required to have also passed the examination in Physiology at some previous first M.B. examination carried on under the present Regulations; at which examination he shall not be allowed to compete for honours.

(k) *See* footnote (e).

(l) *See* First M.B. Examination, Clause 3.

(m) The Senate regard it as highly desirable that candidates for the degree of M.B. should practically acquaint themselves with the different forms of insanity by attendance in a lunatic asylum.

(n) Candidates who have obtained the degree of Bachelor of Medicine previously to 1866 will be admitted to the examination for the degree of Master in Surgery without having taken the degree of Bachelor of Surgery; and in the case of such candidates, the attendance on surgical practice required by Regulation 2 may commence from the date of the M.B. degree.

degree of Bachelor of Surgery in this University. One year of attendance on clinical or practical surgery, or two years of practice, will be dispensed with in the case of those candidates who, at the B.S. examination, have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

These certificates shall be transmitted to the Registrar at least fourteen days before the examination begins.

The fee for the degree of Master in Surgery shall be five pounds.

The examination shall be conducted by means of printed papers and *viva voce* interrogation, and includes—Logic and Moral Philosophy. Any candidate who has taken the degree either of B.A., B.Sc., or M.D. in this University is exempted from this part of the examination; and any candidate who has passed the second M.B. examination may, at any subsequent M.S. examination, present himself for Logic and Moral Philosophy alone, if he so prefer, thereby gaining exemption, if he should pass, from examination in that subject when he presents himself to be examined for the degree of Master in Surgery. Surgery, including a commentary on a case in Surgery, by printed papers; Surgical Anatomy, by printed papers; Surgery, by printed papers; examination, and report on cases, of surgical patients in the wards of a hospital; and dissection of a surgical region, or performance of surgical operations. *Viva voce* interrogation.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Surgery at the examination for the degree of Master in Surgery shall receive a gold medal of the value of twenty pounds.

DOCTOR OF MEDICINE.

The examination for the degree of Doctor of Medicine shall take place once in each year, and shall commence on the fourth Monday in November. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having passed the second examination for the degree of Bachelor of Medicine in this University. 2. Of having attended, subsequently to having taken the degree of Bachelor of Medicine in this University—*a*. To Clinical or Practical Medicine during two years in a hospital or medical institution recognised by this University. *b*. Or to Clinical or Practical Medicine during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession. *c*. Or of having been engaged during five years in the practice of his profession, either before or after taking the degree of Bachelor of Medicine in this University. One year of attendance on Clinical or Practical Medicine or two years of practice, will be dispensed with in the case of those candidates who at the second M.B. examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

These certificates shall be transmitted to the Registrar at least *fourteen days* before the examination begins.

The fee for the degree of Doctor of Medicine shall be £5.(o)

The examination shall be conducted by means of printed papers and *viva voce* interrogation, and includes Logic aud Moral Philosophy. Any candidate who has taken the degree either of B.A., B.Sc., or M.S. in this University is exempted from this part of the examination; and any candidate who has passed the second B.M. examination may at any subsequent M.D. examination present himself for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from examination in that subject when he presents himself to be examined for the degree of Doctor of Medicine. Medicine, including a commentary on a case in Medicine or Obstetric Medicine, at the option of the candidate, by printed papers. Medicine, by printed papers. Examination, and report on cases, of medical patients in the wards of a hospital. *Viva voce* interrogations, and demonstration from specimens and preparations.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Medicine at the examination for the degree of Doctor of Medicine shall receive a gold medal of the value of £20.

REGULATIONS RELATING TO CANDIDATES WHO COMMENCED THEIR MEDICAL STUDIES IN OR BEFORE JANUARY, 1839.

Bachelor of Medicine.—Candidates who commenced their professional studies in or before January, 1839, shall be required to pass the preliminary scientific examination in Chemistry and Botany only, and shall be admitted to the first examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during two years in their professional studies. 2. Of having attended a course of lectures on each of four of the subjects comprehended in the list previously given.(p) 3. Of having dissected during nine months. 4. Of having attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the second examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during four years in their professional studies. 2. Of having passed the first M.B. examination. 3. Of having attended a course of lectures on each of two of the subjects comprehended in the list previously given.(q) 4. Of having dissected during twelve months. 5. Of having attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines. 6. Of having conducted at least six labours. 7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months. 8. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months. 9. Of moral character from a teacher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended.

Candidates who have not taken a degree in Arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medica*.

REGULATIONS RELATING TO PRACTITIONERS IN MEDICINE OR SURGERY DESIROUS OF OBTAINING DEGREES IN MEDICINE.(r)

Bachelor and Doctor of Medicine.—Bachelor of Medicine.—Candidates shall be admitted to the two examinations for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been admitted prior to the year 1840 members of one of the legally constituted bodies in the United Kingdom for licensing practitioners in Medicine or Surgery; or, of having served previously to 1840 as surgeons or assistant-surgeons in Her Majesty's Army, Ordnance, or Navy, or in the service of the Honourable the East India Company. 2. Of having received a part of their education at a recognised institution or school, as required by the Charter of the University. 3. Of moral character, signed by two persons of respectability.

Candidates who have not taken a degree in Arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medica*.

Doctor of Medicine.—Candidates who have been engaged during five years in the practice of their profession shall be admitted to the examination for this degree on producing certificates to the following effect:—1. Of having been engaged during five years in the practice of their profession. 2. Of having taken the degree of Bachelor of Medicine in this University.

Candidates who have not taken a degree in Arts, or passed the matriculation examinatiou in this University, will be required to translate a portion of Celsus *de Re Medica*.

Examinations in 1872-73.—The following are the dates at which the several examinations for the year 1872-73 will commence:—Matriculation: Monday, January 8, and Monday, June 24, 1872; and Monday, January 13, 1873. Bachelor of Arts: First B.A., Monday, July 15; Second B.A., Monday, October 28. Master of Arts: Branch I., Monday, June 3; Branch II., Monday, June 10; Branch III., Monday, June 17. Doctor of Literature: First D.Lit., Monday, June 3; Second D.Lit., Tuesday, October 8. Scriptural Examinations: Tuesday, November 26. Bachelor of Science: First B.Sc., Monday, July 15; Second B.Sc., Monday, October 28. Doctor of Science: Within the first twenty-one days of June. Bachelor of Laws: First LL.B. and Second LL.B., Tuesday, January 9, 1872, and within the first fourteen days of January, 1873. Doctor of Laws: Thursday, January 18, 1872, and in the week following the LL.B. Pass Examinations in January, 1873. Bachelor of Medicine: Preliminary Scientific, Monday, July 15; First M.B., Monday, July 29; Second M.B., Monday, November 4. Bachelor of Surgery: Tuesday, November 26. Master in Surgery: Monday, November 25. Doctor of Medicine: Monday, November 25. Examination for Women: Monday, May 6.

(o) This fee will continue to be £10 to all such as, having taken their M.B. degree under the former Regulations, shall not have paid the fee of £5 at the preliminary scientific examination.

(p) *See* First M.B. Examination, Clause 3.

(q) *See* First M.B. Examination, Clause 3.

(r) All these Regulations are applicable exclusively to practitioners who obtained their licences or commissions prior to 1840.

UNIVERSITY OF DURHAM.

For Registration.—No one shall be held to be a student in Medicine who has not been registered in a register kept for that purpose. No one shall be so registered unless he has passed one of the preliminary examinations recommended by the General Medical Council. Every registered student shall receive from the Registrar a certificate of his registration, for which he shall pay the sum of five shillings. The registration examination shall be directed to the rudiments of Religion, Literature, and Science, and shall be conducted by two or more examiners nominated by the Warden. The registration examination shall be held twice a year—viz., shortly before the winter session, and shortly before the summer session, of the College of Medicine, Newcastle-upon-Tyne. The registration examination will begin at Durham on Tuesday, September 17, 1872, and on April 15 and September 16, 1873, at 9 a.m. each day. Applications to be made to Arthur Beanlands, Esq., Durham, at least one month before the day of examination, to whom also each candidate must, at the same time, send the examination fee, £1, and a certificate of character, and specify the optional subject in which he wishes to be examined.

Subjects of Examination for September 17, 1872.—Necessary Subjects:—The History contained in the Acts of the Apostles; English Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I. and II.; Latin Grammar, with Virgil, Æneid, Lib. I. and II.; and one of the following optional subjects:—Greek Grammar, with Xenophon's Memorabilia; French Grammar, with Voltaire's Charles XII.; German Grammar, with Goëthe's Dichtung und Wahrheit, Book I.; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics.

Subjects of Examination for April 15, *and September* 16, 1873.—Necessary Subjects:—The History contained in the Acts of the Apostles; English Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I. and II.; Latin Grammar, with—in April, Cæsar, De Bello Gallico, Lib. I. and II.; in September, Virgil, Æneid, Lib. I. and II.; and one of the following subjects:—Greek Grammar, with Xenophon's Memorabilia; French Grammar, with Voltaire's Charles XII.; German Grammar, with Goëthe's Dichtung und Wahrheit, Book I.; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics. The following examinations are also accepted as qualifications for registration:—1. Durham senior examination of persons not Members of the University. For this, candidates are required to satisfy the Examiners in Latin, Algebra (including Simple Equations), Euclid (Books I. and II.); and one of the four following subjects:—(1) Greek, (2) French, (3) German, (4) Mechanics, Hydrostatics, and Pneumatics. 2. Durham examinations for students in Arts in their first year.

The next senior examinations of persons not Members of the University will commence at Durham, on Monday, June 12, 1873, at two o'clock.

For Licences and Degrees.—Candidates for the degrees of M.C., M.B., and M.D., in the University of Durham, are required to reside for three terms, as students in Arts, at the University, either in Durham or in Newcastle.

For the Licence in Surgery.—The regulations are the same as those for the licence in Medicine, except that the final examination is directed more particularly to Surgery, and may or may not be passed at the same time as the final examination for the licence in Medicine.

For the Licence in Medicine.—A candidate must produce certificates of registration as a student in Medicine, of having, after registration, spent four years in medical study at one or more of the schools recognised by the licensing bodies named in Schedule (A) of the Medical Act, 1858, one of the said four years being spent at the University College of Medicine, Newcastle-on-Tyne, of good moral conduct, and of having attained the age of 21 years. There are two examinations; one after the second winter session, the other after the fourth winter session, of medical study. The first is directed to Anatomy, Physiology, and Chemistry. The second to the other branches of medical education, and more particularly to the Practice of Medicine.

For the Degree of Master in Surgery.—A candidate must be a Licentiate in Surgery, and also a Licentiate in Medicine, of the University, and of the standing of eighteen terms (six years) at least from the date of his registration at Durham, and of three terms at least from the date of his admission to the licence in Surgery. He must be a Bachelor of Arts, or have passed the final examination for B.A., or one equivalent thereto, and must have kept one year's residence in Arts, either at Durham in the University, or at Newcastle-upon-Tyne in the Durham University College of Medicine. The examination for this degree is directed chiefly to the Practice of Surgery.

For the Degree of Bachelor of Medicine.—A candidate must be of the standing of one year at least as a Licentiate in Medicine, and of six years at least from the date of his matriculation. He must either be a Bachelor of Arts, or have kept one year's residence in Arts, either at Durham in the University, or at Newcastle-upon-Tyne in the Durham University College of Medicine, and have passed the final examination for the degree of B.A., or an equivalent thereto. The examination for this degree is directed chiefly to the Practice of Medicine.

For the Degree of Doctor in Medicine.—A candidate must be of the standing of one year at least as a Bachelor in Medicine of the University of Durham, and of the standing of seven years from the date of his matriculation at Durham, and must perform such exercises as the Warden and Senate require.

The examinations for the licences and degrees in Medicine and Surgery are conducted in Newcastle. Those for the licences: 1. By printed papers of questions. 2. Practically in Anatomy, Physiology, Chemistry, Materia Medica Pharmacy, Surgery, Medicine, Midwifery, and Medical Jurisprudence. 3. *Viva voce* on all the subjects. The examinations are held, except in special cases, yearly in the month of June, at the close of the Easter Term, and are open to members of the University. The next examination will begin on Monday, June 12, 1873, at 9 a.m. The licences and degrees are conferred in Convocation at Durham. The examiners are appointed yearly by the Warden of the University, and approved by Convocation.

Expenses at Durham.—The average annual cost of residence at University College may be estimated at £80 to £85; at Bishop Hatfield's Hall, at £65 to £70. Students may also, with the consent of the authorities, reside in a private house or lodging (approved by the authorities) without becoming members of any college or hall. The University fees payable by such students will amount to about £20 per annum.

Fees for Examination and Degrees: For senior middle class examination, £1; for examination at the end of first year, £1; for registration examination, £1; for registration, 5s.; for a certificate in Chemistry, 10s.; for each public examination in Medicine or in Surgery, £1; for a licence in Medicine, £3; for a licence in Surgery, £3; for a degree of Master in Surgery, £6; for a degree of Bachelor in Medicine, £6; for a degree of Doctor in Medicine, £6.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

BY-LAWS RELATING TO MEMBERS.

1. The Members of the College, present and future, are alone eligible to the Fellowship. They have the use of the Library and Museum, and are admitted to all lectures, but they are not entitled to any share in the government, or to attend or vote at general meetings of the Corporation. 2. All persons who have been admitted before February 16, 1859, Licentiates of the College, are entitled to be admitted Members of the College under certain conditions. 3. Any extra-Licentiate who shall have produced testimonials as to character satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of pharmacy, and who shall comply with such other regulations as are required by the by-laws of the said Corporation, may be proposed to the College to be admitted a Member of the College. 4. Any person who shall have satisfied the College touching his acquirements in general science and literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the by-laws and regulations of the College, may be proposed to the College to be admitted a Member of the College. 5. Every candidate for the Membership of the College, under the last by-law, who shall have commenced his professional studies after September, 1861, shall satisfy the Censors' Board that previous to the commencement of his professional studies he has obtained a degree in Arts from some university of the United Kingdom or of the colonies, or from some other university specially recognised by the Medical Council, or that he has passed examinations equivalent to those required for a degree in Arts. All other candidates for membership shall be examined on the subjects of general education by the President and Censors of the College. 6. Every candidate for membership shall furnish proof that

he has attained the age of 25 years. 7. Every candidate shall produce a testimonial from a Fellow or Member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a Member of the College. 8. Every candidate (*except such as shall be admissible under the provisions of Sections* 15 *and* 16) shall produce proof of his having been engaged in professional studies during a period of five years, of which four years at least shall have been passed at a medical school or schools recognised by the College. 9. Every candidate (*except such as shall be admissible under the provisions of Sections* 15 *and* 16) shall produce evidence, satisfactory to the Censors' Board, of his having fulfilled the course of study prescribed for Licentiates of the College (see below) with the following exceptions:—(1.) The candidate for membership must have attended lectures on Clinical Medicine during three winter and three summer sessions, the attendance not to commence earlier than the second winter session, at a recognised medical school. (2.) He must have attended diligently during three winter sessions and three summer sessions the medical practice, *and during three winter sessions and two summer sessions the surgical practice*, of a hospital containing at least 100 beds, and have been engaged during six months in the olinical study of diseases peculiar to women, and have served the office of Clinical Clerk in the medical wards during at least six months. [The requirements printed in italics apply to candidates who commenced their professional education in the United Kingdom on or after October, 1, 1867, and to candidates who commenced their professional education at a recognised foreign or colonial school on or after October 1, 1868.] 10. Every candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding by-law (*except such as shall be admissible under the provisions of Section* 16), shall, nevertheless, bring proof of his having attended, during at least twelve months, the medical practice of a hospital in the United Kingdom containing at least 100 beds. 11. If the Censor's Board doubt the sufficiency of the certificates and testimonials produced by any candidate, or his fitness in any respect for admission to examination, they may submit the case to a general meeting of the Fellows. 12. No candidate shall be admitted to examination who is engaged in trade; or who dispenses medicine, or makes any engagement with a chemist, or any other person, for the supply of medicines; or who practises Medicine or Surgery in partnership, by deed or otherwise, so long as that partnership continues. 13. No candidate shall be admitted to examination who refuses to make known, when required by the President and Censors, the nature and composition of any remedy he uses. 14. Every candidate (except in cases specially exempted under Sections 15 and 16) shall give proof of his acquirements by written answers to questions placed before him, and shall be examined *viva voce* at three separate examinations, and shall be approved by the President and Censors, or by the major part of them. 15. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at a university in the United Kingdom, wherein the courses of study, and the examination to be undergone by the students previously to graduation, shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the examinations hereinbefore described, except such as relate to the third or pass examination; the nature and extent of which examination shall, in the case of each candidate, be determined by the Censors' Board. Every candidate for the membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages. 16. If any candidate who has attained the age of 40 years shall produce testimonials not merely satisfactory as to his moral character and conduct, and his general and professional acquirements, but further showing that he has improved the art or extended the science of Medicine, or has at least distinguished himself highly as a medical practitioner, the Censors' Board, having well weighed and considered these testimonials, may, if they see fit, submit them to the Fellows at a general meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the candidate shall be admitted to examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient. 17. Any candidate who shall produce satisfactory evidence of having passed an examination on Anatomy and Physiology, conducted by any of the bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a course of study and an examination satisfactory to the College, will be exempt from re-examination on the subjects of the primary examination.(a) 18. Any candidate who shall have obtained a degree in Surgery, at a university in the United Kingdom, after a course of study and an examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy and the Principles and Practice of Surgery. 19. Any candidate who shall have passed the examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a course of study and an examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery.

The fee to be paid for admission as a Member of the College shall be thirty guineas.

BY-LAWS AND REGULATIONS RELATING TO THE EXAMINATION FOR THE MEMBERSHIP.

Every candidate for the membership of the College (except such as shall be admissible under the provisions of Sections 15 and 16 of the by-laws) will be required to pass the following examinations:—

The first examination, on Anatomy and Physiology, will be conducted on successive days, as follows:—On Monday: Evening, from 7 to 10, by written questions. On Tuesday: Evening, commencing at 7 o'clock, *vivâ voce*, on Dissections and Preparations.

The second examination will be conducted as follows:—On Monday: Evening, from 7 to 10, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. On Tuesday: Morning—The candidate's practical knowledge will be tested, either at the College or in the surgical wards of a hospital; Afternoon, from 1 to 4, on Materia Medica, and on Chemistry in its applications to Pathology, Pharmacy, and Toxicology. This examination will be conducted partly by written questions and partly in a practical manner. Evening, commencing at 7, by written questions on Midwifery, and the Diseases peculiar to Women. On Thursday, commencing at 7 p.m., examination, *viva voce*. The third or pass examination will be conducted on successive days, as follows:—On Thursday, from 2 to 6, by written questions on Medical Anatomy, and on the Principles of Medicine. On Friday, from 2 to 6, by written questions on the Practice of Medicine, including the Principles of Public Health and on Psychological Medicine. On Saturday or Monday—The candidate's practical knowledge will be tested, either at the College or in the medical wards of a hospital. On Tuesday, commencing at 5, examination, *viva voce*. On Wednesday, commencing at 5, examination, *viva voce*.

Candidates will not be admitted to the first examination until after the termination of the second winter session of professional study at a recognised medical school, nor to the second examination until after the termination of four years of professional study, nor to the third or pass examination until after the completion of the required course of professional study.

Every candidate must give fourteen days' notice in writing to the Registrar of the College, of his intention to present himself for examination, at the same time transmitting the following certificates:—*For the Primary Examination.*—Evidence of having passed an Arts examination; and in the case of those who shall have commenced professional studies after 1861, evidence of having previously obtained a degree in Arts from some university of the United Kingdom, or of the colonies, or from some other university specially recognised by the Medical Council, or that he has passed examinations equivalent to those required for a degree in Arts; of having been duly registered as a medical student; and of having completed the second winter session of professional study at a recognised medical school; all other candidates for membership shall be examined on the subjects of general education by the President and Censors of the College. *For the Second Examination.*—Evidence of having completed four years of professional study; of having attained the age of 21 years; of instruction and proficiency in the practice of vaccination; and of having attended not less than twenty labours, and of having discharged the duties of clinical clerk, and performed the duties of dresser, for periods of not less than three months. *For the Pass Examination.*—Proof of having attained the age of 25 years; a testimonial from a Fellow or Member of the College; evidence of having completed the required course of professional study.

(a) *See* Regulations relating to the Examinations.

LICENTIATES.

The College will, under its charter, grant licences to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery (which licences are not to extend to make the Licentiates members of the Corporation), to persons who shall conform to the following by-laws:—

Every candidate for the College licence (except when otherwise provided by the by-laws) is required to produce satisfactory evidence to the following effect:—1. Of having attained the age of 21 years. 2. Of moral character. 3. Of having passed, before the commencement of professional study, an examination in the subjects of general education recognised by the College. 4. Of having been registered as a medical student in the manner prescribed by the General Medical Council. "After October, 1870, every candidate (not exempted from registration) is required to have been registered at least four years previously." 5. Of having been engaged in professional studies during four years, of which at least three winter sessions and two summer sessions shall have been passed at a recognised medical school or schools, and one winter session and two summer sessions in one or other of the following ways:—*a.* Attending the practice of a hospital or other institution recognised by the College for that purpose. *b.* Receiving instruction as the pupil of a legally qualified practitioner, holding any public appointment which affords opportunities, satisfactory to the examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery. *c.* Attending lectures on any of the required subjects of professional study at a recognised place of instruction. Professional studies commenced *before* the candidate shall have passed an examination in the subjects of general education will not be recognised by the College. 6. *Of having attended, during three winter sessions and two summer sessions, the medical and surgical practice at a recognised hospital or hospitals;* of having discharged the duties of clinical clerk at a recognised hospital for a period of not less than three months; of having performed the duties of dresser at a recognised hospital for a period of not less than three months; and of having been engaged during six months in the clinical study of diseases peculiar to women. 7. Of having studied the following subjects:—Anatomy (with dissections) during two winter sessions;(b) Physiology during two winter sessions; Chemistry during six months; Practical Chemistry during three months; Materia Medica during three months; Practical Pharmacy during three months (by Practical Pharmacy is meant instruction in the laboratory of a registered medical practitioner, or of a Member of the Pharmaceutical Society of Great Britain, or of a public hospital or dispensary recognised by the College); Botany during three months (this course of lectures may be attended prior to the commencement of professional studies; and any candidate producing satisfactory evidence that Botany formed one of the subjects of his preliminary examination will be exempt from attendance on this course); Morbid Anatomy during six months (this includes attendance and instruction in the post-mortem room during the period of clinical study); Principles and Practice of Medicine during two winter sessions (it is required that the Principles of Public Health should be comprised in this course of lectures, or in the course of lectures on Forensic Medicine. The attendance on these lectures must not commence earlier than the second winter session at a recognised medical school); Principles and Practice of Surgery *during two winter sessions*(c) (the attendance on these lectures must not commence earlier than the second winter session at a recognised medical school); Clinical Medicine *during two winter sessions and two summer sessions* (the attendance on these lectures must not commence until after the first winter session at a recognised medical school); Clinical Surgery *during two winter and two summer sessions* (the attendance on these lectures must not commence until after the first winter session at a recognised medical school. By Clinical Medicine and Clinical Surgery are meant special study and instruction at the bedside, with lectures on cases); Midwifery and the Diseases peculiar to Women during three months (certificates must also be produced of attendance on not less than twenty labours, and of instruction and proficiency in vaccination); Forensic Medicine during three months. 8. Of having passed the professional examinations.

(b) The winter session comprises a period of six months, and the summer session a period of three months.

(c) The requirements printed in italics apply to candidates who commenced their professional education in the United Kingdom on or after October 1, 1867; and to candidates who commenced their professional education at a recognised foreign or colonial school on or after October 1, 1868.

Any candidate who shall produce satisfactory evidence of having passed an examination on Anatomy and Physiology, conducted by any of the bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a course of study and an examination satisfactory to the College, shall be exempt from re-examination on the subjects of the primary examination.(d) Any candidate who shall have obtained a degree in Medicine at a university recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on the subjects of the primary examination. Any candidate who shall have obtained a degree in Surgery at a university in the United Kingdom, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. Any candidate who shall have passed the examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. Any candidate, being a "registered medical practitioner," whose qualification or qualifications shall have been obtained before the first day of January, 1861, having been, with the consent of the College, admitted a candidate for the licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the professional examinations as his qualifications may seem to the examiners to render in his case unnecessary.

Licentiates of this College shall not compound or dispense medicines except for patients under their own care.

BY-LAWS AND REGULATIONS RELATING TO THE EXAMINATION FOR THE LICENCE.

Every candidate for the College licence, before he is admitted to examination, will be required to sign a declaration stating whether he has or has not been rejected within three months by any of the examining boards included in Schedule (A) to the Medical Act.

The first examination, on Anatomy and Physiology, will be conducted on successive days, as follows:—On the first day: Evening, from 7 to 10, by written questions. On the second day: Evening, commencing at 7 o'clock, *viva voce*, on Dissections and Preparations. The second, or pass examination, will be conducted on successive days as follows:—On the first day: Evening, from 7 to 10, by written questions, on Surgical Anatomy, and on the Principles and Practice of Surgery. On the second day: Morning—The candidate's practical knowledge will be tested, either at the College or in the surgical wards of a hospital. Afternoon, from 1 to 4, on Materia Medica, and on Chemistry in its applications to Pathology, Pharmacy, and Toxicology.(e) This examination will be conducted partly by written questions, and partly in a practical manner. Evening, commencing at 7 o'clock, by written questions on Midwifery, and the Diseases peculiar to Women. On the third day: Evening, from 7 to 10, by written questions on Medical Anatomy, and on the Principles and Practice of Medicine, including the Principles of Public Health. On the fourth day: Morning—The candidate's practical knowledge will be tested, either at the College or in the medical wards of a hospital. Evening, commencing at 7 o'clock, *viva voce*, on the Principles and Practice of Medicine, Surgery, and Midwifery.

Candidates will not be admitted to the first examination until after the termination of the second winter session of professional study at a recognised medical school; nor to the second, or pass examination, until after the termination of four years of professional study.

After October, 1870, the College will not admit to the pass examination any candidate (not exempted from registration) whose name had not been entered in the Medical Students' Register at least four years previously.

Any candidate who shall be rejected at the first examination will not be readmitted to examination until after the lapse of three months, and will be required to produce a certificate of the performance of dissections, or other professional study satisfactory to the examiners, during that time.

(d) *See* Regulations relating to the Examinations.

(e) Candidates who shall have passed the first examination for the licence at this College before October 1, 1867, are exempted from re-examination on Materia Medica, and on Chemistry in its application to Pharmacy.

Examinations of candidates for the College licence will take place, commencing as follows:—For the first examination on the first Mondays in the months of October and December, 1872, and February, April, July, October, and December, 1873; and for the second or pass examination on the second Mondays of the same months.

Any candidate who shall be rejected at the second, or pass examination, will not be re-admitted to examination until after the lapse of six months, and will be required to produce a certificate of attendance on the practice of a recognised hospital, and also of attendance on clinical lectures, or other professional study satisfactory to the examiners, during that time.

Every candidate intending to present himself for examination is required to give fourteen days' notice in writing to the Registrar of the College, at the same time transmitting the following certificates :—For the First Examination: Evidence of having passed an Arts examination, of having been duly registered as a medical student, and of having completed the second winter session of professional study at a recognised medical school. For the Second, or Pass Examination: Evidence of having completed four years of professional study, of having attained the age of 21 years, of instruction and proficiency in the practice of vaccination, of having attended not less than twenty labours, and of having discharged the duties of clinical clerk, and performed the duties of dresser, for periods of not less than three months. A testimonial of moral character is required of every candidate.

Blank forms of the required certificates of attendance on hospital practice and on lectures may be obtained on application at the College.(f)

The fee for the College licence is fifteen guineas,(g) of which five guineas are to be paid on admission to the first examination, which fee will not be returned to any candidate rejected at this examination, but will be allowed in the fee for the licence, and he will be admitted to one subsequent first examination without the payment of an additional fee.

Any candidate who shall be rejected at the second, or pass examination, will have the fee paid on admission to this examination returned to him, less three guineas.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RELATING TO THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF FELLOW.

SECTION I.—*Preliminary Examination.*—I. Candidates will be required to produce one or other of the following certificates or *testamurs*, viz. :—1. Of Graduation in Arts at a University recognised for this purpose. The following are the Universities at present recognised, viz. :—Oxford, Cambridge, Dublin, London, Durham, Queen's University in Ireland, Edinburgh, Glasgow, Aberdeen, and St. Andrews; Calcutta, Madras, and Bombay; Canada—McGill's College, Montreal; and Queen's College, Kingston. A certificate or *testamur* of graduation in Arts at a Foreign University, on the special recommendation of the Court of Examiners, approved by the Council. 2. Of having passed such examinations in Arts as shall from time to time be required for graduation in Medicine by a University recognised for this purpose. The following are the Universities at present recognised, viz. :—Oxford, Cambridge, Dublin, London, and Durham. II. Candidates who shall not be able to produce one or other of the foregoing certificates will be required to pass an examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of the Council of the College.

The following are the subjects of the examination referred to in the foregoing paragraph for the year 1872, viz. :—

Part I. Compulsory Subjects.—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English grammar. 4. Writing a short English composition; such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, of vulgar fractions and of decimals. 6. Questions on the geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English history—that is, the succession of the sovereigns, and the leading events of each reign. 8. Mathematics: Euclid, Books I. and II. or the subjects thereof; algebra to simple equations, inclusive. 9. Translation of a passage from the second book of Cæsar's Commentaries "De Bello Gallico." 10. Translation of a passage from the first book of the Anabasis of Xenophon. 11. Translation of a passage from X. B. Saintine's "Picciola"; or, at the option of the candidate, translation of a passage from Schiller's "Wilhelm Tell."

Part II. Optional Subjects.—Papers will also be set on the following subjects; and each candidate will be required to offer himself for examination on one subject, at his option :—1. Translation of a passage in French or German, as the case may be, from the before-mentioned works. Besides these translations into English, the candidate will be required to answer questions on the grammar of each subject, whether compulsory or selected. 2. Mechanics. The questions will be chiefly of an elementary character. 3. Chemistry. The questions will be on the elementary facts of Chemistry. 4. Botany and Zoology. The questions will be on the classification of plants and animals. The quality of the handwriting and spelling will be taken into account. N.B. Each candidate (who has not already paid the amount) is required to pay a fee of £2 on the morning of the first day of the examination, prior to his admission thereto. The next examinations will be held on or about the third Tuesday or Wednesday in June and December. The exact dates of the examinations will be duly advertised when fixed in the medical journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of the examination.

Note.—*Candidates who passed, prior to the 1st of January, 1870, an examination recognised as equivalent to the preliminary examination for the diploma of Member, will be required, in order to qualify for the Fellowship, to pass in Algebra, Greek, and French or German, included in Part I., and in one, at their option, of the four subjects included in Part II. of the foregoing examination, and those who passed, subsequently to the 1st of January, 1870, an examination equivalent to that required for the Membership, will have to pass in all the aforesaid subjects excepting Algebra, when the certificate shall contain evidence that this last subject was included in the first-named examination.*

Special Notice.—In the case of candidates, natives of India, the certificates of having passed the matriculation examinations of the Universities of Calcutta, Madras, and Bombay, will be recognised as equivalent to the foregoing preliminary examination, provided that they contain evidence that, in addition to the compulsory subjects thereof, the candidate passed in Latin, and, in lieu of Greek, in one of the Eastern languages comprised in the lists of subjects issued from time to time by the respective Universities.

SECTION II. *Professional Education.*—I. Except in the cases and instances hereinafter provided for to the contrary, every candidate for admission to the first or Anatomical and Physiological examination for the Fellowship is required to produce the following certificates, viz. :—1. Of having passed the preliminary examination appointed by the Council, or such other examination as the Council may from time to time determine to be equivalent thereto. 2. Of having studied Practical Pharmacy during three months. 3. Of having attended lectures on Anatomy during two winter sessions at a recognised school or schools. 4. Of having performed dissections at a recognised school or schools during three winter sessions. 5. Of having attended lectures on General Anatomy and Physiology during one winter session at a recognised school. 6. Of having attended a practical course of General Anatomy and Physiology during another winter or a summer session, consisting of not less than thirty meetings of the class at a recognised school. *Note A.*—By the practical course referred to in Clause 6, it is meant that the learners themselves shall, individually, be engaged in the necessary experiments, manipulations, etc. 7. Of having attended one course of lectures on Comparative Anatomy, one course of lectures on Chemistry, and a three months' course of Practical Chemistry (with manipulations), in its application to medical study, at a recognised school or schools. *Note B.*—The course of lectures on Chemistry included in Clause 7 will not be required in the case of a candidate who shall have passed a satisfactory examination in this subject in his preliminary examination. *Note C.*—The certificates of attendance on the several courses of lectures must include evidence that the student has attended the practical instructions and examinations of his teacher in each course.

II. Except in the cases and instances hereinafter provided for to the contrary, every candidate before his admission to the second professional examination is required to produce the following certificates, viz. :—1. Of being 25 years of age. 2. Of having been engaged for six years in the acquirement of professional knowledge in hospitals or schools of Anatomy, Surgery, and Medicine recognised by the Council of the College for that purpose; or if the candidate be already a Member of the College, he shall produce certificates of having been engaged for two years in the acquirement of professional knowledge in recognised hospitals and schools, in addition to the certificates

(f) Hours of attendance, from 11 a.m. to 4 p.m.; Saturday from 11 a.m. to 2 p.m.

(g) The fee must be paid three days prior to the day on which the examination commences.

required for the diploma of Member. 3. Of having attended lectures on Surgery, during one winter session, at a recognised school. 4. Of having attended a course of Practical Surgery during a period occupying not less than six months prior or subsequent to the course required by the preceding Clause No. 3 at a recognised school. *Note D.*—The course of Practical Surgery referred to in Clause 4 is intended to embrace instruction in which each pupil shall be exercised in practical details, such as in the application of anatomical facts to Surgery, on the living person, or on the dead body; the methods of proceeding and the manipulations necessary in order to detect the effect of diseases and accidents on the living person or on the dead body; the use of surgical apparatus; the examination of diseased structures, as illustrated in the contents of a museum of morbid anatomy and otherwise. 5. Of having attended, at one or more recognised school or schools, one course of lectures on each of the following subjects, viz.:—Materia Medica, Medicine, Forensic Medicine. Midwifery (with practical instruction, and a certificate of having personally conducted not less than ten labours). Pathological Anatomy during not less than three months. *Note E.*—The certificates of attendance on the several courses of lectures must include evidence that the student has attended the practical instructions and examinations of his teacher in each course. 6. Of having performed operations on the dead body under the superintendence of a recognised teacher. 7. Of instruction and proficiency in the practice of vaccination. *Note F.*—In the case of candidates who commenced their professional education on or after October 1, 1868, the certificate of instruction in vaccination will only be received from recognised vaccine stations, or from recognised vaccine departments in medical schools or hospitals, or other public institutions, where the appointed teacher of vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this purpose at each place. 8. Of having attended the surgical practice of a recognised hospital or hospitals during four winter and four summer sessions, and the medical practice of a recognised hospital or hospitals during one winter and one summer session. 9. Of having been individually engaged, at least twice in each week, in the observation and examination of patients at a recognised hospital or hospitals, under the direction of a recognised teacher, during not less than three months. *Note G.*—It is intended that the candidate should receive the instruction required by Clause 9 at an early period of his attendance at the hospital. 10. Of having attended clinical lectures on Surgery during two winter and two summer sessions, and clinical lectures on Medicine during one winter and one summer session at one or more recognised hospital or hospitals. 11. Of having attended, during three winter and two summer sessions, demonstrations in the post-mortem rooms of a recognised hospital. 12. Of having served the office of House-Surgeon or Dresser, for not less than six months, in a recognised hospital.

Notice.—*The alterations in the Regulations, which are applicable to candidates who commenced their professional studies on or after October* 1, 1870, *are contained in Clauses* 3, 5, *and* 6, *paragraph I., in Clauses* 3, 4, 5, 9, 10, *and* 11, *paragraph II., and in Notes A, B, C, D, E, and G, paragraphs I. and II. of Section II.*

III. In the case of a candidate who shall have taken by examination the degree of Bachelor or Master of Arts in any university in the United Kingdom, recognised by the Council for this purpose, it shall be sufficient for him to produce a certificate or certificates that he has been engaged for five years (instead of six years) in the acquirement of professional knowledge in hospitals or schools of Anatomy, Surgery, and Medicine recognised by the Council of the College for that purpose.

IV. Any Member of the College shall, after the expiration of eight years from the date of his diploma, be entitled to be admitted to the professional examination for the Fellowship upon the production of a certificate, signed by three Fellows, that he has been for eight years in the practice of the profession of Surgery, and that he is a fit and proper person to be admitted a Fellow if upon examination he shall be found qualified.

Section III.—*Professional Examinations.*—1. The examinations are held twice in the year, in the months of May and November, and at such other times as the Council may appoint. 2. The examinations occupy not less than two days, either successive or at such intervals as the Court of Examiners may appoint. 3. The first examination on Anatomy and Physiology is partly written and partly *viva voce*, on the recently-dissected subject and on prepared parts of the human body; the second examination, on Pathology, Therapeutics, and the Principles and Practice of Surgery and Medicine,(a) is partly written, partly *viva voce*, and partly on the practical use of surgical apparatus, and includes the examination of patients, and operations on the dead body. 4. Prior to his admission to the first or anatomical and physiological examination, the candidate is required to pay—*a.* A fee of five guineas, to be allowed on the fee for the diploma of Fellow, but to be retained in case of rejection. 5. Prior to his admission to the second professional examination, the candidate is required to pay—*a.* (b) A fee of five guineas (if a Member) over and above all charges for stamps, to be retained in case of rejection. *b.*(b) A fee of twenty-five guineas (if not a Member) over and above all charges for stamps, of which five guineas will be retained in case of rejection. 6. A candidate whose qualifications shall be found insufficient on his anatomical and physiological examination shall be referred, and shall not be allowed to present himself for re-examination until after the expiration of six months from the date of his reference. 7. A candidate whose qualifications shall be found insufficient upon his pathological and surgical examination shall be referred, and shall not be allowed to present himself for re-examination until after the expiration of one year from the date of his reference, unless the Court of Examiners shall otherwise determine.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF MEMBER OF THIS COLLEGE.

I. *Preliminary General Education and Examination.*—(1.) Candidates who commenced their professional education on or after January 1, 1861, will be required to produce one or other of the following certificates:—1. Of graduation in Arts at a university recognised for this purpose. The following are the universities at present recognised, viz.:—Oxford, Cambridge, Dublin, London, Durham, Queen's University in Ireland, Edinburgh, Glasgow, Aberdeen, and St. Andrews; Calcutta, Madras, and Bombay; Canada—M'Gill College, Montreal; and Queen's College, Kingston. 2. Of having passed an examination for matriculation, or such other examination as shall, in either case, from time to time be sanctioned by the Council of this College, at a university in the United Kingdom, or at a colonial or foreign university recognised by the Council of this College. The following are the examinations at present recognised under this Clause (No. 2), viz:—Oxford.—Responsions or Moderations. Middle-Class Examinations, Senior, the certificates to include Latin and Mathematics. Cambridge.—Previous Examination. Middle-Class Examinations, Senior, the certificates to include Latin and Mathematics. Dublin.—Entrance Examination. London.—Matriculation Examination. Durham.—Examination of students in Arts in their second and first years. Middle-Class Examinations, Senior, the certificates to include Latin and Mathematics. Registration Examination for medical students. Queen's University in Ireland.—Two years' Arts course for diploma of Licentiate in Arts. Preliminary Examinations at end of B.A. Course. Middle-Class Examinations, the certificates to include Latin and Mathematics. Matriculation Examinations. Edinburgh, Aberdeen, Glasgow, and St. Andrews.—Preliminary or Extra Professional Examinations for Graduation in Medicine. Calcutta, Madras, and Bombay.—Matriculation Examinations. Canada; Queen's College, Kingston.—Matriculation Examination. Preliminary Examination of students in Medicine; M'Gill College, Montreal; University College, Toronto; Victoria College, Toronto; University of Laval, Quebec.—Matriculation Examinations. Nova Scotia; King's College, Windsor.—Matriculation Examination. Responsions. New Brunswick; Frederickton.—Matriculation Examination. Australia: Melbourne.—Matriculation Examination, with a certificate that the student has passed an examination in Latin; Sydney.—Matriculation Examination. New York; Bellevue

(a) Candidates can claim exemption from examination in Medicine under the following conditions, viz.:—1. The production by the candidate of a degree, diploma, or licence in Medicine entitling him to register under the Medical Act of 1858, or a degree, diploma, or licence in Medicine of a Colonial or Foreign University approved by the Council of the College. 2. A declaration by the candidate, prior to his admission to the final examination for the Fellowship, that it is his intention to obtain either of the medical qualifications mentioned in the foregoing paragraph, in which case the diploma of the College will not be issued to him until he shall produce either the said medical qualification or proof of having passed the several examinations entitling him to receive the same. N.B. A candidate who has passed an examination in Medicine for the Membership will not be required to pass any further examination in Medicine for the Fellowship.

(b) The sum of £2 paid on the Preliminary Examination will be allowed against these amounts.

Hospital Medical College.—Matriculation examination. 3. Of having passed the preliminary examination for the Fellowship of this College. 4. Of having passed the preliminary examinations of the Royal Colleges of Surgeons in Ireland and of Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. 5. Of having passed the examination in Arts of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland. 6. Of having passed the first-class examination of the Royal College of Preceptors. 7. Of having obtained the *testamur* of the Codrington College, Barbadoes. 8. Of having obtained the degree of Associate of Arts granted by the Tasmanian Council of Education, with a certificate that the student has been examined in Latin and Mathematics. 9. Of having passed the voluntary examinations of Christ's College, Canterbury, New Zealand, the certificate to include all the subjects required from time to time in the preliminary examination of the College. (2.) Candidates who shall not be able to produce one or other of the foregoing certificates will be required to pass an examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.

The following are the subjects of the examination referred to in the foregoing paragraph for the year 1872, viz.: Part (1.)—Compulsory Subjects:—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English grammar. 4. Writing a short English composition; such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, of vulgar fractions, and of decimals. 6. Questions on the geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English history—that is, the succession of the sovereigns, and the leading events of each reign. 8. Mathematics: Euclid, Books I. and II., or the subjects thereof; algebra to simple equations, inclusive. 9. Translation of a passage from the second book of Cæsar's Commentaries, "De Bello Gallico." Part (2.)—Optional Subjects:—Papers will also be set on the following six subjects; and each candidate will be required to offer himself for examination on one subject at least, at his option; but no candidate will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the first book of the Anabasis of Xenophon. 2. Translation of a passage from X. B. Saintine's "Picciola." 3. Translation of a passage from Schiller's "Wilhelm Tell." Besides these translations into English, the candidate will be required to answer questions on the grammar of each subject, whether compulsory or optional. 4. Mechanics. The questions will be chiefly of an elementary character. 5. Chemistry. The questions will be on the elementary facts of chemistry. 6. Botany and Zoology. The questions will be on the classification of plants and animals. The quality of the handwriting and the spelling will be taken into account. N.B.—Each candidate (who has not already paid the amount) is required to pay a fee of £2 on the morning of the first day of the examination prior to his admission thereto. The next examination will be held on or about the third Tuesday or Wednesday in December. The exact dates of the examination will be duly advertised when fixed in the medical journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of the examination.

Note.—A candidate, in order to qualify for the Fellowship, is required, in addition to the subjects included in Part I., to pass in Greek, French, or German, and in one, at his option, of the remaining subjects in Part (2).

II. *Professional Education.*—(1.) Professional studies prior to the date at which the candidate shall have passed an examination in general knowledge in conformity with the Regulation in the preceding section are not recognised.

(2.) The following will be considered as the commencement of professional education:—1. Attendance on the practice of a hospital or other public institution recognised by this College for that purpose. 2. Instruction as the pupil of a legally qualified surgeon, holding the appointment of surgeon to a hospital, general dispensary, or union workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council. 3. Attendance on lectures on Anatomy, Physiology, or Chemistry, by lecturers recognised by this College. *The commencement of professional study, otherwise than by attendance on lectures in recognised medical schools, or by attendance on the practice of recognised hospitals, will not be admitted until a certificate thereof shall be furnished to the Secretary for registration at the College, by the practitioner whose pupil the candidate shall have become, or by the medical superintendent of the hospital or other institution to the practice of which he shall have entered, and will, consequently, date only from the reception of such certificate by the Secretary; the certificate to be accompanied by proof of having passed the necessary preliminary examination in general knowledge.*

(3.) Candidates will be required to produce the following certificates, viz.:—1. Of being 21 years of age. 2. Of having been engaged, subsequently to the date of passing the preliminary examination, during four years, or during a period extending over not less than four winter and four summer sessions, in the acquirement of professional knowledge. 3. Of having attended lectures on Anatomy during two winter sessions. 4. Of having performed dissections during not less than two winter sessions. 5. Of having attended lectures on General Anatomy and Physiology during one winter session. 6. Of having attended a practical course of General Anatomy and Physiology during another winter or a summer session, consisting of not less than thirty meetings of the class. *Note A.*—By the practical course referred to in Clause 6, it is meant that the learners themselves shall, individually, be engaged in the necessary experiments, manipulations, etc. 7. Of having attended lectures on Surgery during one winter session. 8. Of having attended a course of Practical Surgery during a period occupying not less than six months, prior or subsequent to the course required by the preceding Clause 7. *Note B.*—The course of Practical Surgery referred to in Clause 8 is intended to embrace instruction in which each pupil shall be exercised in practical details, such as in the application of anatomical facts to Surgery, on the living person, or on the dead body. The methods of proceeding and the manipulations necessary in order to detect the effects of diseases and accidents on the living person or on the dead body. The performance, where practicable, of the operations of Surgery on the dead body. The use of surgical apparatus. The examination of diseased structures, as illustrated in the contents of a museum of morbid anatomy and otherwise. 9. Of having attended one course of lectures on each of the following subjects, viz.:—Chemistry, Materia Medica, Medicine, Forensic Medicine, Midwifery (with practical instruction, and a certificate of having personally conducted not less than ten labours), Pathological Anatomy during not less than three months. *Note C.*—The course of lectures on Chemistry included in Clause 9 will not be required in the case of a candidate who shall have passed a satisfactory examination in this subject in his preliminary examination. 10. Of having studied Practical Pharmacy during three months. 11. Of having attended a three months' course of Practical Chemistry (with manipulations), in its application to medical study. 12. Of instruction and proficiency in the practice of vaccination. *Note D.*—In the case of candidates who commenced their professional education on or after October 1, 1868, the certificate of instruction in vaccination will only be received from recognised vaccine stations, or from recognised vaccine departments in medical schools or hospitals, or other public institutions, where the appointed teacher of vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this purpose at each place. *Note E.*—The certificates of attendance on the several courses of lectures must include evidence that the student has attended the practical instructions and examinations of his teacher in each course. 13. Of having attended, at a recognised hospital or hospitals, the practice of Surgery during three winter (c) and two summer (d) sessions. 14. Of having been individually engaged, at least twice in each week, in the observation and examination of patients at a recognised hospital or hospitals, under the direction of a recognised teacher, during not less than three months. *Note F.*—It is intended that the candidate should receive the instruction required by Clause 14 at an early period of his attendance at the hospital. 15. Of having, subsequently to the first winter session of attendance on surgical hospital practice, attended, at a recognised hospital or hospitals, clinical lectures on Surgery, during two winter and two summer sessions. 16. Of having been a dresser at a recognised hospital, or of having, subsequently to the completion of one year's professional education, taken charge of patients under the superintendence of a surgeon, during not less than six months, at a hospital,

(c) The winter session comprises a period of six months, and in England commences on October 1 and terminates on March 31.

(d) The summer session comprises a period of three months, and in England commences on May 1 and terminates on July 31.

general dispensary, or parochial or union infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of practical Surgery. 17. Of having attended, during the whole period of attendance on surgical hospital practice (see Clause 13) demonstrations in the post-mortem rooms of a recognised hospital. 18. Of having attended, at a recognised hospital or hospitals, the practice of Medicine, and clinical lectures on Medicine, during one winter and one summer session.

Notice.—*Clauses* 6, 8, 11, 14, *and* 17, *and Notes A, B, C, E, and F, together with the courses of lectures on Forensic Medicine and Pathological Anatomy mentioned in Clause* 9, *are applicable to candidates who commenced their professional education on or after October* 1, 1870. N.B. Blank forms of the required certificates may be obtained on application to the Secretary, and all necessary certificates will be retained at the College.

III.—1. Certificates will not be received on more than one branch of science from one and the same lecturer; but anatomy and dissections will be considered as one branch of science.

2. Certificates will not be recognised from any hospital in the United Kingdom unless the surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any school of anotomy and physiology, or midwifery, unless the teachers in such school be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any school of surgery, unless the teachers in such school be members of one of the legally constituted Colleges of Surgeons in the United Kingdom.

3. No metropolitan hospital will be recognised by this College which contains less than 150, and no provincial or colonial hospital which contains less than 100 patients.

4. The recognition of colonial hospitals and schools is governed by the same regulations, with respect to number of patients and to courses of lectures, as apply to the recognition of provincial hospitals and schools in England.

5. Certificates of attendance upon the practice of a recognised provincial or colonial hospital unconnected with, or not in convenient proximity to, a recognised medical school, will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College; and in such cases clinical lectures will not be necessary, but a certificate of having acted as dresser for a period of at least six months will be required.

6. Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on lectures and hospital practice within fifteen days from the commencement of the session; nor from candidates who have studied in the provincial schools in England, unless their names shall be duly returned from their respective schools. N.B.—At their first registration in October, candidates will be required to produce a certificate of having passed one or other of the preliminary examinations in general knowledge recognised by this College.

7. Those candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the several certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland from candidates for their diploma, together with a certificate of instruction and proficiency in the practice of vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the preliminary examination, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge; and in the case of candidates who shall have pursued the whole of their studies at recognised foreign or colonial universities, upon the production of the several certificates required for their degree by the authorities of such universities, together with a certificate of instruction and proficiency in the practice of vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the preliminary examination, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge.

8. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and graduates in Surgery of any university recognised for this purpose by this College, will be admitted to examination on producing their diploma, licence, or degree, together with proof of being 21 years of age, a certificate of instruction and proficiency in the practice of vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the preliminary examination, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge.

9. Graduates in Medicine of any legally constituted college or university recognised for this purpose by this College will be admitted to examination on adducing, together with their diploma or degree, proof of being 21 years of age, a certificate of instruction and proficiency in the practice of vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the preliminary examination, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge.

IV. *Professional Examination.*—This examination is divided into two parts — 1. The first or primary examination, on Anatomy and Physiology, is partly written and partly demonstrative, on the recently dissected subject, and on prepared parts of the human body. 2. The second or pass examination, on Surgical Anatomy and the Principles and Practice of Surgery and Medicine,(e) is partly written, partly oral, and partly on the practical use of surgical apparatus, and the practical examination of patients. 3. The primary examinations are held in the months of January, April, May, July, and November, and the pass examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the primary examination until after the termination of the second winter session of their attendance at a recognised school or schools; nor to the pass or surgical examination until after the termination of the fourth year of their professional education. The fee of £5 5s., paid prior to the primary examination, and allowed on the whole fee of £22(f) payable for the diploma, is retained; and after any two consecutive failures at the primary examination, the candidate is required to pay an *additional* fee of £5 5s. prior to being again admitted to that examination, which *additional* fee is also retained. 6. £5 5s., part of the sum of £16 15s., the balance of the whole fee due for the diploma, and paid prior to the pass examination, is retained; and after any two consecutive failures at the pass examination, the candidate is required to pay an *additional* fee of £5 5s. prior to being again admitted to the said pass examination, which *additional* fee is also retained. 7. A candidate having entered his name for either the primary or the pass examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for examination within the period of three months from the date at which he shall have so failed to attend. 8. A candidate referred on the primary examination is required, prior to his admission to re-examination, to produce a certificate of the performance of dissections during not less than three months, subsequently to the date of his reference. 9. A candidate referred on the pass examination is required, prior to his admission to re-examination, to produce a certificate of at least six months' further attendance on the surgical practice of a recognised hospital, together with lectures on Clinical Surgery, subsequently to the date of his reference.

QUALIFICATION IN MIDWIFERY.

REGULATIONS RESPECTING THE PROFESSIONAL EDUCATION OF CANDIDATES FOR THIS CERTIFICATE.

1. Persons who were Fellows or Members of the College prior to the 1st day of January, 1853, will be admitted to examination for the certificate of qualification in Midwifery upon producing their diploma.

2. Persons having become members of the College subsequently to the 1st of January, 1853, will be admitted to examination on producing their diploma, together with a certificate or certificates of having attended twenty labours.

3. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University recognised for this purpose by this College, will also be admitted to examination on producing, together with their diploma, licence, or degree, proof of being 21 years of age—of having been occupied at least four entire years in the acquirement of professional knowledge—of having attended one course of lectures on Midwifery—and of having attended not less than twenty labours.

(c) Candidates can claim exemption from examination in Medicine under the following conditions, viz.:—1. The production by the candidate of a degree, diploma, or licence in Medicine entitling him to register under the Medical Act of 1858, or a degree, diploma, or licence in Medicine of a Colonial or foreign university approved by the Council of the College. 2. A declaration by the candidate, prior to his admission to the final examination for Membership or Fellowship, that it is his intention to obtain either of the medical qualifications mentioned in the foregoing paragraph, in which case the diploma of the College will not be issued to him until he shall produce either the said medical qualification or proof of having passed the several examinations entitling him to receive the same.

(f) This sum of £22 is exclusive of the fee of £2 paid for the preliminary examination.

4. Graduates in Medicine of any legally constituted college or university recognised for this purpose by this College, will also be admitted to examination on producing, together with their diploma or degree, proof of being 21 years of age—of having been occupied at least four entire years in the acquirement of professional knowledge—of having completed, at recognised schools, the Anatomical and Surgical education required of candidates for the diploma of Member of the College—of having attended one course of lectures on Midwifery—and of having attended not less than twenty labours.

5. Persons having commenced their professional education, either by attendance on hospital practice or on lectures on Anatomy, prior to the 1st of January, 1853, will be admitted to examination on producing the several certificates of professional education required for admission to examination for the diploma of Member of this College at the period when such persons shall respectively have, in such manner, commenced their professional education.

6. Persons having commenced their professional education, either by attendance on hospital practice or on lectures on Anatomy, after the 31st day of December, 1852, will be admitted to examination on producing certificates of being 21 years of age—of having been engaged during at least four entire years in the acquirement of professional knowledge—of having completed at recognised schools the professional education required of candidates for the diploma of Member of this College—of having attended one course of lectures on Midwifery and the Diseases of Women and Children—and of having personally conducted thirty labours.

Note.—All candidates who shall commence their professional education on or after October 1, 1866, will, in addition to the certificates enumerated in the foregoing clauses, be required to produce a certificate of having, prior to such commencement, passed a preliminary examination in general knowledge recognised by this College.

N.B.—The fee for the certificate is as follows, viz.:—1. Persons who were Fellows or Members of this College prior to January 1, 1853, two Guineas. 2. Persons admitted Fellows or Members of this College subsequently to January 1, 1853, three guineas. 3, 4. Persons producing any other diploma or certificate or degree which may be considered by the Council to afford satisfactory proof of sufficient surgical and medical education, three guineas. 5, 6. All other persons, ten guineas.

The examinations are held in the months of February, May, August, and December.

REGULATIONS RELATING TO THE DIPLOMA IN DENTAL SURGERY.

Education.—Candidates are required to produce the following certificates:—

1. Of being 21 years of age.

2. Of having been engaged during four years in the acquirement of professional knowledge.

3. Of having attended at a school or schools recognised by this College, not less than one of each of the following courses of lectures, delivered by lecturers recognised by this College, namely:—Anatomy, Physiology, Surgery, Medicine, Chemistry, and Materia Medica.

4. Of having attended a second winter course of lectures on Anatomy, or a course of not less than twenty lectures on the Anatomy of the Head and Neck, delivered by lecturers recognised by this College.

5. Of having performed dissections at a recognised school during not less than nine months.

6. Of having completed a course of Chemical Manipulation, under the superintendence of a teacher or lecturer recognised by this College.

7. Of having attended, at a recognised hospital or hospitals in the United Kingdom, the practice of Surgery and clinical lectures on Surgery during two winter sessions.

8. Of having attended, at a recognised school, two courses of lectures upon each of the following subjects, viz.:—Dental Anatomy and Physiology (Human and Comparative), Dental Surgery, Dental Mechanics, and one course of lectures on Metallurgy, by lecturers recognised by this College.

9. Of having been engaged, during a period of not less than three years, in acquiring a practical familiarity with the details of Mechanical Dentistry, under the instruction of a competent practitioner.

10. Of having attended at a recognised dental hospital, or in the dental department of a recognised general hospital, the practice of Dental Surgery during the period or two years.

N.B.—The students of the London schools are required to register the above certificates at this College; and special returns will be required from the provincial schools.

Examination.—The examination is partly written and partly oral.

The written examination comprises General Anatomy and Physiology, and General Pathology and Surgery, with especial reference to the practice of the dental profession.

The oral practical examination comprises the several subjects included in the curriculum of professional education, and is conducted by the use of preparations, casts, drawings, etc.

Members of the College, in the written examination, will only have to answer those questions set by the section of the Board consisting of persons skilled in Dental Surgery; and in the oral examination will be examined only by that section.

A candidate whose qualifications shall be found insufficient will be referred back to his studies, and will not be admitted to re-examination within the period of six months, unless the Board shall otherwise determine.

Examinations will be held in January and June.

The fee for the diploma is ten guineas, over and above any stamp duty.

SOCIETY OF APOTHECARIES (ENGLAND).

Every candidate for a certificate of qualification to practise as an Apothecary will be required to produce testimonials—1. Of having passed a preliminary examination in Arts, as a test of general education. (This examination must be passed before the commencement of professional studies, which is defined by the Medical Council to be "the time of commencing studies at a medical school.") 2. Of having served an apprenticeship or pupilage of not less than five years to a practitioner qualified by the Act of 1815. (This period may include the time spent in attending lectures and hospital practice.) 3. Of having attained the full age of 21 years, of which satisfactory evidence will be required. 4. Of good moral conduct. 5. Of having pursued a course of medical study in conformity with the regulations of the Court.

Course of Study.—Every candidate whose attendance on lectures shall have commenced on and after October 1, 1863, must attend the following lectures and medical practice during not less than three winter and two summer sessions (each winter session to consist of not less than six months, and to commence not sooner than the first nor later than the 15th of October; and each summer session to extend from May 1 to July 31):—

First Year.—Winter Session: Chemistry; Anatomy and Physiology; Dissections. Summer Session: Botany; Materia Medica and Therapeutics; Practical Chemistry.

Second Year.—Winter Session: Anatomy and Physiology, including dissections and demonstrations; Principles and Practice of Medicine; Clinical Medical Practice. Summer Session: Midwifery and Diseases of Women and Children, and Vaccination; Forensic Medicine and Toxicology; Clinical Medical Practice.

Third Year.—Winter Session: Principles and Practice of Medicine; Clinical Medical Lectures; Morbid Anatomy; Clinical Medical Practice.

N.B.—All medical students presenting themselves for the second examination shall produce evidence of having served the office of clinical clerk at a recognised hospital during the period of six weeks at least; and also shall produce evidence that they have been examined at the class examinations instituted by the various lecturers and professors of their respective medical schools and colleges.

No certificates of lectures or of anatomical instruction delivered in private to particular students, apart from the ordinary classes of recognised public medical schools, can be received by the Court of Examiners.

All students are required *personally* to register the several tickets of admission to lectures and medical practice within the first fifteen days of the months of October and May.

Examination in Arts.—Examinations will be held at the Hall of the Society on Friday and Saturday, January 26 and 27, April 26 and 27, September 27 and 28. Candidates will be examined in the following branches, and no candidate will be approved unless he show a competent knowledge of each branch of the examination:—1. The English language; 2. The Latin language; 3. Mathematics; 4. One of the following subjects, at the option of the candidate:—(*a*) Greek, (*b*) French, (*c*) German), (*d*) Natural Philosophy. Candidates applying to be admitted to any examination must pay the fee (one guinea) at least one week before the examination, and must sign their names in the Candidates' Book between 11 a.m. and 3 p.m. o'clock, not later than the previous Thursday. If a candidate fail to pass the examination, the fee will not be returned to him, but he will be admissible to either or both of the two next following examinations in Arts without the payment of an additional fee, upon giving the usual notice, and signing the Candidates' Book.

Syllabus of Subjects for Examination, 1873.—I. The English Language: The leading features of its history; its structure and grammar; English composition. [The books recommended for study in this subject are Adams's "Elements of the English Language" and Trench's "English, Past and Present."] II. The Latin Language: January examination—Cicero: de Senectute. April examination—Virgil: Æneid, Book xii. September examination—Horace: Odes, Books iii. and iv. Re-translation of easy sentences. Grammatical questions will be introduced into the Latin paper, and each candidate will be expected to give satisfactory answers to these. III. Mathematics: The ordinary rules of arithmetic; vulgar and decimal fractions; addition, subtraction, multiplication, and division of algebraical quantities; simple equations; the first two Books of Euclid. IV. (*a*) Greek: Homer: Iliad, Book i.; grammatical questions. (*b*) French: Molière, Le Malade Imaginaire; translation from English into French; grammatical questions. (*c*) German: Schiller's poems, Ritter Toggenburg, Der Kampf mit dem Drachen, and Der Gang nach dem Eisenhammer; translation of short sentences from English into German; grammatical questions. (*d*) Natural Philosophy: Mechanics; hydrostatics and pneumatics. [The book recommended for study in this subject is Snowball's "Cambridge Course of Elementary Natural Philosophy."]

Certificates in Arts granted by any of the bodies whose certificate is recognised by the Medical Council will be accepted from candidates who present themselves at the professional examination at the Hall as equivalent to their having passed this examination.

Professional Examinations.—The Court of Examiners meet in the Hall every Thursday, where candidates are required to attend at 3.45 p.m. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previous to the day of examination, and must at the same time deposit all the required testimonials and the fee at the office of the Beadle, where attendance is given every day, except Sunday, from 10 to 4 o'clock; Saturday, 10 to 2.

The examination of candidates is divided into two parts, and is conducted partly in writing and partly *viva voce*.

The first examination, which may be passed after the second winter session, embraces the following subjects:—The British Pharmacopœia; Latin of Physicians' Prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany; and Materia Medica.

Second or pass examination, after the third winter session (the five years' pupilage being completed):—Principles and Practice of Medicine; Pathology and Therapeutics; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

All graduates in Medicine of British universities will be admitted to a practical examination in Medicine and Midwifery only.

Licentiates of the Royal College of Physicians, London; of the Royal College of Physicians, Edinburgh; of the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall of Dublin, will be admitted to a *viva voce* examination in Medicine, Midwifery, Forensic Medicine, and Toxicology.

Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland, possessing a surgical qualification only, will be admitted to a first and second examination on one evening. The first or *viva voce* examination will include the subjects of Physicians' Prescriptions, Visceral Anatomy, Physiology, Chemistry, Materia Medica, Botany, and Pharmacy; the second, which is partly written and partly *viva voce*, will include the subjects of Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicological Chemistry.

Any candidate who has passed his first examination for the licence of the Royal College of Physicians, London; the licence of the King and Queen's College of Physicians, Ireland; the joint licence of the Royal College of Physicians and Surgeons, Edinburgh, or for the single licence of the College of Physicians, Edinburgh; the licence of the Faculty of Physicians and Surgeons, Glasgow; the first professional examination for the degree of M.B., or Master in Surgery, in the Universities of Oxford, Cambridge, or London; or the second part of the professional examination for the degree of M.B. or Master in Surgery, in the Universities of Edinburgh, Aberdeen, St. Andrews, and Glasgow; or the first examination for the medical and surgical degrees in the Irish Universities; or the first examination for the licence of the Apothecaries' Company, Dublin, will be admitted to a single examination in Materia Medica, Therapeutics, Medicine, Pathology, Midwifery, and Toxicology, part of which examination will be conducted in writing.

The examination of candidates for certificates of qualification to act as Assistant in compounding and dispensing medicines, is as follows:—In translating physicians' prescriptions, in the British Pharmacopœia, in Pharmacy, Pharmaceutical Chemistry, Materia Medica, and Medical Botany.

By the 22nd section of the Act of Parliament, no rejected candidate for the licence can be re-examined until the expiration of six months from his former examination. A candidate rejected on his first professional examination can be admitted to re-examination after the expiration of three months. No rejected candidate as an Assistant can be re-examined until the expiration of three months.

Fees.—For a certificate of qualification to practise, six guineas, the half to be paid at the first examination; for an Assistant's certificate, two guineas.

Students' Prizes.—The Society of Apothecaries annually offer two prizes for proficiency in the knowledge of Botany, and also two prizes for proficiency in the knowledge of Materia Medica and Pharmaceutical Chemistry. The prizes consist of a gold medal awarded to the candidate who distinguishes himself the most in the examination; and of a silver medal and a book to the candidate who does so in the next degree.

The examination in Botany will be held at the Hall of the Society on the second Wednesday in June, at 10 a.m., and will be conducted by printed papers and *viva voce* questions.

The examinations in Materia Medica and Pharmaceutical Chemistry will be held at the Hall of the Society on the third Wednesday, and on the following Friday, in October, from ten in the forenoon to one in the afternoon of each day; by printed papers on the Wednesday, and by *viva voce* questions on the Friday.

The Society's Botanic Garden at Chelsea is open daily (except Sunday) from ten till five o'clock p.m., and on Saturdays from ten till two o'clock. Tickets of admission may be had on application at the Beadle's Office, Apothecaries' Hall, Blackfriars, E.C.

ARMY MEDICAL DEPARTMENT,

WHITEHALL-YARD.

QUALIFICATIONS AND EXAMINATION OF CANDIDATES FOR COMMISSIONS IN THE ARMY MEDICAL SERVICE.

1. Every candidate desirous of presenting himself for admission to the Army Medical Service must be unmarried, and not under 21 nor over 28 years of age. He must produce a certificate from the District Registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must produce a certificate of moral character from the parochial minister, if possible.

2. The candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a Medical Officer in any climate.(a) He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so.

3. The candidate must be registered under the Medical Act of 1858 as licensed to practise Medicine and Surgery in Great Britain or Ireland.

4. Certificates of registration, character, and age must accompany this schedule when filled up and returned.

5. Candidates will be examined by the Examining Board in the following subjects:—Anatomy and Physiology, Surgery, Medicine (including Therapeutics), the Diseases of Women and Children, Chemistry and Pharmacy, and a practical knowledge of drugs. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside.) The eligibility of each candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only. Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to Materia Medica; and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the examination by candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science. Marks will also be given to candidates who are willing to pass an examination in French and German.

6. After passing this examination, every candidate will be required to attend one entire course of practical instruction at the Army Medical School on—(1) Hygiene; (2) Clinical and Military Medicine; (3) Clinical and Medical Surgery; (4) Pathology of Diseases and Injuries incident to Military Service.

7. At its conclusion the candidate will be required to pass an examination on the subjects taught in the School. If he give satisfactory evidence of being qualified for the practical duties of an Army Medical Officer, he will be eligible for a commission as Assistant-Surgeon.

8. During the period of his residence at the Army Medical School each candidate will receive an allowance of 5s. per diem with quarters, or 7s. per diem without quarters, to cover all costs of maintenance, and he will be required to provide himself with uniform (viz., the regulation undress uniform of an Assistant-Surgeon, but without the sword).

9. All candidates will be required to conform to such rules of discipline as the Senate may from time to time enact.

EXTRACTS FROM THE ROYAL WARRANT (April 1, 1867) FOR THE PAY AND NON-EFFECTIVE PAY OF MEDICAL OFFICERS.

The daily rates of pay of the officers of the medical branch of the Hospital Department of our Army shall be as follows:—

Medical Staff.—Daily pay: Director-General, special; Inspector-General £2, after twenty-five years' service £2 5s.,

(a) His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. Every candidate must also be free from organic disease of other organs, and from constitutional weakness or other disability likely to unfit him for military service in any climate.

after thirty years' service £2 7s., after thirty-five years' service £2 10s.; Deputy Inspector-General £1 10s., after twenty-five years' service £1 12s., after thirty years' service £1 15s., after thirty-five years' service £1 17s.; Surgeon-Major £1 4s., after twenty-five years' service £1 7s.; Surgeon 17s. 6d., after fifteen years' service 20s.; Assistant-Surgeon, on appointment 10s., after five years' service 12s. 6d., after ten years' service 15s., after fifteen years' service 17s. 6d. Charge Pay: The officer in medical charge of an army in the field, of 10,000 men and upwards, £1 daily; of 5000 men and upwards, 15s. daily; of less than 5000, 10s. daily; or, in medical charge of a colony where the number of commissioned officers and enlisted men is 1500 and upwards, 5s. daily.

Apothecaries' Daily Pay.—Apothecaries 9s., after five years' service 10s. 6d., ten years' 12s., fifteen years' 13s. 6d., twenty years' 15s., twenty-five years' 16s. 6d., thirty years' 18s.

Medical Officers have the right to retire on half-pay after twenty years' service; Medical Officers of the rank of Surgeon-Major, Surgeon, or Assistant-Surgeon shall be placed on the retired list at the age of 55, and all Inspectors-General and Deputy Inspectors-General at the age of 65 years.

An Apothecary shall have the right to retire on half-pay after thirty years' good service.

Non-effective Pay: A Medical Officer placed on half-pay by reduction of establishment, or on the report of a medical board, in consequence of wounds or ill-health caused in and by the discharge of his duties, or on account of age, shall be entitled to half-pay at the following daily rates.—Inspector-General, after thirty years' service £1 17s. 6d., twenty-five years' £1 13s. 6d., twenty years' £1 10s.; Deputy Inspector-General, after thirty years' £1 5s. 6d., twenty-five years' £1 2s. 6d., twenty years' £1 1s.; Surgeon-Major, after twenty-five years' £1, twenty years' 16s. 6d.; Surgeon, after fifteen years' 13s. 6d., ten years' 11s.; Assistant-Surgeon, after ten years' 10s., five years' 8s., under five years' 6s.

The rate of half-pay awarded to officers retiring for their own convenience, after twenty years' service on full-pay, shall not exceed one half of their full-pay at the time of retirement.

ARMY MEDICAL SCHOOL.

President of the Senate.—Sir T. Galbraith Logan, K.C.B., M.D., Director-General of the Army Medical Department.

Members of the Senate.—Sir Ranald Martin, C.B., Physician to the Indian Council; Inspector-General F. W. Innes, M.D., C.B., Principal Medical Officer Royal Victoria Hospital; Deputy Inspector-General T. Longmore, C.B., Professor of Military Surgery; Deputy Inspector-General W. C. Maclean, Professor of Military Medicine; William Aitkin, M.D., Professor of Pathology; E. A. Parkes, M.D., F.R.S., Professor of Military Hygiene.

Assistant Professors.—Staff Surgeon-Majors W. A. Mackinnon, C.B., and W. J. Fyffe, M.D.; Staff Surgeon F. S. B. F. De Chaumont, M.D.; and Staff Assistant-Surgeon F. H. Welch.

Candidates for Commissions in the Army, and in the Queen's Indian Service, proceed to Netley after passing the examination in London. At Netley they attend the medical and surgical practice of the Royal Victoria Hospital, and learn the system and arrangements of military hospitals. During four months they attend the lectures given by the professors and assistant-professors, and go through a course of practical instruction in the hygienic laboratory and microscopical room.

NAVAL MEDICAL DEPARTMENT, ADMIRALTY.

QUALIFICATIONS AND EXAMINATION OF CANDIDATES FOR COMMISSIONS IN THE MEDICAL SERVICE OF THE ROYAL NAVY.

The Lords Commissioners of the Admiralty are pleased to direct that the following regulations, relative to the examination of candidates for the appointment of Assistant-Surgeon in the Royal Navy, shall in future be adopted:—

1. Every candidate desirous of presenting himself for admission to the Naval Medical Service must be not under 21 nor over 28 years of age. He must produce a certificate from the District Registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must also produce a certificate of moral character.

2. The candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate.(a) He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so.

3. The candidate must be registered under the Medical Act of 1858, as licensed to practice Medicine and Surgery in Great Britain or Ireland, and he must have performed the capital and minor operations of Surgery under a recognised teacher.

4. Certificates of registration, character, and age must accompany the schedule when filled up and returned.

5. Candidates will be examined by the Examining Board in the following subjects:—Anatomy and Physiology; Surgery; Medicine, including Therapeutics, the Diseases of Women and Children; Chemistry and Pharmacy, and a practical knowledge of drugs. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside.) The eligibility of each candidate for the Naval Medical Service will be determined by the result of the examinations in these subjects only.

Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to Materia Medica; also in French and German; and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the examination by candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science.

6. After passing this examination, every candidate will be required to attend one entire course of practical instruction in the Medical School at Netley, on—(1) Hygiene; (2) Clinical and Naval and Military Medicine; (3) Clinical and Naval and Military Surgery; (4) Pathology of Diseases and Injuries incidental to Naval and Military Service.

7. At its conclusion, the candidate will be required to pass an examination on the subjects taught in the School. If he give satisfactory evidence of being qualified for the practical duties of a Naval Medical Officer, he will be eligible for a commission as Assistant-Surgeon.

8. During the period of his residence at the Netley Medical School, each candidate will receive an allowance of 5s. per diem with quarters, or 7s. per diem without quarters, to cover all costs of maintenance; and he will be required to provide himself with uniform—viz., the regulation undress uniform of an Assistant-Surgeon, but without the sword.

9. All candidates will be required to conform to such rules of discipline as the Senate may from time to time enact.

10. After completing three years' full-pay service, Assistant-Surgeons will be allowed to be examined for the rank of Surgeon; but no Assistant-Surgeon can be promoted to the rank of Surgeon until he shall have served five years, two of which must have been in a ship actually employed at sea.

REGULATIONS SHOWING RANK, PAY, AND POSITION OF NAVAL MEDICAL OFFICERS.

1. Assistant-Surgeons at home, after completing their time for examination for the rank of Surgeon, may be granted two months' leave of absence on full-pay, on condition of their resuming their studies at a medical school or hospital.

2. Promotion to the rank of Staff Surgeon is open to officers for distinguished or special service, although twenty years on full-pay may not have been completed; such Staff Surgeons will have 16s. a day half-pay.

3. Staff Surgeons rank with Commanders, according to date of commission.

4. The whole time served on full-pay as an Assistant-Surgeon to be allowed to Surgeons to qualify for the rank of Staff Surgeon, provided the examination for Surgeon is passed before the officer completes ten years service, otherwise only ten years served as Assistant-Surgeon will be allowed to count.

5. Staff Surgeons are appointed to the flagships of Commanders-in-Chief on foreign stations, with an allowance of 5s. a day in addition to their established pay.

6. The Hospital allowances for Naval Medical Officers at home and abroad, in lieu of provisions for themselves and servants, and for fuel and light, are as follows:—

	At Home.	Abroad.
Inspector-General of Hospitals ...	... £85	£130
Deputy Inspectors-General	... 67	112
Staff Surgeons and Surgeons ...	... 53	112
Assistant-Surgeons	... 39	108

In cases where Medical Officers draw provisions or fuel from public stores, they will be charged for the same at cost price.

7. The travelling allowances, extra pay, lodging money, and compensation for losses, are fixed for Naval Medical Officers according to their relative rank in the Service.

(a) His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. Every candidate must also be free from organic disease of other organs, and from constitutional weakness or other disability likely to unfit him for naval service in any climate.

8. Medical Officers have cabins according to their relative rank in the Service, excepting always that the senior executive officer of whatever rank has the one most suitable for his duties.

9. The full- and half-pay of Naval Medical Officers is in accordance with the following scale:—Full pay: Inspector-General of Hospitals and Fleets—On promotion or under twenty-five years' service, £2 5s.; ditto or above twenty-five years' service, £2 6s.; and for each additional year of service 1s. a day more until the maximum is reached—namely, £2 10s. Deputy Inspector-General of Hospitals and Fleets—On promotion or under twenty-two years' service, £1 11s.; ditto or above twenty-two years' service, £1 12s.; and for each additional year of service 1s. a day more until the maximum is reached—namely £1 18s. Staff Surgeon—On promotion or under twenty years' service, £1 3s.; ditto or above twenty years' service, £1 4s.; and for each additional year of service 1s. a day more until the maximum is reached—namely £1 10s. Surgeon—On promotion or under fourteen years' service, 18s.; ditto or under seventeen years' service, £1; and for each additional year of service 1s. a day more until the maximum is reached—namely £1 2s. Assistant Surgeon—Under five years' service,(b) 11s.; under eight years' service, 12s. 6d.; under eleven years' service, 14s.; under fourteen years' service, provided he passed his examination for Surgeon while under ten years' service, 15s. 6d.; above fourteen years' service, ditto, 17s. Half-pay: Assistant Surgeon—Under five years' service, 6s.; under eight years' service, 8s.; under eleven years' service, 10s.; above eleven years' service, provided he passed his examination for Surgeon while under ten years' service, 11s. Surgeon—On promotion or under fourteen years' service, 11s.; ditto or under seventeen years' service, 13s.; ditto or above seventeen years' service, 14s. Staff Surgeon—On promotion or under twenty years' service, 16s.; ditto or above twenty years' service, 16s. 6d.; and for each additional year of service 6d. a day more until the maximum is reached—namely, 18s. 6d. Deputy Inspector-General of Hospitals and Fleets—On promotion or under twenty-two years' service, £1 1s.; ditto or above twenty-two years' service, £1 2s.; and for each additional year of service 1s. a day more until the maximum is reached—namely, £1 7s. Inspector-General of Hospitals and Fleets—On promotion or under twenty-five years' service, £1 11s.; ditto or above twenty-five years' service, £1 12s.; and for each additional year of service 1s. a day more until the maximum is reached—namely, £1 18s.

10. Retirement is provided for according to age and service, under special regulations.

11. My Lords will consider, and publish hereafter, the manner in which it may be found most advisable to assist Naval Medical Officers in their professional education after examination and admission into the Navy.

RULES AND REGULATIONS

OF THE

EXAMINING MEDICAL BODIES IN SCOTLAND.

UNIVERSITY OF EDINBURGH.

THE Session 1872-73 will be publicly opened on Friday, November 1, with an address by the Principal.

GRADUATION IN MEDICINE—STATUTES OF THE UNIVERSITY OF EDINBURGH RELATIVE TO GRADUATION IN MEDICINE AND SURGERY.

Three medical degrees are conferred by the University of Edinburgh—viz., Bachelor of Medicine (M.B.), Master in Surgery (B.M.), and Doctor of Medicine (M.D.). The degree of Master in Surgery is not conferred on any person who does not also at the same time obtain the degree of Bachelor of Medicine.

I. The preliminary branches of extra-professional education are—English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and the proficiency of students in these branches is ascertained by examination prior to the commencement of their medical study.

II. No candidate is admitted to a professional examination who has not passed a satisfactory examination on at least two of the following subjects (in addition to the subject mentioned above): — Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place before the candidate has entered on his medical curriculum.

III. A degree in Arts (not being an honorary degree) in any one of the universities of England, Scotland, or Ireland, or in any colonial or foreign university, specially recognised for this purpose by the University Court, exempts from all preliminary examination; and an examination in Arts by any corporate body whose examination has been recognised as qualifying for entrance on medical study by resolution of the General Medical Council of the United Kingdom, provided the said examination by the said corporate body shall be also approved by the University Court, shall exempt from preliminary examination in Arts, on all subjects comprised in the said examination of the said corporate body.

IV. No one is admitted to the degree of Bachelor of Medicine or Master in Surgery who has not been engaged in medical and surgical study for four years—the medical session for each year, or *annus medicus*, being constituted by at least two courses of not less than one hundred lectures each, or by one such course, and two courses of not less than fifty lectures each; with the exception of the clinical courses, in which lectures are to be given at least twice a week during the prescribed periods.

V. Every candidate for the degrees of M.B. and C.M. must give sufficient evidence by certificates—

1. That he has studied each of the following departments of medical science — viz., Anatomy, Chemistry, Materia Medica, Institutes of Medicine or Physiology, Practice of Medicine, Surgery, Midwifery and the Diseases peculiar to Women and Children (two courses of Midwifery of three months each being reckoned equivalent to a six months' course, provided different departments of Obstetric Medicine be taught in each of the courses) General Pathology (or, in schools where there is no such course, a three months' course of lectures on Morbid Anatomy, together with a supplemental course of Practice of Medicine, or Clinical Medicine), during courses including not less than one hundred lectures; Practical Anatomy, a course of the same duration as those of not less than one hundred lectures above prescribed; Practical Chemistry, three months; Practical Midwifery, three months at a midwifery hospital, or a certificate of attendance on six cases from a registered medical practitioner; Clinical Medicine, Clinical Surgery, courses of the same duration as those of not less than one hundred lectures above prescribed, or two courses of three months, lectures being given at least twice a week; Medical Jurisprudence, Botany, Natural History, including Zoology, during courses including not less than fifty lectures.(a and b)

2. That he has attended for at least two years the medical and surgical practice of a general hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of physicians and surgeons.

3. That he has been engaged for at least three months, by apprenticeship or otherwise, in compounding and dispensing drugs at the laboratory of an hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a member of the Pharmaceutical Society of Great Britain.

4. That he has attended for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, physician, surgeon, or member of the London or Dublin Society of Apothecaries.(b)

VI. The studies of candidates for the degrees of Bachelor of Medicine and Master in Surgery are subject to the following regulations:—

1. One of the four years of medical and surgical study required by Section IV. must be in the University of Edinburgh.

2. Another of such four years of medical and surgical study must be either in the University of Edinburgh or in some other university entitled to give the degree of Doctor of Medicine.

3. Attendance during at least six winter months on the medical or surgical practice of a general hospital which accommodates at least eighty patients, and during the same period on a course of Practical Anatomy, may be reckoned as one of such four years, and to that extent shall be held equivalent to one year's attendance on courses of lectures as above prescribed.

4. One year's attendance on the lectures of teachers of Medicine in the hospital schools of London, or in the school of the College of Surgeons in Dublin, or of such teachers of Medicine in Edinburgh, or elsewhere, as shall from time to time be recognised by the University Court, may be reckoned as one of such four years, and to that extent shall be held as attendance on courses of lectures, as above prescribed.

5. Candidates may, to the extent of four of the departments of medical study required by Section V., Sub-section 1, attend, in such year or years of their medical and surgical studies as may be most convenient to them, the lectures of the teachers of Medicine specified in the foregoing Sub-section 4.

6. All candidates, not students of the University, availing themselves of the permission to attend the lectures of extra-academical teachers in Edinburgh, must at the commencement of each year of such attendance enrol their names in a book

(a) Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the carefulness with which the dissections have been made. Before a student can appear for an examination in Anatomy, with a view to a degree, he is recommended to have dissected the human body at least once.

(b) The Medical Faculty recommend that medical students should not attend Clinical Surgery during their first six months' attendance on Clinical Medicine. *See* Note as to vaccination, appended to Section XX.

(b) Except during session at Netley. *See* Regulations.

to be kept by the University for that purpose, paying a fee of the same amount as the matriculation fee paid by students of the University, and having, in respect of such payment, a right to the use of the library of the University.

7. The fee for attendance on the lectures of an extra-academical teacher in Edinburgh, with a view to graduation, must be of the same amount as that exigible by medical professors in the University.(c)

8. No teacher is recognised who is at the same time a teacher of more than one of the prescribed branches of study, except in those cases where professors in the University are at liberty to teach two branches.

VII. Every candidate must deliver, before March 31 of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—

1. A declaration in his own handwriting that he has completed his 21st year,(d) and that he will not be, on the day of graduation, under articles of apprenticeship to any surgeon or other master.

2. A statement of his studies, as well in literature and philosophy as in Medicine, accompanied with proper certificates.

VIII. Each candidate is examined, both in writing and *vivâ voce*—First, on Chemistry, Botany, and Natural History; secondly, on Anatomy, Institutes of Medicine, Materia Medica,(e) and Pathology; thirdly, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; fourthly, Clinically on Medicine and on Surgery in an Hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, and Natural History are conducted, as far as possible, by demonstrations of objects placed before the candidates.

IX. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of their second year, may be admitted to examination at that time.(f)

X. Students who have passed their examination on the first division of these subjects may be admitted to examination on the second division at the end of their third year.

XI. The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *annus medicus*.

XII. Candidates may, if they choose, be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of their fourth year.

XIII. If any candidate at these examinations be found unqualified, he cannot be again admitted to examination unless he has studied, during another year, two of the prescribed subjects, either in the University or in some other school of Medicine.

XIV., XV., XVI. * * * * *

XVII. The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degree of Bachelor of Medicine, and is of the age of 24 years, and has been engaged, subsequently to his having received the degree of Bachelor of Medicine, for at least two years in attendance on an hospital, or in the Military or Naval Medical Services, or in medical and surgical practice.(g) Provided always that the degree of Doctor of Medicine shall not be conferred on any person unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified, or unless he shall, before or at the time of his obtaining the degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects—namely, French, German, Higher Mathematics, and Natural Philosophy. And provided also that the candidate for the degree of Doctor of Medicine shall, on or before the 31st day of March in the year in which he proposes to graduate, submit to the Medical Faculty a thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the degree of Bachelor of Medicine, which he may have made a subject of study after having received the degree.(h)

XVIII. The medical examiners for all candidates for graduation in Medicine are the Professors in the Faculty of Medicine, and, in addition, three persons appointed annually by the University Court.

XIX. The provisions of these statutes came into operation on the 4th of February, 1861.

XX. Persons who began their medical studies before the 4th of February, 1861, are entitled to graduate under the system in force before or after that date, according as they may comply with the regulations in force in the University before or after that date.

Note.—In conformity with the desire expressed by the Privy Council, it has been resolved that any candidate for a degree in Medicine must produce, at his final examination, a certificate from a dispensary or other public institution where vaccination is practised, attesting that he has been practically instructed in the operation, and is acquainted with the appearances which follow its performance.

Notice to Candidates for Graduation in Medicine.—Candidates who commenced their medical studies by attendance on qualifying classes before February 4, 1861, are entitled to appear for examination for the degree of Doctor of Medicine, after four years' study, on completing their twenty-first year, and without having taken the degree of Bachelor of Medicine. They are also exempted from the preliminary examinations mentioned in Sections I. and II., and require only to undergo an examination in Latin. They are also exempted from attendance on Practical Chemistry and Practical Midwifery, and require only three months of Clinical Surgery, and eighteen months of hospital attendance.

An *Annus Medicus* is constituted by at least two winter courses of one hundred lectures each, or by one such course, and two summer courses, of fifty lectures each, all being duly certified.

Four *Anni Medici* are required for Graduates in Medicine. Two at least of these years must be passed at a university which grants degrees in Medicine, one of the two being at Edinburgh.

One or two of the *Anni Medici* may be taken at qualified extra-academical schools, in the manner stated in the succeeding paragraph:

In University College, in King's College, in the hospital schools of London, in the extra-Academical School of Edinburgh, in the School of the College of Surgeons of Dublin, and in certain medical schools where at least two lecturers have been qualified by the University Court, a candidate may make *two Anni Medici*—one of which must be constituted by hospital attendance and Practical Anatomy, and the other by at least two courses of one hundred lectures, or one such course, and two courses of fifty lectures. The classes at these schools only qualify to the extent of four, and one of the four must be Practical Anatomy.

In provincial schools where there are no lecturers qualified by the University Court, a candidate can make *one Annus Medicus only*, and this is constituted by attendance on a qualified hospital, along with a course of Practical Anatomy.

The Edinburgh extra-Academical Classes only qualify if the fee paid at the commencement of the session is the same as that paid to the Professors in the University.

All classes must be taken at a university, except *four* selected by the candidate. The classes so selected must be qualifying courses, as regards the subjects and extent.

Three months' courses of Materia Medica, Pathology, and Midwifery do not qualify. For each of these subjects *one* course of one hundred lectures is required.

No teacher is qualified who lectures on more than one of the required subjects, as specified in Section VI., 8.

Every candidate for a degree in Medicine must be a matriculated student of the University for the year in which he appears for examination or graduation.

The dates of the examinations for 1872-73 have been fixed as follows; and candidates for each of them are required to assemble in the upper Library Hall a quarter of an hour before the time fixed for examination:—Preliminary examinations in Arts, October 15 and 16, 1872; March 28 and 19, 1873, at 10.30 a.m. each day. First professional examination, October 22, 1872; April 1, 1873, at 11 o'clock each day. Second professional examination, April 9 and 10, 1873, at 12 o'clock. Final professional examination in June, 1873. Graduation, August 1, 10 o'clock.

The names of candidates for the foregoing examinations must be given in, and the fees paid, etc., as follows, viz.:—For the final examination in June, 1873, on or before May 20; for graduation on August 1, on or before July 15; for second professional examination in April, 1873, on or before March 29; for preliminary examination in October, 1872, on or before October 5; for preliminary examination in March, 1873, on or before March 8; for first professional examination in October, 1872, on or before October 12; for first professional examination in April, 1873, on or before March 22; theses for M.D., on or before April 30, 1873. Specimens of the examination papers for 1871-72 are given in the Calendar.

The preliminary examinations in Arts accepted by the General Council are recognised *pro tanto*—that is to say, they exempt from examination in Arts on the subjects comprised in them, in so far as the examinations are of the same extent as those required by this University. Any subjects required by the Statutes, and not included in these examinations, or not carried out to the requisite extent, must be passed at the University. In all cases candidates must produce certificates of having passed such examinations, with an official notice of the subjects in which they have passed.

The fees for the examinations must be deposited with the Registrar at least ten days before the day of examination. The fees are—For the preliminary examination, each non-matriculated student pays a fee of 10s. (candidates who paid the fee in March may obtain admission to the examination in October without further payment); for the degree of M.B., three Examinations £5 5s. each, £15 15s.; for the degree of C.M., £5 5s. additional; for the degree of M.D., £5 5s. additional to that for

(c) The fee must be paid at the commencement of the course.

(d) Or that he will have done so on or before the day of graduation.

(e) Including Practical Pharmacy.

(f) Students who commence their medical studies in May may appear for this examination on the second October after the commencement of their studies, provided they have complete certificates for two qualifying summer sessions and one qualifying winter session, each session being constituted by attendance on at least two classes.

(g) Certificates for at least two years' practice must be produced on or before July 15 of the year in which the candidate proposes to graduate.

(h) The candidate must lodge his thesis with the Dean on or before April 30 of the year in which he proposes to graduate.

M.B., exclusive of £10 Government stamp. The graduation fees must all be paid on or before July 15 in the year in which candidates propose to graduate.

Note.—Total fees and stamp for graduating as M.D. only, by Regulations, for students who commenced their medical education before February, 1861, £25.

Candidates, settled for a period of years in foreign parts, who have complied with all the regulations for the degree of M.D. (under the new Statutes), but who cannot appear personally to receive the degree, may, on satisfying the Senatus to that effect by production of sufficient official testimonials, have the degree conferred on them in absence.

Students are recommended to commence their medical studies by attending a summer session.

MEDICAL DEGREES.—PRELIMINARY EXAMINATION IN ARTS, PROGRAMME FOR 1872-73.

I. In conformity with Section I. of the Statutes, Examinations on the Preliminary Branches of extra-Professional Education will take place on Tuesday and Wednesday, October 15 and 16, 1872, and on Tuesday and Wednesday, March 18 and 19, 1873, at 10.30 o'clock a.m. Examination on Tuesdays—English, Arithmetic, Mechanics, Greek, Higher Mathematics, and German. Examination on Wednesdays—Latin, Elements of Mathematics, Natural Philosophy, French, Logic, and Moral Philosophy. 1. English.—A portion of an English author must be written to dictation; the grammatical construction of one or two sentences must be explained; the grammatical errors in a sentence ungrammatically composed must be pointed out and their nature explained, and the derivation and definition of a few English words in common use must be given. (*See* Bain's "English Grammar," and Angus "On the English Language.") 2. Latin.—"Cicero Epistolæ ad Familiares," Book iv., an easy passage from a Latin prose author, and a single passage of English (translated from a Latin author) to be retranslated into Latin, the more difficult Latin words being given. 3. Arithmetic.—The Common Rules, including Vulgar and Decimal Fractions. 4. Elements of Mathematics.—Euclid, Books i., ii., and iii., and the ordinary rules of Algebra, including Simple Equations. A knowledge of Euclid alone will not be sufficient. 5. Elements of Mechanics.—Elementary Mechanics and Hydrostatics. (*See* "Tomlinson's Rudimentary Mechanics," Weale's Series.)

Greek.—1. "Xenophon Cyropædia," Book i. 2. French.—Molière, "Le Malade Imaginaire." 3. German.—Lessing's "Emilia Galotti." 4. Higher Mathematics.—Euclid, Books i. to vi.—Algebra, Trigonometry, and Conic Sections. 5. Natural Philosophy.—Text-book recommended—Balfour Stewart's "Elementary Physics." 6. Logic.—Terms, Propositions, Syllogisms, and Fallacies. Induction. (*See* Fowler's "Elements of Deductive Logic." 7. Moral Philosophy.—Moral Faculty. Desires and Emotions. The Will. Moral Obligations. Practical Ethics. (*See* Stewart's "Outlines of Moral Philosophy," Part II. (M'Cosh's edition), with M'Cosh's Notes.) As regards Latin, Greek, French, and German, mere translation is not sufficient. Candidates must answer questions in grammar, and must be prepared to translate a passage of English into these languages.

In Section XVII. of the said Statutes, it is enacted that the degree of Doctor of Medicine shall not be conferred on any person unless he be a Graduate in Arts, or unless he shall, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory Examination on *three* of the subjects mentioned in Section II. Two of these must be Greek and Logic or Moral Philosophy, and the *third* may be any one of the following subjects—namely, French, German, Higher Mathematics, Natural Philosophy.

Examinations of the same extent, and on the same subjects, at other British Universities granting the Degree of M.D., will exempt from these Preliminary Examinations. Certificates of having passed such examinations must be produced, with an official notice of the subjects on which the candidate has passed an examination.

Students who come under the old Statutes, in consequence of having commenced their medical curriculum by attendance on classes before February 4, 1861, will be examined in Latin on Wednesday, October 18, 1871, and Wednesday, March 21, 1872, at 10.30 a.m. For nature of examination, see Section I. of this programme.

UNIVERSITY OF ABERDEEN.

The regulations for granting medical degrees are framed in conformity with an Ordinance of the Universities (Scotland) Commissioners, dated March 16, 1861, and approved by her Majesty in Council.

The following are the degrees in Medicine granted by this University—namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.).

The preliminary examination and professional curriculum and examination for the degrees of M.B., C.M., and M.D., being in conformity with the Ordinances of the Scotch Universities Commissioners, are nearly the same as those of the Universities of Edinburgh, Glasgow, and St. Andrews.

The studies of candidates for the degrees of Bachelor of Medicine and Master in Surgery are subject to these regulations:—

One at least of the four years of medical and surgical study must be in the University of Aberdeen.

Another of such four years must be either in this University or in some other university entitled to give the degree of Doctor of Medicine.

FEES FOR GRADUATION.

1. Each candidate for the degree of M.B. shall pay a fee of £5 5s. in respect of each of the three professional examinations.

2. If the candidate desires to be admitted to the degree of Bachelor of Medicine only, he shall not, on admission thereto, be required to pay any further fee in addition to the £15 15s. so paid by him; but if he desires to be admitted to the degree of Master in Surgery also, he shall, on being admitted to such degree, pay a further fee of £5 5s.

3. And every candidate for the degree of Doctor of Medicine shall pay, in addition to the fees paid by him for the degree of Bachelor of Medicine, a fee of £5 5s., exclusive of any stamp duty which may for the time be exigible.

EXEMPTION FROM THE FOREGOING REGULATIONS.

Students who shall have begun their medical studies before the first Tuesday of November, 1861, are entitled to appear for examination for the degree of M.D. after four years' study, one of which must have been at the University of Aberdeen.

Further information may be obtained from the Dean of the Medical Faculty, Professor Macrobin, M.D.

UNIVERSITY OF ST. ANDREWS.

The regulations for granting medical degrees are framed in conformity with an ordinance of the Universities (Scotland) Commissioners; they therefore generally correspond with those of the Universities of Edinburgh, Aberdeen, and Glasgow.

The degrees in Medicine granted by the University of St. Andrews are those of Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.)

The preliminary examination and professional curriculum and examinations for these degrees are generally the same as those of the Universities of Edinburgh, Aberdeen, and Glasgow. The following regulations, however, for candidates for the degrees of Bachelor of Medicine and Master in Surgery present some difference:—

No one shall be received as a candidate for the degree of Bachelor of Medicine or Master in Surgery unless two years at least of his four years of medical and surgical study shall have been in one or more of the following universities and colleges, viz.:—The University of St. Andrews; the University of Glasgow; the University of Aberdeen; the University of Edinburgh; the University of Oxford; the University of Cambridge; Trinity College, Dublin; Queen's College, Belfast; Queen's College, Cork; and Queen's College, Galway.

The remaining years of medical and surgical study may be either in one or more of the universities and colleges above specified, or in the hospital schools of London, or in the School of the College of Surgeons in Dublin, or under such private teachers of Medicine as may from time to time receive recognition from the University Court.

Attendance on the lectures of any private teacher in Edinburgh, Glasgow, or Aberdeen shall not be reckoned for graduation in St. Andrews, if the fee for such lectures be of less amount than is charged for the like course of lectures in the University of Edinburgh, of Glasgow, or of Aberdeen, according as the teacher lectures in Edinburgh, Glasgow, or Aberdeen.

Every candidate for the degrees of Bachelor of Medicine and Master in Surgery shall be examined both in writing and *viva voce*—first, on Chemistry, Botany, Elementary Anatomy, and Materia Medica; secondly, on Advanced Anatomy, Zoology, with Comparative Anatomy, Physiology, and Surgery; and, thirdly, on Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, General Pathology, and Medical Jurisprudence.

FEES FOR GRADUATION.

For the degree of Bachelor of Medicine five guineas in respect of each of the three divisions of the examination on professional subjects; and if the candidate desires to be admitted to the degree of Bachelor of Medicine only, he shall not, on admission thereto, be required to pay any further fee in addition to the fifteen guineas so paid by him; but if he desires to be admitted to the degree of Master in Surgery also, he shall, on being admitted to such degree, pay a further fee of five guineas; and every candidate for the degree of Doctor of Medicine, who has previously obtained the degree of Bachelor of Medicine, shall pay, in addition to the fees paid by him as a candidate for the degree of Bachelor of Medicine, a fee of five guineas, exclusive of any stamp duty which may for the time be exigible.

N.B.—The degree of Doctor of Medicine may be conferred by the University of St. Andrews on any registered medical practitioner above the age of 40 years, whose professional position and experience are such as, in the estimation of the University, to entitle him to that degree, and who shall, on examination, satisfy the Medical Examiners of the sufficiency of his professional knowledge; provided always, that degrees shall not be conferred under this section to a greater number than ten in any one year. Fee £52 10s.

SUPPLEMENTARY REGULATIONS REGARDING MEDICAL DEGREES, AS REGARDS REGISTERED MEDICAL PRACTITIONERS ABOVE THE AGE OF FORTY YEARS.

The examinations are held yearly, towards the end of April. The graduation fee is fifty guineas. Candidates, whose certificates are approved of by the Medical Faculty, are enrolled for examination in order of application, provided they have complied with the undermentioned regulations as to certificates and deposit. Candidates for graduation shall lodge with the Professor of Medicine the following certificates and deposit, along with their application for admission to examination :—

I. A certificate of age.

II. Certificates from three medical men, of such acknowledged reputation in the Profession, or of such standing in the medical schools, as shall satisfy the Senatus of the professional position and experience of the candidate.

III. A certain portion (viz., £10 10s.) of the graduation fee. This sum shall be forfeited should the candidate fail to appear at the time appointed for examination, or should he fail to graduate.

IV. The examination shall be conducted both in writing and *vivâ voce*, and shall include the following subjects :—(1) Materia Medica and General Therapeutics. (2) Medical Jurisprudence. (3) Practice of Medicine and Pathology. (4) Surgery. (5) Midwifery.

UNIVERSITY OF GLASGOW.

Three degrees in Medicine are granted, viz.:—Bachelor of Medicine (M.B.), Mastery in Surgery (C.M.), and Doctor of Medicine (M.D.). [The preliminary examination, curriculum, and professional examinations for these degrees, being in conformity with the ordinance of the Scottish Universities Commissioners, are the same as for the Universities of Edinburgh, St. Andrews, and Aberdeen.]

Of the four years constituting the curriculum, one at least shall have been passed in the University of Glasgow, and another either in that university or some other university entitled to give degrees in Medicine.

These statutes apply to all candidates who commenced their medical studies on or after October 1, 1861. Candidates who began their medical studies before that date are entitled to obtain their degrees according to the regulations existing at the time when they commenced their studies.

The annual term for conferring medical and surgical degrees is the first day of May.

The fees for the degrees are as follows:—For the degree of M.B. (for each of three examinations, £5 5s.), £15 15s.; for that of C.M. (in addition to the fee for M.B.), £5 5s.; for the degree of M.D. (in addition to the fee for M.B.), £5 5s.; and the Government stamp for the diploma, etc., £10 3s.

The preliminary examinations of medical students in branches of general education take place at the beginning and at the end of the winter session.

The regulations under which the above degrees are granted, and the notices of the subjects of examination, will be obtained by application to the Registrar of the University.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

ABSTRACT OF REGULATIONS FOR THE LICENCE.

1. No one can obtain the licence of the College until he has completed the age of 21 years.

2. Every applicant for the licence must produce evidence that he has been engaged in the study of Medicine during a period of at least four years subsequently to his registration as a medical student, which period shall include attendance during not less than four winter sessions, or three winter and two summer sessions, at a recognised medical school.

3. The applicant must produce certificates that he has attended the following courses at a university, or at some medical school recognised by the College:—Anatomy, one course, six months; Practical Anatomy, six months; Chemistry, one course, six months; Practical Chemistry, three months; Materia Medica and Pharmacy, one course, three months, Physiology or Institutes of Medicine, one course, three months; Practice of Medicine, one course, six months; Clinical Medicine, six months; Principles and Practice of Surgery, one course, six months; Clinical Surgery, three months; Midwifery, one course, three months; Medical Jurisprudence, one course, three months; Pathological Anatomy, one course, three months; or General Pathology, one course, three months; Practical Pharmacy, three months.

The applicant must also produce evidence of having attended the practice of a public hospital (containing not fewer than 80 beds) during a period of not less than twenty-four months, twelve of which must have been spent in attendance on the medical wards. He must also have attended for six months the practice of a public dispensary, or have acted for six months as clinical clerk or dresser in a hospital, or have been engaged for six months as visiting assistant to a registered practitioner.

The applicant must also have attended at least six cases of labour under the superintendence of a qualified medical practitioner, and must produce a certificate to that effect.

The applicant will also be required to produce a certificate that he has studied vaccination under a competent and recognised teacher, and that he is thoroughly informed in every necessary part of the subject.

4. Every applicant for the licence must have passed the preliminary examination in Literature and Science, and have had his name inscribed in the Register of Medical Students, instituted by the General Medical Council, previous to the commencement of his medical studies.

The examination will embrace the following subjects:—1. English: Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry: First two Books of Euclid. 4. Latin: Translation into English, Cicero de Senectute et de Amicitia, *or* Horatii Carmina, Lib. II. et III.—Parsing: Translation from English into Latin, the Latin words being supplied. 5. One of the following subjects, at the option of the candidate:—1. Greek: Herodotus' History, Book I., and Homer's Iliad, Book II. 2. French: Voltaire's "Henriade." 3. German: Schiller's "Wilhelm Tell." 4. Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.

5. Masters and Bachelors of Arts of any British or foreign university, whose course of study may from time to time be approved of by the College, will be exempted from the preliminary examination; also those who have passed the examination of the national educational bodies, or of any of the licensing boards recognised by the Medical Act.

6. The professional examination will be divided into two parts, according to the following arrangements of subjects:—(1) Anatomy, Physiology, Chemistry; (2) Materia Medica and Pharmacy, Pathology, and Pathological Anatomy, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, including the examination of patients, as well as of various morbid products. No candidate will be admitted to the first examination until he has completed two, or to the second until he has completed four, years of professional study. The examinations will be conducted partly *vivâ voce*, partly by written papers.

7. The following will be the periods of examination up to October, 1873:—(1) Preliminary examinations in Literature and Science—Wednesday, October 30, 1872; Tuesday, April 29, 1873; Wednesday, July 30, 1873. (2.) First professional examinations—Wednesday, October 16, 1872; Wednesday, January 15, 1873; Wednesday, March 26, 1873; Wednesday, April 30, 1873; Wednesday, July 16, 1873; Wednesday, October 15, 1873. (3.) The second professional examinations will be held on the Thursdays following the first professional.

8. Candidates for the licence of the College, who already possess a qualification from a recognised licensing body, or who have passed the first professional examination before a qualifying body (provided it be as extensive as that required by this College), will be at once admitted to the second part of the examination.

9. Meetings for the examination of candidates who already possess a qualification from a recognised licensing body, will be held on the first Wednesday of every month (with the exception of September and October), and, if necessary, on the following days. Candidates are required to communicate with the Secretary to the College not less than eight days before the date of the examination at which they propose to appear.

10. No candidate is admissible to examination who has been rejected by any licensing board within three months previous to his examination.

11. The fee payable by a Licentiate is ten guineas. In the event of a candidate being unsuccessful at his examination, the sum of two guineas will be retained to defray expenses.

12. Candidates may be admitted to special examination, on days other than those appointed above, on bringing forward reasons satisfactory to the Council, and on paying an extra fee of five guineas. Should the candidate be unsuccessful, the sum of eight guineas will be returned to him.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS TO BE OBSERVED BY CANDIDATES FOR THE DIPLOMA.

These are the same as those given below for the conjoined qualification in Medicine and Surgery conferred by the Colleges of Physicians and Surgeons, with the following exceptions in professional education:—

No third course of Medicine and no course of Pathological Anatomy are required.

A certificate of three months' instruction in Pathological Anatomy at the post-mortem room of a recognised hospital will be required from candidates commencing professional study after October 1, 1861.

The regulations for the preliminary examination in general education generally correspond with those to be observed by candidates for the joint qualification of the Royal Colleges of Physicians and Surgeons, Edinburgh.

PROFESSIONAL EXAMINATIONS FOR THE DIPLOMA OF THE COLLEGE.

The regulations are generally the same as those for the professional examinations for the joint diploma of the two Colleges, with the following exceptions:—

The sum of £4 must be paid to the Treasurer of the College for the first examination, not later than 10 a.m. of the day preceding it. The sum will be considered as paid to account of the entire fee of £10 payable for the diploma.

In the case of a candidate being unsuccessful at this examination, £2 will be returned to him, the remaining £2 being retained to meet the expenses of the examination.

The second examination embraces Surgery and Surgical Anatomy, also Medicine, Midwifery, Materia Medica, and Medical Jurisprudence; and shall not take place before the termination of the winter session of the last year of study. In the case of candidates who began their course of study after September 16, 1866, it will not take place till four years after the examination in general education. Applications for examination must be made to the Secretary not later than the Tuesday previous to the day of the examination. Every candidate must produce to the Secretary—1. Satisfactory evidence of his having attained the age of 21 years, and of having been duly registered; 2. Certificates of having attended the prescribed classes, together with the certificates enumerated; 3. The certificate of his having passed the first professional examination; and 4. A tabular statement (for which a printed form will be furnished by the officer) exhibiting the full amount of his professional education, and distinguishing the classes, hospitals, and dispensaries attended during each session of his studies. If he have been an apprentice he must also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature, and will be preserved by the College as a record.

If the candidate have been an apprentice to a Fellow of the College, he must also produce his discharged indenture.

The remaining fee payable to the College (being £6), together with the receipt for the fee paid for the first professional examination, must be lodged not later than 10 a.m. of the day preceding the examination day, in the hands of the Treasurer, who will certify this upon the Secretary's letter. The sum of £4 will be returned to unsuccessful candidates.

Periods of examination for the year, 1872-73:—I. Preliminary Examinations in General Education: On Wednesday, October 30, 1872; on Tuesday, April 29, 1873; on Wednesday, July 30, 1873. II. First Professional Examinations: On Tuesday, October 15, 1872; on Tuesday, January 14, 1873; on Tuesday, March 25, 1873; on Tuesday, April 22, 1873; on Tuesday, July 1, 1873; on Tuesday, July 15, 1873. III. Second Professional Examinations: These will take place immediately after the conclusion of the first professional examinations, at each of the above-mentioned periods. They will generally be begun on the Thursday succeeding to the day of the first examination, and in no case on any earlier day.

As frequent instances have occurred of inattention to the times for lodging the certificates and the fees of candidates, causing great disappointment to themselves, it is hereby notified that unless these rules are exactly observed, the examinations of such candidates may require to be postponed.

THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.

The Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh, while they still continue to give their diplomas separately, under separate regulations, have made arrangements by which, after one series of examinations, the student may obtain the diplomas of both Colleges.

The general principle of this joint examination is, that it shall be conducted by a Board, in which each body is represented in those branches which are common to both Medicine and Surgery; but that the College of Physicians shall take exclusive charge of the examination in Medicine, and the College of Surgeons of the examination in Surgery.

The object of the joint examination is to give to students facilities for obtaining from two separate bodies, and at less expense, a qualification in Medicine and a qualification in Surgery.

Students passing that examination successfully will be enabled to register two qualifications under the Medical Act,—Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh.

The arrangement for thus conferring a double qualification by the co-operation of the two Colleges is in conformity with Section XIX. of the Medical Act, and received the special sanction of the General Council of Medical Education and Registration, at a meeting held on August 7, 1859.

SCHOOLS OF MEDICINE.

1. Every candidate must have followed his course of study in a *University*, or in an *established School of Medicine*, as defined below, or in a *Provincial School* specially recognised by the Colleges of Physicians and Surgeons of that division of the United Kingdom in which it is situate.

2. Under the title *established School of Medicine* are comprehended the medical schools of those cities of Great Britain and Ireland in which diplomas in Medicine and Surgery are granted, and such colonial and foreign schools as are similarly circumstanced in the countries in which they exist.

PROFESSIONAL EDUCATION.

1. Candidates commencing professional study after September 16, 1866, must have been engaged during four years after the examination in general education, in professional study, which shall include not less than four winter sessions', or three winter and two summer sessions' attendance at a recognised medical school.(a)

2. The candidate must produce certificates of having attended the following separate and distinct courses of lectures:—

Anatomy, two courses, (b) six months each; Practical Anatomy, twelve months. Or, in the option of the candidate, Anatomy, one course, six months; Practical Anatomy, eighteen months. Chemistry, one course, six months. Practical or Analytical Chemistry, one course, three months. Materia Medica, one course, three months. Physiology, not less than fifty lectures.(c) Practice of Medicine, one course, six months. Clinical Medicine, six months.(d) Medicine—a third course, which may either be Practice of Medicine or Clinical Medicine, at the option of the student, one course, six months.(d) Principles and Practice of Surgery, one course, six months. Clinical Surgery, one course, six months.(d) Surgery—a third course, which may either be Principles and Practice of Surgery or Clinical Surgery at the option of the student, one course, six months.(d) Midwifery and the Diseases of Women and Children, one course, three months. Medical Jurisprudence, one course, three months. Pathological Anatomy, one course, three months.(e) The six months' courses delivered in Scotland must consist of not fewer than one hundred lectures, with the exception of Clinical Medicine and Clinical Surgery. The three months' courses must consist of not fewer than fifty lectures.

3. The candidate must also produce the following certificates:—(*a.*) Of having attended six cases of labour under the superintendence of the practitioner who signs the

(a) Candidates commencing study prior to the above date will be admitted to examination after four winter sessions', or three winter and two summer sessions' attendance on classes at a regular medical school.

(b) The two courses must not be attended in the same session.

(c) In those schools of England and Ireland in which two separate courses of lectures are delivered at separate hours—one on Anatomy, the other on Anatomy and Physiology—the former of these courses will be received as a course of Anatomy, and the other as a course of Physiology.

(d) Two courses of Clinical Medicine, of three months each, if not simultaneous, will be held equivalent to one course of six months. They must be attended during the period of attendance at the hospital where they are delivered. The same rules will apply to Clinical Surgery.

(e) A certificate of attendance on the post-mortem examinations at a general hospital will be accepted in lieu of this course.

certificate, who must be a registered medical practitioner. (*b.*) Of having attended, for three months, instruction in Practical Pharmacy. The certificate to be signed by the teacher, who must be a member of the Pharmaceutical Society of Great Britain, of a chemist and druggist recognised by either College, on special application, or the superintendent of the laboratory of a public hospital or dispensary, or a registered practitioner who dispenses medicines to his patients. (*c.*) Of having attended, for twenty-four months, a public general hospital containing, on an average, at least eighty patients. (*d.*) Of having attended, for six months, the practice of a public dispensary specially recognised by either College; or of having been engaged for six months as visiting assistant to a registered practitioner. (*e.*) Of having been instructed in Vaccination. The certificate to be signed by the teacher, who must be a registered practitioner. (f)

4. The following order of study is recommended as a guide to the student, though not enjoined:—First year: Anatomy, Practical Anatomy, Chemistry, Practical or Analytical Chemistry, Hospital. Second year: Anatomy, Practical Anatomy, Physiology, Surgery, Materia Medica (the last either in this or the third year), Hospital. Third year: Practice of Medicine, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Clinical Medicine, Pathological Anatomy, Hospital. Fourth year: Surgery or Clinical Surgery, Midwifery and the Diseases of Women and Children, Practice of Medicine or Clinical Medicine, Medical Jurisprudence, Practical Midwifery, Hospital.

5. It is strongly recommended to students to avail themselves of any opportunities which they may possess of attending lectures on Ophthalmic and Mental Diseases, also on Natural History and Comparative Anatomy; and of obtaining practical instruction in the use of the microscope, in addition to the courses of instruction which are absolutely required.

PRELIMINARY EXAMINATION IN GENERAL EDUCATION.

1. All students who intend becoming candidates for the diplomas of the Colleges must have passed the complete examination in general education, and have had their names inscribed in the register of medical students instituted by the General Medical Council, at the commencement of their professional studies.

2. The following will be the preliminary examination in general education for the double qualification in Medicine and in Surgery conferred conjointly by the Royal Colleges of Physicians and Surgeons, and also for the separate diploma of each College, for 1871-72:—1. English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. 3. Algebra, including Simple Equations. 4. Geometry: First Two Books of Euclid. 5. Latin: Translation from one of the two following books at the option of the candidate—viz., Cicero de Senectute et de Amicitia, *or* Horatii Carmina, Lib. II. et III.; and of an easy passage from a book not prescribed; Exercises in Parsing, and in rendering English correctly into Latin, the Latin words being supplied. 6. One of the following subjects at the option of the candidate:—(1.) Greek: Herodotus' History, Book I., and Homer's Iliad, Book II. (2.) French: Voltaire's "Henriade." (3.) German: Schiller's "Wilhelm Tell." (4.) Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics. N.B.—In Greek, French, and German, parsing of words from the passages given to be translated will be required; also translation of short sentences from English into the respective languages.

3. Testimonials of proficiency granted by certain educational bodies will be accepted as sufficient evidence of general education, and will exempt from the preliminary examination.

4. The preliminary examinations shall take place at stated periods, and shall be conducted by a special board of examiners in Arts, to be chosen from time to time by the Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh.

5. Students who intend to undergo the preliminary examination shall give in their names, addresses, and places of birth to the officer of either College, not later than three days before the day of examination, and shall pay a fee of 10s., not to be returned in case of rejection, but will be admissible to re-examination at a future period without paying another fee.

6. Candidates, the commencement of whose professional studies was prior to September 17, 1866, may pass the preliminary examination in general education at any of the periods previous to the first professional examination, but are recommended to do so at the earliest possible period. Candidates under this regulation who have not passed a preliminary examination in general education will be admitted to a special examination in general education previously to their first professional examination. For this they shall pay a fee of £1.

PROFESSIONAL EXAMINATIONS.

1. Candidates for the double qualifications shall be subjected to two professional examinations, to be conducted at separate times, partly in writing and partly orally.

2. Opportunities for both examinations will be presented six times in each year. On each of these occasions the candidates shall assemble for the purpose of writing answers to the questions proposed. The oral examinations will be conducted on the days immediately succeeding.

3. Unsuccessful candidates at either the first or second examination shall be remitted to their studies for a period to be determined by the judgment of the examiners, but not in any case less than three months.

4. The first examination shall embrace Anatomy, Physiology, and Chemistry, and shall take place not sooner than the end of the second winter session.

5. Candidates who desire to pass the first professional examination must apply to the Inspector of Certificates on or before the Saturday preceding the day of examination,(g) and must produce certificates of attendance in regard to all those of the required courses of lectures which have reference to the subjects of that examination. They must also produce a certificate of having passed the preliminary examination.

6. The sum of £6 must be paid to the Inspector of Certificates for this examination, not later than 10 a.m. of the day preceding it. This sum will be considered as paid to account of the entire fee of £16 payable for the two diplomas.

7. In the case of a candidate being unsuccessful at this examination, £4 will be returned to him; the remaining £2 being retained to meet the expense of examination.

8. The second examination shall embrace Medicine, Surgery and Surgical Anatomy, Midwifery, Pathological Anatomy, Materia Medica and Pharmacy, and Medical Jurisprudence; and shall not take place before the termination of the winter session of the last year of study. In the case of candidates who began their course of study after September 16, 1866, it will not take place till four years after the examination on general education.

9. Applications for examinations must be made to the Inspector of Certificates not later than the Tuesday previous to the day of examination.(g)

10. Every candidate must produce to the Inspector—1st. Satisfactory evidence of his having attained the age of 21 years; 2nd. A certificate of his having passed the preliminary examination, unless this certificate have already been seen by the Inspector of the Colleges; 3rd. A certificate of his registration in the books of the General Medical Council; 4th. A certificate of his having passed the first professional examination; 5th. The certificates of his classes, and the other certificates required; and 6th. A tabular statement (for which a printed form will be furnished by the Inspector), exhibiting the full amount of his professional education, and distinguishing the classes, hospitals, and dispensaries attended during each session of his studies. The tabular statement, accurately filled up, must be attested by his signature, and will be preserved by the Colleges as a record.

11. The fee payable for this examination, which shall be £10, must be lodged with the Inspector not later than 10 a.m. of the day preceding the examination day.

12. On the production of the above documents, and after receiving the fees, the Inspector shall give the candidate a letter authorising the examiners to take him on trial.

12. In case of a candidate being unsuccessful at the second examination, £8 will be returned to him; the remaining £2 being retained to meet the expense of the examination.

14. Candidates who have passed the first professional examination in Anatomy, Physiology, and Chemistry, at any of the licensing boards recognised by the Medical Act, will be admissible to the second professional examination, on producing certificates of the whole course of study prescribed, and of having passed their preliminary and first professional examinations. If any of the three subjects of the first examination have been omitted, such

(f) By a Regulation of the Privy Council, of date December 1, 1859, no one can be appointed as a contractor for Vaccination under the English Poor-law who does not produce a certificate of proficiency in Vaccination from a person authorised by the Privy Council to grant the same.

(g) Candidates at a distance are requested to send their Certificates much earlier, so as to give sufficient time for the exchange of one or two explanatory letters; as much disappointment has been occasioned by the discovery of defects in their course of study when it was too late to rectify them by the production of documents.

candidates will have to undergo an examination on the omitted subjects; and none of the subjects will be omitted at the second examination, even if some of them should have formed part of the first examination by another board. The fee payable by such candidates is £16, and unsuccessful candidates will receive back £14.

15. In addition to the written and oral examinations, all candidates shall be subjected to a practical clinical examination in Medicine and Surgery, which shall include the examination of patients, physical diagnosis, the use the microscope, surgical appliances, bandages, etc.

16. Candidates desirous of special examinations on other days than those fixed by the regulations, must prepare a case to be submitted for the consideration of the authorities of the College, with evidence to show why it was and is impossible for them to avail themselves of the ordinary examinations past and future. They must *at the same time* produce certificates of the whole of the prescribed course of study and of the preliminary examination, and state the earliest and the latest days within which they can present themselves. It is very desirable that all such candidates, and especially those who are at a distance from Edinburgh, should present their applications as long beforehand as possible.

The fees for special examinations are as follows:—£28 for first and second examinations, of which £22 will be returned to candidates remitted on the first examination, and £10 to candidates successful in the first, but unsuccessful in the second examination. £25 for second examination, when the candidate has passed the first under the conditions of Section 14. Of this £16 will be returned to the candidate if unsuccessful. £19 for second examination, when the candidate has passed the first before the examiners of the Colleges. Of this £10 will be returned to the candidate if unsuccessful.

17. No candidate shall be admissible to examination who has been rejected by any other licensing board within the three months preceding his examination.

I. *Preliminary Examinations in General Education.*—On Wednesday, October 30, 1872; on Tuesday, April 29, 1873; on Wednesday, July 30, 1873.

II. *First Professional Examinations.*—On Tuesday, October 22, 1872; on Tuesday, January 21, 1873; on Tuesday, April 1, 1873; on Tuesday, April 29, 1873; on Tuesday, July 8, 1873; on Tuesday, July 22, 1873.

III. *Second Professional Examinations.*—These will take place immediately after the conclusion of the first professional examiuation, at each of the above-mentioned periods. In no case will they be begun on an earlier day than the Thursday of any period, nor will they usually be later than that day.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

ABSTRACT OF REGULATIONS FOR THE LICENCE, 1872-73.

Course of Study.—(1.) Anatomy, two courses, six months each. (2.) Practical Anatomy, twelve months. (3.) Chemistry, one course, six months. (4.) Practical or Analytical Chemistry, one course, three months. (5.) Physiology, not less than fifty lectures. (6.) Practice of Medicine, one course, six months. (7.) Clinical Medicine, one course, six months. (8.) Principles and Practice of Surgery, one course, six months. (9.) Clinical Surgery, one course, six months. (10.) In addition to the above courses of Surgery and Clinical Surgery, one six months' course of either of these at the option of the student; Materia Medica, one course, three months. (11.) Midwifery and the Diseases of Women and Children, one course, three months. (12.) Medical Jurisprudence, one course, three months. (13.) Practical Midwifery, attendance on at least six cases of labour. (14.) Pathological Anatomy, three months' instruction in the post-mortem room of a recognised hospital. (15.) Practical Pharmacy, three months' practical instruction. (16.) Hospital and Dispensary Practice, twenty-four months' attendanco on the practice of a public general hospital containing on the average at least eighty patients.

A certificate of proficiency in vaccination, from a vaccine institution recognised by the Faculty, will be required of every candidate. Candidates (not exempted from registration) must have been engaged in professional study during four years from the date of registration, which shall include not less than four winter sessions' or three winter and two summer sessions' attendance at a recognised medical school.

Candidates are subjected to two professional examinations. The first examination embraces Anatomy, Physiology, and Chemistry, and cannot be undergone before the end of the second winter session of study.

The second examination embraces Surgery and Surgical Anatomy, Medicine, Materia Medica, Midwifery, and Medical Jurisprudence, and cannot be undergone before the termination of the full period of study.

Intending candidates for the second examination must produce evidence—1st, of being 21 years of age; and 2nd, of having passed the first examination. They will also present to the Secretary for inspection their class and hospital certificates, and write out a tabulated statement of their whole course of study, for which the Secretary, on application, will supply candidates with printed forms.

The fee for the diploma is £10—£4 for the first, and £6 for the second examination.

First examinations will be held on the second Tuesday of every month. Second examinations will take place, the written part on the second Tuesday of each month, and the oral and clinical parts on the succeeding day. A candidate, on showing a sufficient reason, may be admitted to examination on a day specially arranged, by paying an extra fee of £3.

All applicants for the licence must be registered on the form prescribed by the General Medical Council at the commencement of professional study.

Candidates who possess a qualification to practise, or who have passed the examination in Anatomy, Physiology, and Chemistry before any of the licensing boards, will be admitted to the second examination on producing evidence of having attended the full curriculum, and paying the fee of £10.

DOUBLE QUALIFICATION.

The Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians of Edinburgh, while they still continue to give their diplomas separately, under separate regulations, have made arrangements by which, after one series of examinations, the student may obtain two separate licences—one in Medicine and one in Surgery.

The fee for the two diplomas granted conjointly is £16—£6 for the first and £10 for the second examination.

The first examination for the double qualification will be held in the Faculty Hall, Glasgow, on October 3, 1872, January 9, April 1, May 1, and July 17, 1873, and on each occasion it will be continued on the succeeding day. The second examination will be held, the written part on each of the above days, and the oral part on the succeeding day. Applications to be admitted, either to the first or second examination, must be made to the Secretary of the Faculty not later than the Monday preceding the examination.

PRELIMINARY EXAMINATIONS CONDUCTED BY THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW, SESSION 1872-73.

1. Preliminary examinations in general literature, in accordance with the regulations of the General Medical Council, will be held in the Faculty Hall during the session 1872-73 on the following days, commencing at 11 o'clock, viz.:—Friday, October 18, and Friday, November 1, 1872; Friday, April 25, and Friday, July 18, 1873; and on each occasion the examination will be continued on the succeeding day.

The examination will embrace the following subjects:—1. English language. 2. Latin. 3. Arithmetic; Algebra. 4. Geometry. 5. One of the following subjects at the option of the candidate:—(1.) Natural Philosophy—Mechanics, Hydrostatics and Pneumatics. (2.) Greek. (3.) French. (4.) German.

The fee for the examination and certificate is 10s., payable to the Secretary previous to the examination.

FACULTY OF MEDICINE IN IRELAND.

UNIVERSITIES, COLLEGES, COURSES OF STUDY, DEGREES, AND LICENCES TO PRACTISE.

The following bodies grant one or more degrees or licences to practise Medicine or Surgery, and provide courses of instruction in the Medical Sciences:—The University of Dublin grants the degrees of M.B. or Bachelor of Medicine; M.D. or Doctor of Medicine; M.C. or Master of Surgery; and B.C. or Bachelor of Surgery; also licences in Medicine (L.M.) and Surgery (L.S.). In connexion with the University, Trinity College gives a diploma in State Medicine, after examination, to Doctors of Medicine of Dublin, Oxford, or Cambridge. The Queen's University in Ireland, with its Provincial Colleges at Belfast, Cork, and Galway: This University confers the degrees of M.D. and M.Ch. The King and Queen's College of Physicians in Ireland grants a Licence and a Fellowship. This institution, in connexion with the Medical Faculty of the University of Dublin, constitutes the School of Physic in Ireland. The

Royal College of Surgeons in Ireland grants letters testimonial qualifying to practise Surgery as a Licentiate, and also confers a Fellowship. Fellows and Licentiates of the Colleges of Physicians and Surgeons may obtain from their respective colleges a diploma in Midwifery. The Rotundo and Coombe Lying-in Hospitals grant diplomas in Midwifery, which are, however, not recognised under the Medical Act. The Governor and Company of the Apothecaries' Hall of Ireland also confers a diploma.

The medical session in Ireland commences about the first week in November.

UNIVERSITY OF DUBLIN.

SCHOOL OF PHYSIC.

The School of Physic in the University of Dublin is under the joint control of the Board of Trinity College and of the President and Fellows of the College of Physicians.

MATRICULATION.

All students of the School of Physic must be matriculated by the Senior Lecturer of Trinity College, for which a fee of 5s. is payable. No student can be admitted for the winter courses after November 25.

DEGREES AND LICENCES IN MEDICINE AND SURGERY.

The Act 21 and 22 Vic., c. 99, recognises, as qualifications for medical and surgical practitioners, the degrees and licences in Medicine and Surgery granted by the University. The degrees are—1. Bachelor of Medicine. 2. Doctor of Medicine. 3. Master in Surgery.

UNIVERSITY DEGREES.

1. *Bachelor in Medicine.*—A candidate for the degree of Bachelor in Medicine must be a graduate in Arts, and may obtain the degree of Bachelor in Medicine at the same commencement as that at which he receives his degree of B.A., or at any subsequent commencement, provided the requisite medical education shall have been completed. The medical education of a Bachelor in Medicine is of four years' duration, and comprises attendance on the following courses of lectures, viz.:—Courses of five months' duration (November to April)—Anatomy, Practical Anatomy (with Dissections), Surgery, Chemistry, Practice of Medicine, Midwifery. Courses of three months' duration (April to July)—Botany, Practical Chemistry, Medical Jurisprudence, Materia Medica and Pharmacy, Institutes of Medicine.

Hospital Attendance.—1. Nine months' attendance on the clinical lectures of Sir Patrick Dun's Hospital. 2. Nine months' additional attendance on the clinical lectures of any hospital recognised by the Board. 3. Instruction in practical midwifery, including not less than six deliveries. 4. Certificate of personal attendance on fever cases, stating name and date of each case.

Any of the above-named six or three months' courses may be attended at any medical school in Dublin recognised by the Provost and Senior Fellows (and three of them, at the discretion of the candidate, may be attended in the University of Edinburgh), provided the candidate have kept an *Annus Medicus* in the School of Physic.

The Schools recognised are—1. The School of the Royal College of Surgeons in Ireland. 2. The Carmichael School. 3. The School of Dr. Steevens' Hospital. 4. The St. Peter-street School. 5. The School of the Catholic University. The recognition of these Schools is conditional on their students being furnished with *bona fide* certificates of an amount of regular attendance equivalent to that required by the University—viz., three-fourths of the entire number of lectures in each course.

An *Annus Medicus*, or a year's attendance, in the School of Physic may be kept in three ways:—1. By attending at least two, or not more than three, of the foregoing courses which are of six months' duration. 2. By attending one course of six months' and two of three months' duration. 3. By nine months' attendance on Sir Patrick Dun's Hospital and clinical lectures; together with one course of six months', or, in lieu thereof, two courses of three months' duration.

The fee for nine months' attendance at St. Patrick Dun's Hospital is £12 12s. The fee for each course of lectures is £3 3s. The fee for the *Liceat ad Examinandum* is £5. The fee for the degree of M.B. is £11.

2. *Doctor in Medicine.*—A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the degree of M.B. for three years, and must perform exercises for the degree before the Regius Professor of Physic, in accordance with the rules and statutes of the University. Total amount of fees for this degree, £13.

3. *Master in Surgery.*—The degree of Master in Surgery can only be obtained by students who are Bachelors of Arts, and who have completed the professional curriculum and passed the examinations required. The curriculum extends over a period of four years, and comprises attendance upon the following courses of lectures:—viz., Anatomy, one course; Demonstrations, three courses; Dissections, three courses; Theory and Practice of Surgery, two courses; Practice of Medicine, one course; Chemistry, one course; Materia Medica, one course; Midwifery, one course; Practical Chemistry, one course; Botany, one course; Medical Jurisprudence, one course. After the year 1874, the Mastership in Surgery will be conferred upon those candidates only who are of Masters in Arts standing.

Hospital Attendance.—Three sessions, each of nine consecutive months' duration, in any recognised Hospital, together with attendance on the clinical lectures on Medicine and Surgery there delivered. Any of the above-named courses may be attended at any of the medical schools of Dublin recognised by the Board, provided the candidate has kept an *Annus Medicus* in the School of Physic. The following hospitals are recognised by the Board:—1, Sir Patrick's Dun's School of Physic Hospital; 2, Meath Hospital; 3, Richmond, Whitworth, and Hardwicke Hospitals; 4, Dr. Steevens' Hospital; 5, Jervis-street Infirmary; 6, City of Dublin Hospital; 7, Mercer's Hospital; 8, St. Vincent's Hospital; 9, Adelaide Hospital; 10, Mater Misericordiæ Hospital. Of the courses of lectures, which are of five months' duration, not more than three can be attended during any one session. Candidates will also be required to perform surgical operations on the dead subject. Candidates for the degree of Master in Surgery, who have already passed the examination for the degree of Bachelor of Medicine, will be examined in Anatomy and Surgery only. Fee for the *Liceat ad Examinandum*, £5. Fee for the degree of M.Ch., £11.

UNIVERSITY LICENCES.

Candidates for the licences in Medicine or Surgery must be matriculated in Medicine, and must have completed four years in medical studies. Candidates for the licences in Medicine or Surgery must pass the following examination in Arts, unless they be students in the Senior Freshman or some higher class:—Homer's Iliad, Books I., II. (omitting catalogue of ships), III.; Lucian's Dialogues (Walker's edition); Xenophon's Anabasis, Books I., II., III.; Virgil, Æneid, Books I., II., III.; Sallust; Horace, Satires; Latin Prose Composition; English Prose Composition; English History; Modern Geography; Arithmetic; Algebra to the end of Simple Equations; Euclid, Books I., II., III. In case the student should wish to continue the undergraduate course in Arts, with a view to the degree of B.A., his answering in the above will be reckoned as equivalent to the entrance examination, and the Hilary examination of the Junior Freshman year. Students who have passed the foregoing examination will be required to pay the admission fee of £15.

1. *Licentiate in Medicine.*—The medical course and examination necessary for the licence in Medicine is the same as for the degree of M.B., with the exception that any general hospital approved by the Board of Trinity College may be substituted for Sir Patrick Dun's. Candidates who are already Licentiates in Surgery of the Royal College of Surgeons in Ireland, or Members of the College of Surgeons of England, on passing the foregoing Arts examination, will be admitted to examination for the licence in Medicine. Fee for the *Liceat ad Examinandum*, £5. Fee for the licence in Medicine, £5.

2. *Licentiate in Surgery.*—The surgical course and examination necessary for the licence in Surgery are the same as for the degree of Master in Surgery. Fee for the *Liceat ad Examinandum*, £5. Fee for the licence in Surgery, £5.

Total Expenses of obtaining the Degrees of Bachelor in Medicine and Master in Surgery.—I. Lectures: 1. Anatomy (one course), £3 3s. 2. Practical Anatomy (three courses), £9 9s. 3. Dissections (three courses), £12 12s. 4. Surgery (two courses), £4 4s. 5. Practice of Medicine, £3 3s. 6. Chemistry (two courses), £4 4s. 7. Materia Medica and Pharmacy, £3 3s. 8. Midwifery, £3 3s. 9. Botany. 10. Medical Jurisprudence, £3 3s. 11. Institutes of Medicine, £3 3s.—II. Hospitals: 1. Sir P. Dun's (first year), £12 12s. 2. Second and third years' attendance, £15 15s. 3. Practical Midwifery, £3 3s.—III. Degrees: 1. *Liceat ad Examinandum in Medicina*, £5. 2. *Liceat ad Examinandum in Chirurgia*, £5. 3. M.B. degree, £11. 4. M.Ch. degree, £11.—Total Expenses: 1. Lectures, £49 12s. 2. Hospitals, £31 10s. 3. Degrees, £32. 4. Private tuition,

£20. Total, £133 2s. N.B.—As no degrees in Medicine or Surgery are conferred except upon graduates in Arts, the expense of the degree of Bachelor in Arts, amounting altogether to £82 4s., should be added to the foregoing, making the total cost something over £200.

THE QUEEN'S UNIVERSITY IN IRELAND,

Granting the degrees of Doctor in Medicine and Master in Surgery, includes three colleges—the Queen's Colleges of Belfast, Cork, and Galway—each of which possesses a Faculty of Medicine. The curriculum of medical study extends over a period of four years, and is divided into two periods of two years each. The first period comprises attendance on Chemistry, Natural History, Anatomy and Physiology, Practical Anatomy, Materia Medica, and Pharmacy. The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery and Diseases of Women and Children, Theory and Practice of Medicine, Medical Jurisprudence. At least two of the above courses of lectures must be attended in some one of the Queen's Colleges; the remainder may be taken, at the option of the candidate, in any university, college, or school recognised by the Senate of the Queen's University. Candidates are required before graduating to have also attended in one of the colleges of the Queen's University lectures on Experimental Physics and on one Modern Language, and to have passed the matriculation examination. They are further required to attend during the first period, Practical Chemistry in a recognised laboratory, and the practice during six months of a recognised medico-chirurgical hospital, containing at least sixty beds, together with the clinical lectures delivered therein: and to attend, during the second period, a recognised midwifery hospital, with the clinical lectures therein delivered, for a period of three months; or a midwifery dispensary for the same period; or ten cases of labour, under the superintendence of the medical officer of any hospital or dispensary where cases of labour are treated; and eighteen months' practice of a recognised medico-chirurgical hospital containing at least sixty beds, and in which clinical instruction is delivered. There are two University examinations; one comprising the subjects of study in the first period, the other the subjects of the second period. The University examinations are held twice in each year—in June and September. Candidates who commenced their medical studies elsewhere are admitted to the first University examination before proceeding to college. Further information will be found in the "Queen's University Calendar," or may be obtained by application to the Secretary Queen's University, Dublin Castle.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RELATIVE TO THE LICENCE IN MEDICINE.

Examinations for the licence in Medicine are statedly held on the second Tuesday and Wednesday in each month (except August and September).

The name of every candidate, together with his schedule and the documents hereafter mentioned, must first be submitted to the College at one of its meetings. These are held regularly on the first Friday in each month (except August and September).

CURRICULUM.

A candidate who has not, previous to entering his name, obtained any medical or surgical qualification recognised by the College, must produce—1. Evidence of having been engaged in the study of Medicine for four years. 2. A certificate of having passed the preliminary examination of one of the recognised licensing corporations before the termination of the second year of medical study. 3. Certificates of having studied, at a school or schools recognised by the College, the following subjects, viz.:—Practical Anatomy; Anatomy and Physiology, or Institutes of Medicine; Botany; Chemistry; Practical Chemistry; Materia Medica; Practice of Medicine and Pathology; Surgery; Midwifery; Medical Jurisprudence. 4. Certificates of having attended a medico-chirurgical hospital in which regular courses of clinical lectures are delivered, together with clinical instruction, for twenty-seven months; or such hospital for eighteen months, with nine months' attendance on a medical hospital, and similar courses of clinical lectures and instruction. 5. A certificate of having attended practical midwifery for six months at a recognised lying-in hospital, or evidence satisfactory to the College in each individual case of having attended practical midwifery. 6. Certificates of character from two registered physicians or surgeons.

A candidate who has already obtained a medical or surgical qualification recognised by the College is required to fill up a schedule which will be supplied on application, and to lodge it in the same manner as a candidate not previously qualified; but the only documents he is required to produce are his diploma or certificate of registration, and the certificate of practical midwifery, and testimonials as to character.

EXAMINATION FOR THE LICENCE IN MEDICINE.

The examination is conducted—1st, clinically; 2ndly, by printed questions to be answered in writing; and 3rdly, *vivâ voce;* and consists of two parts. The subjects of the first part or previous examination are—Anatomy, Physiology, Botany, Chemistry. The subjects of the second part or final examination are—Materia Medica, Practice of Medicine, Medical Jurisprudence, Midwifery.

All candidates for the second or final examination (with the exception below specified)(a) are examined in the practice of Medicine at the bedside in one of the hospitals of Dublin. The name of the hospital selected will not be declared to the candidates until half an hour previous to the time of examination.

Candidates qualified as follows are required to undergo the *second part* of the professional examination *only*, viz.:—1. Graduates in Medicine of a university in the United Kingdom, or of any foreign university approved by the College. 2. Fellows, Members, or Licentiates of the Royal College of Physicians of London or Edinburgh, who have been admitted upon examination. 3. Graduates or licentiates in Surgery. 4. Candidates who, having completed the curriculum above mentioned, have passed the previous examination of any of the licensing corporations in the United Kingdom.

DIPLOMA IN MIDWIFERY.

Candidates already qualified in Medicine or Surgery may apply for permission to be examined for the diploma in Midwifery. The certificates required to be lodged are the same as those required from *qualified* candidates for the licence to practise Medicine.

Fees.—Fee for the licence in Medicine, £15 15s. Fee for licence in Medicine and diploma in Midwifery (for which latter there is a separate examination), if taken out within an interval of a month, £16. Fee for the diploma in Midwifery, £3 3s.

Further information and blank schedules can be obtained by application, personally or by letter, to the Registrar, College of Physicians, Kildare-street, Dublin.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

I.—REGISTRATION OF PUPILS.

Every person requiring to be registered as a pupil on the College books shall, if the Council think fit, be so registered if he shall have laid before the Council a receipt showing that he has lodged, to the credit of the President and for the use of the College, in the Bank of Ireland, a registry fee of five guineas.

II.—QUALIFICATIONS OF CANDIDATES FOR LETTERS TESTIMONIAL.

Every registered pupil shall be admitted to an examination for letters testimonial if he shall have laid before the Council the following documents:—

a. A receipt showing that he has lodged a sum of twenty guineas in the Bank of Ireland to the credit of the President and for the use of the College.

b. A certificate that he has passed an examination as to his acquaintance with the Greek and Latin languages.

c. Certificate showing that he has been engaged in the study of his profession for not less than four years.

d. Certificates of attendance on an hospital recognised by the Council, where clinical instruction is given during three years.

e. Certificates of attendance on three courses of lectures on Anatomy and Physiology; three courses of lectures on the Theory and Practice of Surgery, and of the performance of three courses of dissections, accompanied by demonstrations; also, certificates of attendance on two courses of lectures on Chemistry, or one course of lectures on General and one on Practical Chemistry; one course of lectures on Materia Medica; one course of lectures on the Practice of Medicine; one course of lectures on Midwifery; one course of lectures

(a) Candidates who are physicians or surgeons of five years' standing are further exempted from the clinical and written portions of the Final Examination.

on Medical Jurisprudence; and one course of lectures on Botany.

QUARTERLY EXAMINATION.

1. Examinations are held quarterly, on the second Tuesday in February, May, August, and November, at which candidates shall be divided into two classes—junior and senior.

2. The junior class shall produce certificates of having attended three courses of lectures on Anatomy and Physiology; three courses of lectures on Practical Anatomy, with dissections; two courses of lectures on Chemistry; one course of lectures on Materia Medica; one course of lectures on Botany; and one course of lectures on Forensic Medicine.

3. This class shall be examined in Anatomy, Physiology, and Materia Medica.

4. The fee for this examination shall be five guineas; not to be returned in case of rejection, but to be allowed in the fee for the second examination.

5. The senior class shall produce certificates of having attended three courses of lectures on the Theory and Practice of Surgery, one course of lectures on the Practice of Medicine, and one course of lectures on Midwifery; also certificates of attendance on a recognised hospital for three winter and three summer sessions.

6. This class shall be examined in Surgery, Operative Surgery, the Practice of Medicine, and form of prescription.

7. Both these examinations shall be partly written and partly oral.

8. The fee for this examination shall be fifteen guineas.

Fees to be paid by Candidates for Letters Testimonial.

1. The candidate pays ten shillings for his preliminary examination.

2. Five guineas as registered pupil of the College.

3. Five guineas for the junior class examination, which is not returned in case of rejection, but is allowed in the fee for his second examination.

4. Fifteen guineas for the senior class examination—total, £26 15s.

5. In addition to the foregoing, a fee of one guinea is to be paid to the Registrar on handing each licentiate his diploma.

6. Every candidate rejected at the quarterly examination shall be required to pay to the College the sum of two guineas on applying for re-examination, so as to recompense the College for the necessary expense.

III.—QUALIFICATIONS OF CANDIDATES FOR THE FELLOWSHIP.

Every registered pupil or licentiate shall be admitted to examination for the Fellowship if he shall have laid before the Council the following documents:—

a. A receipt showing that he has lodged in the Bank of Ireland, for the use of the College, if he be a licentiate, the sum of twenty guineas, or thirty-five in case he be a registered pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the candidate intend to reside in Dublin, or within ten miles thereof, he shall lodge, if he is a licentiate, thirty guineas; or, if he be a registered pupil, forty-five guineas. Fellows entering on the country list, who may subsequently settle as practitioners in Dublin, or within ten miles thereof, shall pay ten guineas to the College.

b. A certificate that he is 25 years of age.

c. A certificate that he is a Bachelor of Arts of some university, or that he has been examined in such manner as the Council may from time to time direct, with a view to ascertain that he has obtained a liberal preliminary education.

d. A certificate, signed by two or more Fellows of the College, of good general conduct during his professional education.

e. Certificates that he has been engaged in the acquisition of professional knowledge for a period of not less than six years, during three of which he must have studied in one or more of the schools or hospitals recognised by the Council. He may have studied for the other three years in any school or schools of the United Kingdom which shall be approved by the Council, or in any foreign school of repute. It is also required that the candidate shall have had opportunities of practical instruction as house-surgeon or dresser in a recognised hospital.

f. Certificates of attendance on the several courses of lectures required to be attended by candidates for letters testimonial, together with one course of lectures on Comparative Anatomy and one course on Natural Philosophy.

g. A thesis on some medical subject or clinical reports, with observations of six or more medical or surgical cases taken by himself.

h. Candidates of the required age, who shall have taken the degree of Bachelor of Arts in a British or Irish university, and have complied with the foregoing regulations in other respects, will be admitted to examination at the end of five years of professional study, of which three years must have been passed in one or more of the recognised schools or hospitals.

i. Licentiates of the College, who may not be able to show that they have followed the course of study specified in the preceding regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the examination required for the Fellowship, provided they produce such evidence as shall be satisfactory to the Council that they have conducted themselves honourably in the practice of their profession.

PRELIMINARY EXAMINATION, REGISTRATION, AND MATRICULATION.

Registered pupils are admitted to answer the preliminary examination at any period previous to the final examination for letters testimonial.

Students who are not registered pupils are also admitted to answer the preliminary examination at any period previous to the examination for letters testimonial, upon payment of a matriculation fee of ten shillings.

The following are the subjects upon which each candidate for the preliminary examination will be examined, viz.:—The English language, including grammar and composition. Arithmetic, including vulgar and decimal fractions. Algebra, including simple equations. Geometry, first two books of Euclid. Latin and Greek, including translations and grammar. In Greek—the Gospel of St. John, the Menippus of Lucian, or the First Book of Xenophon's Anabasis. In Latin—the First and Second Books of the Æneid of Virgil, the Jugurthine War of Sallust, or the Third Book of Livy. These examinations are held quarterly, viz.:—On the third Wednesday in January, April, July, and October in each year. Fee, ten shillings.

Candidates are requested to enter their names, and pay the fee to the Registrar, at least three days previous to the day of examination.

THE APOTHECARIES' HALL OF IRELAND.

BY-LAWS AND REGULATIONS.

Every candidate for the licence to practise is required to undergo a preliminary and a professional education and examination.

THE PRELIMINARY EDUCATION AND EXAMINATION IN ARTS.

Compulsory.—1. English Grammar, Composition, Writing from Dictation, and the leading events of Roman and English History. 2. Arithmetic and Algebra, to Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin: The Twenty-first Book of Livy; the first Three Books of the Æneid of Virgil; the first Two Books of the Odes of Horace (any two of the three named). 5. Greek: The first Two Books of the Anabasis of Xenophon; the Ninth Book of the Iliad of Homer; The Ajax of Sophocles (any two of the three named). 6. French: Charles XII., or "Voyage en Orient" of Lamartine. 7. German: "Wilhelm Tell" or "Die Rauber" of Schiller. Candidates will be examined in French or German, as they may select.

Optional.—1. Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. 2. Natural History: The Classification, Elementary Structure, and General Physiology of Vegetables and Animals.

THE ARTS EXAMINATIONS

will be held at the Hall four times in the year—viz., the third Thursday in the months of January, April, July, and October, at the hour of 12 o'clock noon. It will be conducted by means of printed papers and by special examiners (Graduates in Arts of the University of Dublin), with assessors from the Court of the Hall. The answers to the papers will be required in writing.

Unsuccessful candidates will be remitted to their studies for a period of six months.

THE PROFESSIONAL EDUCATION AND EXAMINATIONS.

Every candidate for the licence to practise must produce certificates to the following effect:—

1. Of having passed an examination in Arts previously to entering on professional study.

2. Of being at least 21 years of age, and of good moral character.

3. Of apprenticeship to a qualified apothecary, or of having been engaged at practical pharmacy with an apothecary for a period of three years subsequent to having passed the examination in Arts.

4. Of having spent four years in professional study.

5. Of having attended the following courses, viz.:—Chemistry, during one winter session; Anatomy and Physiology, during two winter sessions; Demonstrations and Dissections, during two winter sessions; Botany and Natural History, during one summer session; Practical Chemistry (in a recognised laboratory), during three months; Materia Medica, during three months; Principles and Practice of Medicine and Therapeutics, during one winter session; Midwifery and Diseases of Women and Children, during six months; Practical Midwifery at a recognised hospital (attendance upon twenty cases); Surgery, during one winter session; Forensic Medicine, during one summer session; instruction in the practice of vaccination.

6. Of having attended, at a recognised hospital or hospitals, the practice of Medicine and clinical lectures on Medicine, during two winter and two summer sessions; also the practice of Surgery and clinical lectures on Surgery, during one winter and one summer session.

7. Of having performed the operation of vaccination successfully under a recognised vaccinator.

The Court of Examiners require lecturers and teachers to hold weekly class examinations.

The examination for the licence to practise is divided into two parts:—The first part comprehends Chemistry, Botany, Anatomy, Physiology, and Pharmacy; the second—Medicine, Surgery, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Hygiene. The first part may be undergone at the close of the second winter session, and after the candidate has attended the courses upon the several subjects named for this examination; and the second after the completion of his studies at the termination of the fourth winter session.

The professional examinations will be held quarterly, and will commence on the first and second Mondays in the months of January, April, July, and October.

Candidates for the licence must lodge their testimonials, and enrol their names and addresses, with the Clerk, at the Hall, in Dublin, a week prior to the day of examination.

TO CORRESPONDENTS.

We beg to return our best thanks to the Registrars and Secretaries of the various Universities, Colleges, and Schools for their prompt replies to our Circular, and for the trouble they have taken in supplying the latest Regulations of the Institutions with which they are connected.

In order to confine the whole of this week's Number to information specially important to Students, we are compelled to defer answers to several Correspondents, together with all notices of passing events, until next week.

Medical Times and Gazette.

SATURDAY, SEPTEMBER 14, 1872.

TO STUDENTS.

"Whatsoever thy hand findeth to do, do it with all thy might." This is a good old Bible text, than which the student on his entrance into school life can take none better for his motto—none more likely to raise him to eminence in his chosen profession. Many would say that in the present age and at the present day there was little likelihood of its being forgotten; but the fierce struggle for existence is characteristic of a period of life later than that of studentship, whereas it is the period during which man is preparing for his future career that constitutes the basis of all future advancement. There is an old proverb to the effect that certain men "would either make a spoon or spoil a good horn,"(a) and though the saying be antiquated, its truth is as vital as ever it was. Often and often do we see enter our medical schools men possessed of great original ability, who yet during their student's career become so warped as to be in future life worse than useless. The material was good, but the ultimate product is bad. The student's age is one of possibilities rather than actualities, and it is at once the duty of the student, as of his teachers, to strive to realise these possibilities to the uttermost.

(a) Alluding to the olden practice of using spoons made of horn.

The virtue we meantime mainly desire to inculcate is *thoroughness*, and with it we must of necessity deal with the philosophy of *habit*. No one can have read with care Bishop Butler's chapter on the force of habit in his "Analogy of Religion" without being impressed by it. He therein shows how every act of our daily life tells on the formation of future character. Every time an action is performed it is rendered easier of performance another time. If the action be a good one, it aids in the formation of good habits; if a bad one, then of course, too, it must help to the development of a disposition for evil. The thing is a matter of necessity; and so it arises that, in the formation of character, the kind of our actions is, as it were, pictured in that which ultimately becomes ourselves. Of course Bishop Butler applies this to the formation of morals, but here we mean to apply the same reasoning to the processes whereby habits are acquired, as well as to the habits themselves. For just as through the influence of habitual emotions and actions a man may develope for good or for evil, so, according to the mode of performing the duties of his daily life, he may become careful and reliable, or a sloven in whom no confidence can be placed.

Let us say that a young man has selected his school, or it has been selected for him. He comes to attend his classes, and he hears what in each class is intended to be done. Let him, whatever else he does, stick to that day by day. It is all very well to say that there is plenty of time to come, and that by-and-by will do well enough for acquiring a knowledge of the particular subject on hand. Rely upon it that a more convenient time never does come. It is easier for a man to make himself master of his subjects at the time set apart for each than at any other. Most courses of instruction are conducted in great part by lectures, and an attendance on a certain number of these is now generally enforced in them. How much wiser, then, is it that a man should take the trouble to qualify himself for being an intelligent listener than that he should spend the hour a dead, inert mass, incapable of understanding what is going on from the want of some knowledge which should previously have been acquired. Unfortunately, some men may tell you that lectures are useless; in that they make a mistake in logic: they mean, *some* lectures are useless. But let that pass. They may also tell you that it is far better to acquire a knowledge of any subject by books. Unfortunately, there are few books which give an adequate knowledge of any particular subject, and students have no time for isolated treatises. Here, as elsewhere, we recommend thoroughness. Attend regularly; the habit will soon make that easy. Learn diligently what is to be learnt; habit will make that easy too. In short, make the best of the situation in every way, for thereby you acquire habits of the utmost value, altogether apart from the instruction which is given you.

But all this is preparatory. Your profession must be learned in the wards and out-patient rooms of the hospital. It is here, above all, that the system of *thoroughness* is most necessary, and where it is most beneficial. Now students, when they enter are apt to run about too much. Within certain limits, there is no harm in that. They will learn something of manner from their various teachers, and they will select him who is the most suited to their turn of mind. And in a hospital it is surprising how many varieties of style may be seen, from the dogmatic teacher, who lays down the law as it is (and if it is not so, as it ought to be), to him who is ever full of philosophic doubt. Let the young student stick to the former. But mooning about the wards is not learning our profession, even though the old term was to "walk" the hospital; and so the student ought soon to settle down. The question is, Where? Sometimes we have seen first-year students in the physicians' wards; from this they ought to be *chassé* at once. The phy-

sician is not worth his salt if he does not speak of things which to them are unintelligible. Nor will they be much better in a select surgical ward. Perhaps the best place for them to begin is in a well-regulated surgical out-patient room; by which we mean not one where the patients are dismissed at the rate of one a minute, but one where the patients are specially selected for instruction. They will soon learn to know the appearance of an ulcer—they will know before long when an arm is broken—they will see how bandages are applied—and, by-and-by, learn how to make themselves useful. Thoroughness should be displayed in learning all that is to be known in this department; but the learner will have still greater opportunities when he is advanced to the post of clinical clerk or dresser. These posts are invaluable to the student, and should be even more eagerly sought after than they are. Here the student comes in more intimate contact with the patient than he has heretofore done. He has opportunities of examining him by himself, and of forming an opinion which will, probably, be asked of him before the assembled students. Now, nothing will so much conduce to success in future life as a thorough fulfilment of the duties of these posts. A man may be a brilliant dissector; but in practice that is useless, and very often the best anatomists turn out poor practical surgeons. So, too, he may be a brilliant lopper-off of limbs; but that, too, is a thing which does not occur daily in a surgeon's life. The man will succeed best who is best up in the minuter details of his profession, medical as well as surgical. But, above all, a man must make no mistakes. He must, therefore, accustom himself to a careful and thorough examination of every patient who comes under his charge. This may seem irksome at first, but use is second nature. By-and-by it will be easy, and then it is sure to be safe. Too often this thoroughness is confined to an examination of the patient. But it should extend further. Quite as much care ought to be expended in detecting the best remedy for the patient, the best preparation of that remedy, the best quantity of that preparation, and the best time for its administration. Above all, care should be expended as much in selecting a diet as in selecting a remedy. Unfortunately, in hospital practice, owing to the necessity of providing for a large number at the least cost, this is not an easy study; but in private practice it is essential, and men befool themselves who neglect it.

Now, thoroughness in practice by no means implies, as we have sometimes seen it taken to do, mere attention to detail. It means something far more than that—it means no mere study of minute symptoms individually; it implies a due weighing of these as well—a balancing of the one against the other, and a careful conclusion as to what they all combine to signify. In a great number of instances it will be found that symptoms are capable of a twofold interpretation, and we must carefully balance the relative merits of the two. We have seen a student draw up a report full of the minutest details, but which contained nothing like a conclusion as to the meaning of them all; often a guess, hopelessly wrong, concluded an epitome of what was least important in the case. This is not thoroughness, it is triviality.

Whatever you have got to do, do it well, and do it with all your might, is a golden rule for students—golden not only in immediate results, but in ultimate consequences. Above all, it is golden in the acquisition of habits which, applied to any pursuit in life, are sure to lead to comfort and competence, if not to fame and fortune. Let the young student look to the leaders of our noble Profession—to men whose names are to it an honour and a glory—and let him look forward to the possibility of one day becoming such as these. And how have they succeeded? Ask anyone who knows their careers. Not by dint of intellect alone, although they are men pre-eminent for ability, but above all by a thorough discharge of duty: by constantly keeping before them the rule—To do everything well, and to do it with all their might.

CHANGES IN THE METROPOLITAN HOSPITALS AND SCHOOLS.

The changes which have taken place in the Medical Schools and Hospitals of London during the past academical year have neither been few nor unimportant. Most of them have been duly chronicled in our journal; but, in accordance with our usual custom, we shall now present them in a collected form for the benefit of those old students (forming, we are certain, the large majority of our readers) who still feel an interest in the progress and fortunes of *Alma Mater*.

To commence (in alphabetical order) with St. Bartholomew's, we notice that Mr. Holmes Coote has retired from his joint occupancy with Mr. Savory of the chair of Surgery, the duties of the chair devolving now upon Mr. Savory solely. We regret to hear that Mr. Holmes Coote's resignation has depended upon failure of health. A great loss has also been sustained by the staff and students of Bartholomew's in the death of Mr. Skey, who, it will be remembered, retained the post of Lecturer on Clinical Surgery after his retirement from the Surgeoncy to the Hospital. Dr. Brunton now shares with Dr. Farre the chair of Materia Medica, and Mr. Symons lectures on Physiological Chemistry; Dr. Gee conducts a course on Pathological Anatomy, and Dr. Southey adds to his course on Forensic Medicine one on Hygiene.

In the retirement of Mr. Hancock from the Surgeoncy of the Hospital, the Charing-cross School has sustained a great loss. Mr. Hancock, as a practical surgeon and excellent teacher, would have done honour to the largest School of Surgery, and his retirement from the Charing-cross Hospital—which, although second to none in the education it offers, is numerically inferior to several of its rivals—must be felt alike both by his colleagues and the students. The School and Hospital have also to regret the loss of Dr. Beigel, in the department of Skin Disease. Mr. Cantlie succeeds Mr. Bruce as Anatomical Demonstrator. Dr. G. V. Poore has been appointed Assistant-Physician, and succeeds Dr. Pollock in the chair of Forensic Medicine. Mr. Bruce relieves Dr. Silver of the duty of teaching Microscopic Anatomy, and Mr. Fairbank succeeds Mr. Canton in the chair of Dental Surgery. The vacant chair of Comparative Anatomy has not been yet filled.

At Guy's, the lamented death of Mr. Alfred Poland has left a gap in the surgical staff. The only other change is the retirement of Dr. Stevenson and Mr. D. Colley from the chair of Natural Philosophy.

At King's College and Hospital, Dr. Playfair has succeeded Dr. Priestley as Physician-Accoucheur and Lecturer on Midwifery. Mr. Henry Smith is now Surgeon to the Hospital. Dr. Pritchard has succeeded Dr. Ferrier as the Demonstrator of Practical Physiology.

At the London, Mr. Couper shares with Mr. Hutchinson the chair of Surgery, and Dr. Woodman shares with Dr. Fenwick that of Practical Physiology and Histology. Mr. Sanders succeeds Dr. Woodman in the chair of Comparative Anatomy. Dr. Palfrey is promoted from the rank of Assistant Obstetric Physician to that of Obstetric Physician, with Dr. Head.

At St. George's the changes have not been numerous. Mr. Goldsmith has retired from the office of Principal Anatomical Demonstrator, and has been succeeded by Mr. Bennett, with whom is associated Mr. Spitta. Dr. Whipham has succeeded Dr. William Ogle in the office of Assistant-Physician.

At St. Mary's, Dr. Shepherd has succeeded Dr. Nunneley as Assistant-Physician, with the chair of Experimental Physiology. Mr. Gawith has succeeded Mr. Boon as Assistant Anatomical Demonstrator.

At the Middlesex Hospital and School, Dr. Liveing has succeeded Dr. Goodfellow as Physician to the Hospital, and Dr. R. King has been appointed Assistant-Physician. Mr. Morris shares the chair of Anatomy with Dr. Liveing. Dr. Cobbold gives a course of lectures on Parasitic Diseases. Mr. Lawson

has been promoted to a full Surgeoncy, and Mr. A. Clark has been appointed Assistant-Surgeon. Dr. J. Murray shares with Dr. Cayley the Lectureship on Morbid Anatomy and Pathology. Dr. Thorowgood succeeds Dr. Brunton in teaching Materia Medica; and Mr. Lowne succeeds Dr. Cobbold in the chair of Botany. Dr. H. Rayner is appointed to give a course of lectures on Mental Diseases; and Dr. Murray one on Diseases of the Throat.

At St. Thomas's and at University College there are no changes to record, except that Dr. John Williams has been elected Assistant Obstetric Physician to University College Hospital.

At the Westminster, Dr. Lee and Dr. Allchin lecture on Pathology and Morbid Anatomy; Mr. Cooke and Mr. Ramsay are made Demonstrator of Anatomy; Mr. Cooke has been elected Assistant-Surgeon to the Hospital; and Mr. Cowell is appointed to give a course of lectures on Ophthalmic Surgery.

EDUCATIONAL VACCINATING STATIONS.

In order to provide for the granting of those special certificates of proficiency in vaccination which, under the regulations of the Local Government Board, are required to be part of the medical qualification for entering into contracts for the performance of public vaccination, or for acting as deputy to a contractor, the following arrangements are made:—

1. The vaccinating stations enumerated in the subjoined list are open, under conditions appointed by the Local Government Board, for the purposes of teaching and examination.

2. The public vaccinators officiating at the stations are authorised by the Local Government Board to give the required certificates of proficiency in vaccination to persons whom they have sufficiently instructed therein; and

3. The public vaccinators, whose names in the subjoined list are printed in italic letters, are also authorised to give such certificates, after satisfactory examination, to persons whom they have not themselves instructed.

London.—Principal Station, Surrey Chapel, Blackfriars-road: *Mr. James Furness Marson*, who attends on Tuesday and Thursday, at 1 p.m. North-west Stations—Marylebone Institution, 15, Lower Seymour-street: Mr. William A. Sumner, on Monday, from 9 to 11 a.m.; Albion Hall, Grove-place, Lisson-grove: Mr. William A. Sumner, on Wednesday, from 9 to 11 a.m. West Station, 9, St. George's-road, Pimlico, S.W.: Dr. Edward Lowe Webb, on Thursday, at 10 a.m. East Station, Eastern Dispensary, Leman-street: Mr. Charles T. Blackman, on Wednesday, at 11 a.m. North Station, Tottenham-court Chapel, Tottenham-court-road: Mr. William Edwin Grindley Pearse, on Monday and Wednesday, at 1 p.m. South-west Station, 2, Regent-place, Horseferry-road: Mr. William Edwin Grindley Pearse, on Tuesday, at 2 p.m. Strand Station, Charing-cross Hospital: Mr. Robert William Dunn, on Monday, at 10 a.m.

Birmingham.—The School-rooms, 27, Old Meeting-street, on Monday; the rooms occupied by the Working Men's Mutual Improvement Society, in Barr-street, on Tuesday; St. Mark's School-rooms, St. Mark's-street, on Wednesday; and the Islington Assembly-rooms, 42, Broad-street, on Thursday: *Dr. Edmund Robinson*, at 11 o'clock on the days before-mentioned.

Bristol.—The Public Vaccination Station, Peter-street: *Dr. Henry A. P. Robertson*, on Wednesday, at 10 a.m.

Exeter.—Odd Fellows' Hall, Bamfyld-street: *Mr. Charles H. Roper*, on Thursday, at 3 p.m.

Leeds.—23, Burmantofts-street: *Mr. Frederick Holmes*, on Tuesday, at 3 p.m.

Liverpool.—4, Oldham-street: *Mr. Arthur Browne Steele*, on Thursday, at 2 p.m.

Manchester.—159, Rochdale-road: *Mr. Ellis Southern Guest*, on Monday at 2 p.m.

Edinburgh.—The Royal Dispensary: *Dr. William Husband*, on Wednesday and Saturday, at 12.

Glasgow.—The Hall of the Faculty of Physicians and Surgeons: *Dr. James Dunlop*, on Monday, at 12. The Royal Infirmary: Dr. Robert Dunlop Tannahill, on Monday and Thursday, at 12.

City of London Hospital for Diseases of the Chest, Victoria-park.—Office, 24, Finsbury-circus, E.C.—Physicians—T. B. Peacock, M.D.; J. R. Bennett, M.D.; E. L. Birkett, M.D.; S. H. Ward, M.D; J. Andrew, M.D. Consulting Surgeon—J. Hilton, F.R.S. Assistant-Physicians—J. C. Thorowgood, M.D.; H. G. Sutton, M.B.; A. B. Shepherd, M.B.; C. Bäumler, M.D.; Eustace Smith, M.D.; W. H. Corfield, M.D. Resident Medical Officer—G. C. Franklin. The Hospital affords accommodation for 164 in-patients. During the last year 705 cases were under treatment in the wards, and 13,741 were relieved as out-patients. In-patients admitted since the wards were opened in 1855, 8400; out-patients admitted since the establishment of the institution in 1848, 207,000. Information respecting medical instruction at the Hospital may be obtained on application to the Physicians.

The Hartley Institution, Southampton.—Principal, Francis T. Bond, M.D., B.A. Lond. In the department of preliminary medical education, which is recognised by the Royal Colleges of Surgeons and Physicians, students are prepared for the regular curriculum of the medical schools, one winter and two summer sessions thus passed counting towards the four years' professional study required of all candidates for a diploma. Students in this department also receive instruction in dressing, taking notes of cases, etc., at the Southampton Royal Infirmary. For further information address the Principal.

DAYS AND HOURS OF INTRODUCTORY LECTURES

TO BE DELIVERED AT THE DIFFERENT MEDICAL SCHOOLS.

IN THE METROPOLIS.

	Days and hours, p.m.	
St. Bartholomew's Hospital and Medical School	Oct. 1,	No Introductory Lecture announced.
Charing-cross Hospital and Medical Coll.	„ 1, 8	Dr. Jas. Watt Black.
St. George's Hospital Medical School ...	„ 1, 2	Mr. Rouse.
Guy's Hospital Medical School	„ 1, 2	Dr. J. Pye-Smith.
King's College Medical Department ...	„ 1, 4	Professor Playfair.
London Hospital Medical College ...	„ 1, 3	Mr. J. Hutchinson.
St. Mary's Hospital Medical School ...	„ 2, 3½	Mr. A. T. Norton.
Middlesex Hospital Medical School ...	„ 1, 3	Dr. J. C. Thorowgood.
St. Thomas's Hospital Medical College...	„ 1, 2	Mr. Croft.
University College Faculty of Medicine	„ 1, 3	Mr. Chris. Heath.
Westminster Hospital Medical School ...	„ 1, 3	Mr. Pearse.

IN THE PROVINCES.

	Days and hours, p.m.	
Birmingham Queen's College	Oct. 1, 3	Prof. C. J. Bracey.
Leeds School of Medicine	„ 1, 4	Dr. J. D. Heaton.
Liverpool Royal Infirmary School of Medicine	„ 1, 3	Mr. W. M. Banks.
Manchester Royal School of Medicine	„ 7,	—
Newcastle-upon-Tyne Coll. of Medicine	„ 1, 2	Dr. W. C. Arnison.
Sheffield School of Medicine	„ 1, 4	Mr. T. H. Morton.

The Winter Session of the Bristol Medical School will commence on October 1.

TABLE OF FEES CHARGED IN THE MEDICAL SCHOOLS OF ENGLAND

FOR ALL LECTURES AND HOSPITAL PRACTICE REQUIRED FOR THE LICENTIATE EXAMINATIONS OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE LONDON SOCIETY OF APOTHECARIES, AND FOR THE MEMBERSHIP EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

London.	£	s.	d.
St. Bartholomew's (in three half-yearly instalments of £36 15s., £36 15s., and £36 15s.)...	110	5	0
Charing-cross (in three yearly instalments of £34 13s., £31 10s., and £14 14s.; in the case of Matriculated Students a deduction of 8 per cent.)	80	17	0
St. George's Hospital (in yearly instalments of £42, £42, and £10 10s.)—(with the exception of Practical Chemistry) ...	94	10	0
Guy's Hospital (in three yearly instalments of £40, £40, and £20)	100	0	0
King's College (in one sum)	100	0	0
„ (in instalments of £52 10s., £42, and £10 10s.) ...	105	0	0
London Hospital (in two instalments of £45 and £50)	90	0	0
St. Mary's (£89 5s. in instalments, or in one sum)	84	0	0
Middlesex, unlimited (or in yearly instalments of £35, £35, and £20, and £10 each succeeding year)	90	0	0
St. Thomas's (in yearly instalments of £40, £40, and £20, and £10 each succeeding year), unlimited	105	0	0
University College (payable in yearly instalments of £47 16s. £38 7s., and £18 11s.)	106	16	0
Westminster (in one sum)	70	0	0
„ (in yearly instalments of £35, £30, and £10) ...	75	0	0
The Provinces.			
Birmingham—Queen's College and Hospital	84	0	0
Birmingham—Queen's College and General Hospital	84	0	0
Bristol Medical School and Bristol Royal Infirmary	109	0	0
Bristol Medical School and Bristol General Hospital	97	15	0
Leeds Medical School and Infirmary (in two yearly instalments)	88	4	0
Liverpool Royal Infirmary School	80	17	0
Liverpool Royal Infirmary School and Northern Hospital ...	73	10	0
Manchester Medical School and Infirmary...	84	0	0
Newcastle School and Infirmary (in one payment)	70	7	0
Sheffield Medical School and Infirmary	76	15	0

TABLE OF FEES CHARGED IN THE MEDICAL SCHOOLS OF ENGLAND

FOR THE LECTURES AND SURGICAL PRACTICE REQUIRED BY CANDIDATES FOR THE DIPLOMA IN DENTAL SURGERY OF THE ROYAL COLLEGE OF SURGEONS IN ENGLAND.

	£	s.	d.
St. Bartholomew's (the "general subjects required") payable in two half-yearly instalments of £26 5s. each	52	10	0
St. George's Hospital and School (not including Prac. Chem.) ...	45	0	0
King's College (in one sum)	67	0	0
„ (in two yearly instalments of £50 to £20 7s.) ...	70	7	0
St. Mary's	52	10	0
Middlesex (in two yearly instalments of £26 5s. and £15 5s.) ...	42	0	0
St. Thomas's (by instalments of £40 and £10), in one sum ...	45	0	0
Westminster Hospital (in yearly instalments of £20 and £10) ...	30	3	0

Norfolk and Norwich Hospital.—150 beds. One year's attendance recognised by Examining Boards.—Fees: For the Physicians' practice, £10 10s.; for the Surgeons' practice—one year, £20; two years, £30; perpetual, £40. Pupils resident and non-resident. Physicians—Dr. Copeman, Dr. Eade, Dr. Bateman. Surgeons—Mr. Nichols, Mr. Firth, Mr. Cadge. Resident Medical Officer—Mr. J. R. Baumgartner. Assistant-Surgeons—Mr. Crosse, Mr. Williams.

TABLES

GIVING THE NAMES OF LECTURERS, HOURS OF LECTURE, DAYS OF ATTENDANCE, AND FEES IN THE METROPOLITAN MEDICAL SCHOOLS AND HOSPITALS.

LECTURES.	ST. BARTHOLOMEW'S.					CHARING CROSS.					ST. GEORGE'S.				
	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
PRINCIPLES AND PRACTICE OF MEDICINE	Dr. Black Dr. Andrew	M Tu and Th 3 30	5 5	..	7 7	Dr. Headland	M W F 1.30	4 4	6 6	..	Dr. Barclay	Tu Th S 9	6 6	..	7 7
SURGERY	Mr. Savory	MW2.30S9	5 5	..	7 7	Mr. Canton	Tu Th S 9	3 3	5 5	..	Mr. Holmes	M W F 9	6 6	..	7 7
PRACTICAL SURGERY ..	Mr. Willett	..	5 5	..	7 7	..	..	..	..	..	..	..	..	..	..
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Callender Mr. T. Smith	Tu W Th F 9	7 7	..	10 10	Mr. Barwell	M W F 9 Th 3	4 4	6 6	..	Mr. Rouse Mr. Bennett	M W F 3 Dly ex Th	6 6	..	7 7
ANATOMICAL DEMONSTRATIONS.	Mr. Langton Mr. Marsh	Daily10.15 till 2	3 3	5	..	Mr. Bellamy Mr. Cantlie	Daily, 10 to 1	3 3	5 5	..	Mr. Bennett Mr. Spitta	Daily 10	3 3	..	..
PHYSIOLOGY	Mr. M. Baker	Tu Th F 2.30	7 7	..	10 10	Dr. Silver	M Tu W F 3.30	4 4	6 6	..	Dr. W. Ogle	Tu Th 3 F 11	6 6	..	7 7
PRACTICAL PHYSIOLOGY..	Mr. Symons	..	5 5	..	7 7	..	..	..	..	..	..	..	..	..	..
CHEMISTRY	Dr. Russell	M W F 10	5 5	..	7 7	Mr. Heaton	M Th F 11	5 5	..	..	Dr. Noad	Tu Th S 11.30	6 6	..	8 8
HOSPITAL PRACTICE—															
Physicians	Dr. Black Dr. Harris Dr. Andrew Dr. Southey	M Tu Th 1 TuThS1.30 M Tu Th F S1.30 M W Th S 1.30	12 12 6 mths	18 18 2 yrs.	26 5	Dr. Headland Dr. Pollock Dr. Silver	M W F 1 Tu Th S 1 Tu Th S Tu F	10 10 6 mths	15 15 12 mths	21 0	Dr. Fuller Dr. Barclay Dr. J. Ogle Dr. Wadham	Tu S 1 M F 1 M F 1 Tu S 1	8 8 6 mths	16 16 3 years	25 4
Assistant-Physicians ..	Dr. Church Dr. Gee Dr. Duckworth Dr. Hensley	Tu F 11 W S 11 M Th 11 F 1.30	..	..	..	Dr. Green Dr. Powell Dr. Poore	M Th W S W S	..	..	..	Dr. Dickinson Dr. Whipham	Tu S 12 M F 12	..	..	..
Surgeons	Mr. Coote Mr. Holden Mr. Savory Mr. Callender	MWFS1.30 Tu F S 1.30 M Tu W Th F S 1.30 Daily 1.30	15 15 6 mths	21 0 1 year	26 5	Mr. Canton Mr. Hird Mr. Barwell	Tu F 1 W S 1 M Th 1	10 10 6 mths	15 15 12 mths	21 0	Mr. P. Hewett Mr. Pollock Mr. H. Lee Mr. Holmes Mr. Brodhurst Mr. B. Carter	M F 1 Tu S 1 Tu S 1 M F 1 M W F 2 *orthop.* Tu W S 2 *oph.*	15 15 6 mths	21 0 3 years	42 0
Assistant-Surgeons	Mr. T. Smith Mr. Willett Mr. Langton Mr. M. Baker	M Th 12.30 F 2.30 WSF12.30 Tu F 12.30	..	..	..	Mr. Bellamy Mr. F. Clarke	M Th Tu F	..	..	..	Mr. Rouse Mr. Pick	Tu S 12 M F 12	..	..	..
Physician-Accoucheur ..	Dr Greenhalgh	Th1.30 S 9	..	..	..	Dr. J. W. Black	M W F	..	..	..	Dr. J. Clarke	TuS1 Th12	..	..	..
CLINICAL MEDICINE ..	Dr. Black Dr. Harris Dr. Andrew Dr. Southey	.. Weekly	..	..	..	Dr. Headland Dr. A. J. Pollock Dr. Silver Dr. Green Dr. Powell	.. Tu 10	..	..	..	Dr. Fuller Dr. Wadham Dr. Ogle	M F 2 M 2 *sum.*	..	..	..
CLINICAL SURGERY ..	Sir J. Paget Mr. Coote Mr. Holden Mr. Savory Mr. Callender	.. Weekly	..	..	..	Mr. Hancock Mr. Canton Mr. Hird	..	..	..	..	Mr. Hewett Mr. Pollock Mr. H. Lee	Tu 2 Tu 2 Tu 2 *sum.*	..	..	..
DISEASES OF WOMEN ..	Dr Greenhalgh	..	..	..	..	Dr. Black	..	..	..	..	Dr. Clarke	..	..	..	..
MORBID ANATOMY AND PATHOLOGY	Dr. Gee	Dly 1&2.30 W*sum* 9·30	2 2	..	3 3	Dr. T. H. Green	Tu F 3 W 4 *sum.*	2 2	..	..	Dr. Dickinson	Th 3 *win.*	5 5	..	..
OPHTHALMIC SURGERY ..	Mr. Power and Mr. Vernon	Tu Th S 2	..	..	..	..	..	..	..	..	Mr. B. Carter	W 10 *win.*	..	..	..
HYGIENE	Dr. Southey	..	..	..	..	..	..	..	..	..	..	..	..	..	..
SUMMER SESSION.															
MATERIA MEDICA	Dr. Farre Dr. Brunton	Tu Th S 10 W 11.30	5 5	..	6 6	Dr. Powell	Tu Th S 9	3 3	..	..	Dr. Dickinson	M W F 3	4 4	..	5 5
BOTANY	Rev. G. Henslow	M W F 10	3 3	..	4 4	Dr. Dowson	Tu Th S 11	2 2	..	..	Mr. Child	Tu Th F 12	3 3	..	4 4
FORENSIC MEDICINE ..	Dr R. Southey	M Th S 9	3 3	..	4 4	Dr. G. V. Poore	M W F 9	2 2	..	..	Dr. Wadham	Tu Th S 9	4 4	..	5 5
MIDWIFERY	Dr. Greenhalgh	Tu W F S 8.30 a.m.	5 5	..	6 6	Dr. J. W. Black	M W Th 3	3 3	..	..	Dr. J. Clarke	M W F 9	5 5	..	6 6
PRACTICAL CHEMISTRY ..	Dr. Russell	M Tu F 11 to 1	2 2	..	..	Mr. Heaton Mr. Francis	M F 10—1	2 2	..	..	Dr. Noad	M W Th F 10	4 4	..	..
MICROSCOPIC ANATOMY ..	Mr. Symons	..	..	..	..	Mr. J. M. Bruce	..	..	..	..	Dr. Cavafy	Tu Th S 10	..	..	..
OPHTHALMIC SURGERY ..	Mr. Power Mr Vernon*dem*	Tu W 12.45 W *win.* 2	2 2	..	3 3	..	..	..	..	..	Mr. B. Carter	W 10	..	..	..
COMPARATIVE ANATOMY..	Dr. Church	M Th 11	2 2	..	3 3	..	..	..	..	..	Dr. Cavafy	M F 4.30	..	..	..
DISEASES OF BRAIN, ETC. ..	..	..	..	..	..	..	..	..	..	..	Mr. L. Clarke	*Winter*	..	..	..
ORTHOPÆDIC SURGERY ..	Mr. Willett	F 12.30	..	..	..	..	..	..	..	..	Mr. Brodhurst	Tu 10	..	..	..
NATURAL PHILOSOPHY ..	Dr. Hensley	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DENTAL SURGERY	Mr. Coleman	F 9 10.30 Jan. Feb. Mar.	2 2	..	3 3	Mr. J. Fairbank	..	..	..	..	Mr. Vasey	Tu 10	1 1	..	..
PSYCHOLOGICAL MEDICINE	Dr. Clayc Shaw	Th 11.45	2 2	..	3 3	Dr. Hunt	M 12	..	..	..	Dr. Blandford	Tu 3	..	..	..
PRACTICAL OR OPERATIVE SURGERY	Mr. Langton Mr. Marsh	..	4 4	..	..	..	..	..	..	..	Mr. Pick	Tu Th S 3	2 2	..	..
PHYSIOLOGICAL CHEMISTRY	Mr. Symons	..	..	..	..	..	..	..	..	..	Mr. Moore	M W F 10 *win.*	..	..	..
SKIN DISEASES	Dr. Duckworth	F 1.30	..	..	..	..	..	..	..	..	Dr. Barclay	Th 2	..	..	..
DISEASES OF THE EAR ..	Mr. T. Smith	F 2.30	..	..	..	..	..	..	..	..	Mr. Dalby	W 3	..	..	..
Entrance to Lectures and Hosp. Practice for Examinations	..	..	..	..	105 0	..	..	..	..	74 3	Compounding	Fee ..	..	..	105 0
To the Hospital Practice only	..	..	..	..	..	..	..	..	..	31 10	..	..	..	..	94 10
To the Lectures only	..	..	..	..	..	..	..	..	..	49 7	..	..	..	..	37 16
											..	..	..	..	..

LECTURES.	GUY'S. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	KING'S COLLEGE AND HOSPITAL. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	LONDON. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
PRINCIPLES AND PRACTICE OF MEDICINE	Dr. Owen Rees Dr. Wilks	M W F 3	5 5	..	..	Dr. G. Johnson	Tu 4 Th F 5	7 7	..	7 7	Dr. H. Davies Dr. Ramskill Dr. L. Down	MWTh 9.15 till Xmas, after Th 9.15 Tu F 4	5 5	..	6 6
SURGERY	Mr. Birkett Mr. C. Forster	Tu Th 3.30 F 10.30	5 5	..	..	Mr. Wood	M Tu W 5	6 6	..	7 7	Mr. Hutchinson and Mr. Couper	Tu F S 9	5 5	..	6 6
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Durham Mr. Howse	Tu W Th F 9	5 5	..	..	Mr. Partridge	Daily except M 9	7 7	..	10 10	Mr. Rivington	M Tu Th F 3	5 5	..	8 8
ANATOMICAL DEMONSTRATIONS	Mr. Davies-Colley	Daily 9 to 4	5 5	..	..	Mr. Curnow Mr. Perrin	..	..	..	..	Mr. J. Adams Mr. W. Tay Mr. M Carthy	Daily 10 to 3 exc. W. & S after.	5 5	..	8 8
GENERAL ANATOMY AND PHYSIOLOGY	Dr. Pavy	M W F 4.15	5 5	..	..	Dr. Rutherford	M W Th F 4	7 7	..	10 10	Dr. Fenwick Dr. Woodman	M W Th 4	4 4	..	6 6
CHEMISTRY	Dr. Debus Dr. Stevenson	Tu Th S 11	5 5	..	..	Mr. Bloxam	M W Th S 10.15	7 7	..	10 10	Dr. Letheby Dr. C. M. Tidy	M W F 10.30	7 7	..	7 7
HOSPITAL PRACTICE—						*In-patients*—									
Physicians	Dr. Owen Rees Dr. Habershon Dr. Wilks Dr. Pavy Dr. B. Hicks, *obs.*	TuThS1.30 TuThS1.30 M Th 1.30 M F 1.30 W S 1.30	10 10 3 mths	15 15 6 mths	26 5	Dr. Johnson Dr. Beale Dr. Garrod *Out-patients*— Dr. A. Duffin Dr. Playfair *obs.*	M Th 2 Tu S 2 W F 2 W S 1 Tu Th S 1.30	10 10 6 mths	15 15 18 mths	21 0	Dr. Davies Dr. A. Clark Dr. Ramskill Dr. Down Dr. H. Jackson Dr. Head, *obs.* Dr. Palfrey, *obs*	M W S.30 M Th 1.30 W S 1.30 Tu F 1.30 M Th 1.30 Tu F 1.30 W S 1.30	6 6 6 mths	12 12 Period regd. by Apoth. H.	21 0
Assistant-Physicians ..	Dr. Moxon Dr. C. H. Fagge Dr. Pye-Smith Dr. J. J. Phillips, *obs.*	M 12 Tu F 12 W 12 M F 1.30 Th S 12	..	..	..	Dr. Yeo Dr. Kelly	M Th 1 Tu F 1	..	..	..	Dr. Mackenzie Dr. Sutton Dr. Fenwick Dr. Woodman	W S 1.30 M Th 1.30 Tu F 1.30 Tu F 1.30			
Surgeons	Mr. Birkett Mr. C. Forster Mr. Bryant Mr. Bader, *oph.* Mr. Hinton *aur*	M Th 1.30 M Th 1.30 M Th 1.30 W S 1.30 M Tu F 12 Tu F 12	10 10 3 mths	15 15 6 mths	26 5	Sir W. Fergusson Mr. Wood Mr. Wells, *oph.* Mr. H. Smith	Tu Th S 1.30 M W F 1.30 Tu Th S 1 M W F 1	15 15 6 mths	21 0 21 mths	26 5	Mr. Hutchinson Mr. Maunder Mr. Couper Mr. Rivington	M Th 1.30 Tu F 1.30 W S 1.30 M Th 1.30 S 9.30 *aur.*	8 8 6 mths	18 18 18 mths	26 3 years
Assistant-Surgeons	Mr. A. Durham Mr. Howse Mr. D.-Colley Eye Wards	W 12 Tu Th 12 S 12 W S 1.30	..	..	..	Mr. R. Bell	Tu Th S 1	..	..	..	Mr. J. Adams Mr. W. Tay Mr. M'Carthy Mr Reeves	Tu F 1.30 W S 9 *oph.* M Th 1.30 W S 9 *oph.* M Th 1.30 Tu S 1.30 S 9.30 *aur.*	..	..	..
CLINICAL MEDICINE ..	*Winter*— Dr. O. Rees Dr. Habershon Dr. Wilks Dr. Pavy *Summer*— Dr. Moxon Dr. Fagge Dr. Pye-Smith	S 1.30 W 1.30	..	..	..	Dr. Johnson Dr. Bealo Dr. Garrod Dr. Playfair, *obs.*	Every alt. M 3 p.m. Every alt. Tu 3 Every alt. F 3 p.m. Every alt. Th 3	..	..	..	Dr. A. Clark Dr. Ramskill Dr. Davies Dr. Down Dr. Sutton Dr. Jackson Dr. Mackenzie	M 2 Oct W 3.30 Jan. M 9 Feb. Tu 2 Nov. Tu 2 May M 2 June S 3 July	Nov. Feb. Mar. Dec.	..	..
CLINICAL SURGERY ..	Mr. Birkett Mr. Forster Mr. Bryant Mr. Durham Mr. Howse Mr. D.-Colley	*Winter* W 1.30 *Summer* F 1.30	..	..	..	Sir W. Fergusson Mr. Wood Mr. Wells, *oph.*	Every alt. Th 3 p.m. Every alt. F 3 p.m. Every alt. M 3	..	..	..	By the Surgeons	..	..	..	..
DISEASES OF WOMEN ..	Dr. Hicks Dr. Philips	W 1.30 M 3	..	..	..	..	..	..	..	..	..	..	..	..	..
PATHOLOGY	Dr. Moxon Dr. Fagge	2.30 *win.* S 9 *sum.*	..	..	..	Dr. Beale	Tu Th 4 s.	2 2	..	3 3	Dr. Sutton	Th 12.30	3 3	..	6 6
SUMMER SESSION.															
MATERIA MEDICA	Dr. Habershon	Tu Th F 3	4 4	..	..	Dr. A. B. Garrod	Tu W Th F 8 a.m.	4 4	..	5 5	Dr. M. P. James	Tu Th F 4	3 3	..	4 4
BOTANY	Mr. Johnson	Tu Th S 11.30	4 4	..	..	Mr. Bentley	M Tu W F 12.15	4 4	..	5 5	Mr. Baker	M W F 11	3 3	..	4 4
FORENSIC MEDICINE ..	Dr. A. Taylor	Tu Th S 10	4 4	..	..	Dr. Guy	M Tu W F 12.15	4 4	..	5 5	Mr. Rodgers Dr. C. M. Tidy	Daily exc. Sat 10	3 3	..	4 4
MIDWIFERY	Dr. B. Hicks	Tu W Th F 8.45 a.m.	5 5	..	..	Dr. Playfair	Tu W Th F 9	4 4	..	5 5	Dr. E. Head	M W Th F 3	4 4	..	6 6
PRACTICAL CHEMISTRY ..	Dr. Debus	M W F 10 to 1	4 4	..	..	Mr C. L. Bloxam Mr Hartley *dem*	M W Th 10.15	4 4	..	7 7	Dr. Letheby	M Th S 9	2 2	..	..
COMPARATIVE ANATOMY..	Dr. Pye-Smith	M F 12.15	4 4	..	..	Mr. T. R. Jones	Tu F S 10.15	3 3	..	4 4	Mr. Sanders	Tu Th 11	3 3	..	4 4
PRACTICAL PHYSIOLOGY AND HISTOLOGY	Dr. Pye-Smith	M F 1	..	..	..	Dr. Rutherford Dr. Pritchard, *dem.*	Tu S 11.15 *win.*	5 5	..	8 8	Dr. Fenwick & Dr. Woodman	..	3 3	..	4 4
NATURAL PHILOSOPHY ..	..	W 12 *win.*	4 4	..	..	..	..	..	..	..	..	..	..	..	..
OPERATIVE SURGERY ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DENTAL SURGERY	Mr. Salter Mr. Moon	..	5 5	..	..	Mr. Cartwright	Tu F 9, alt Tu 10.30 cl.	6	..	8	Mr. Maunder Mr. Barrett	..	..	..	..
HYGIENE	Dr. H. Fagge	Th S 12.15	4 4	..	..	Dr. Guy	..	..	..	..		..	2 2	..	..
AURAL SURGERY	Mr. Hinton	..	..	..	..							..	..	..	..
CUTANEOUS DISEASES ..	Dr. H. Fagge	Tu 12 *win.*	..	..	..	..	..	..	..	..	..	..	..	..	..
OPHTHALMIC SURGERY ..	Mr. Bader	M 8.45 a.m.	..	..	..	Mr. J. S. Wells	M S 9	3 3	..	..	Mr. J. Hutchinson	Tu F 8 in June	2 2	..	3 3
DISEASES OF THE THROAT	..	..	..	..	..	..	..	..	..	..	Dr. Mackenzie	..	2 2	..	3 3
PSYCHOL. MEDICINE ..	Dr. Dixon	..	..	..	..	Dr E. Sheppard	..	..	..	..	..	..	..	..	..

Fee for the Lectures and Hospital Practice, Perpetual, £105.

Fees for the Lectures and Hospital Practice, £105; in one sum, £100.

Fees for the Lectures and Hospital Practice, for Licences, £9[illegible].

LECTURES.	ST. MARY'S. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	MIDDLESEX. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	ST. THOMAS'S. Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
MEDICINE	Dr. Chambers Dr. Broadbent	M W Th 4	4 4	..	6 6	Dr. Greenhow	M W F 9	6 6	..	8 8	Dr. Peacock Dr. Murchison	M Th S 2	..	..	..
SURGERY	Mr. J. R. Lane Mr. Gascoyen	Tu F 4 W 3	4 4	..	6 6	Mr. De Morgan	Tu Th S 9	6 6	..	8 8	Mr. Le Gros Clark Mr. S. Jones	Th 12 MF 5	..	..	..
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Norton	M Tu Th F 2.45	6 6	..	8 8	Dr. R. Liveing & Mr. Morris	M W Th F 10	8 8 10 10	.. ..	12 12 14 14	Mr. Mason Mr. Wagstaffe	Daily ex. S 3	..	..	..
ANATOMICAL DEMONSTRATIONS	Mr. E. Owen J. J. Gawith, *assist. dem.*	Daily 9 to 5	3 3	..	..	Dr. R. Liveing	Daily 8 to 5	6 6	..	8 8	Mr. Rainey Mr. W. Anderson	Daily 9 to 3	..	..	..
PHYSIOLOGY	Dr. Lawson	M W S 12	3 3	..	4 4	Mr. Lowne	M W F 4	6 6	..	8 8	Dr. Ord Dr. J. Harley	M W F 4	..	..	..
EXPERIMENTAL PHYSIOLOGY	Dr. Shepherd	Tu W F 9	3 3	..	4 4	..	..	..	..	..	..	..	..	..	..
CHEMISTRY	Dr. C. R. A. Wright	M Tu Th F 10.15	5 5	..	7 7	Mr. Heisch	M Tu F S 11	6 6	..	8 8	Dr. Bernays	W Th F 11	..	..	..
HOSPITAL PRACTICE:															
Physicians	Dr. H. Jones Dr. Sieveking Dr. Broadbent Dr. A. Meadows, *obs.*	M Th 1.15 Tu F 1.15 W S 1.15 Tu F 10	7 7 6 mths	12 12 1 year	21 0	Dr. Thompson Dr. Greenhow Dr. R. Liveing Dr. J. Hall Davis, *obs.*	Tu Th S 1 Tu Th S 1 M W F 1.30 Tu W F S 1.30	5 5 6 mths	8 8 12 mths	..	Dr. Peacock Dr. Bristowe Dr. Clapton Dr. Murchison Dr. Barnes, *obs.*	From 8.30 to 9.30 a.m.	..	..	..
Assistant-Physicians	Dr. Cheadle Dr. Lawson Dr. Shepherd Dr. Wiltshire, *obs.*	Tu F 1 W S 1 M Th 1	..	..	..	Dr. Cayley Dr. J. Murray Dr. R. King	M W 8.30 Tu 8.30 F 4 Th 8.30 S 4	..	..	..	Dr. Stone Dr. Ord Dr. J. Harley Dr. Payne Dr. Gervis, *obs.*		..	..	..
Surgeons	Mr. Spencer Smith Mr. H. Walton Mr. J. Lane Mr. Gascoyen Mr. Allen, *aur.* Mr. H. Walton *oph.*	M Th 1.15 W S 1.15 Tu F 1.15 M Th 1 Tu F 2 M Th 1 30	9 9 6 mths	21 0 1 year	31 0	Mr. De Morgan Mr. Nunn Mr. Hulke Mr. Lawson Mr. Hulke, *oph.*	M Th 1 Tu F 1 M Th 1 Th S 1 Tu F 8.30	5 5 3 mths	8 8 1 year	..	Mr. Le Gros Clark Mr. Simon Mr. Sydney Jones Mr. Croft Mr. Liebreich, *oph.*		..	..	..
Assistant-Surgeons	Mr A. T. Norton Mr. E Owen Mr. H. Hayward	W S 1 Tu F 1 Tu S 9·30	..	..	..	Mr. Morris Mr. A. Clarke	M F 1 Tu S 1	..	..	..	Mr. MacCormac Mr. Mason Mr. H. Arnott		..	..	..
CLINICAL MEDICINE	Dr. H. Jones Dr. Sieveking Dr. Broadbent	M 2 Every alt. F 2 Every alt. S	..	..	..	The Physicians	F 3	..	..	..	By the Physicians	..	..	..	..
CLINICAL SURGERY	Mr. Spencer Smith Mr. H. Walton Mr. J. R. Lane	Every alt. Th 2 Every alt. S 2 Every alt. Tu	..	..	..	The Surgeons	M 3	..	..	..	By the Surgeons	..	..	..	..
CLINICAL MIDWIFERY	Dr. Meadows	Every alt. F	..	..	..	..	..	..	..	..	Dr. Barnes	W 5	..	..	..
DISEASES OF WOMEN	..	..	..	..	..	Dr. J. H. Davis	Tu 10	..	..	..	..	..	..	..	..
MORBID ANATOMY AND PATHOLOGY	Dr. Cheadle	Tu F 12	3 3	..	..	Dr. Cayley and Dr. J. Murray	M Th 4	3 3	..	4 4	Dr. Payne	Daily 2	..	..	..
EOGRAPHY OF DISEASE	..	..	..	..	..	..	..	..	..	..	Mr. Haviland	..	..	..	..
SUMMER SESSION.															
MATERIA MEDICA.	Dr. Cheadle	Tu W F S 12	4 4	..	6 6	Dr Thorowgood	M W F 10	4 4	..	5 5	Dr. Clapton	M W F 8	..	..	..
BOTANY	Dr. Trimen	M W F 9	3 3	..	4 4	Mr. Lowne	M W F 4	4 4	..	5 5	Dr. J. W. Hicks	Tu Th S 8	..	..	..
FORENSIC MEDICINE	Dr. Randall	M Tu Th 10	3 3	..	4 4	Dr. Divers	Tu Th S 9	4 4	..	5 5	Dr. Stone and Dr. Gervis	Tu S 12 F 8	..	..	..
MIDWIFERY	Dr. Meadows	Daily ex. S 9	4 4	..	6 6	Dr. J. Hall Davis	M W F 9	4 4	..	5 5	Dr. R. Barnes	Tu W Th 8	..	..	..
PRACTICAL CHEMISTRY	Dr. C. R. A. Wright	M Th 11.30 S 9	3 3	..	..	Mr. Heisch	M W F 11	3 3	..	..	Dr. Bernays	Tu Th S 11	..	..	..
COMPARATIVE ANATOMY	Mr. S. G. Mivart	W F 10	2 2	..	3 3	Dr. Murie	Tu Th 4	3 3	..	..	Mr. Stewart	M W 11.30	..	..	..
OPHTHALMIC SURGERY	Mr. H. Walton	Th 2.45	2 2	..	..	Mr. Hulke	Alt. Tu 3	..	..	..	Mr. Liebreich	M 3	..	..	..
MENTAL DISEASES	..	..	..	..	..	Dr. Rayner	..	3 3	..	..	Dr. W. R. Williams	F 12	..	..	..
PRACTICAL PHYSIOLOGY AND HISTOLOGY	..	..	..	..	..	Mr. Lowne	..	4 4	..	..	Dr. Ord Dr. J. Harley	M Th F 1 to 3	..	..	..
AURAL SURGERY	Mr. Allen	F 3	2 2	..	..	Mr. A. Clarke	M 1	..	..	..	..	..	..	..	..
PRACTICAL AND MANIPULATIVE SURGERY	Med. Tutor	..	..	..	..	Mr. Hulke Mr. Lawson Mr. Morris	*winter*	6 6	..	..	Mr. Croft Mr. MacCormac	M Th 2	..	..	..
DENTAL SURGERY	Mr. Hayward	Tu Th S 9.30	2 2	..	..	Mr. Tomes	..	5 5	..	..	Mr. Elliott	Tu F 11	..	..	..
DISEASES OF SKIN	Dr. Cheadle	Th 3	..	..	..	Dr. Liveing	..	..	..	..	..	..	..	..	..
PARASITIC DISEASES	..	..	..	..	..	Dr. Cobbold	..	..	..	..	..	..	..	..	..
DISEASES OF THROAT	..	..	..	..	..	Dr. J. Murray	S 4	..	..	..	..	..	..	..	..
GENERAL PATHOLOGY	..	..	..	..	..	..	..	..	..	..	Dr. Bristowe	Th 4 *win.*	..	..	..
PHYSICS AND NATURAL PHILOSOPHY	Dr. C. R. A. Wright	..	..	..	..	..	..	..	..	..	Dr. Stone	Tu 4 *win.*	..	..	..
PRACTICAL PHARMACY	..	..	3 3 3 mths	6 6 6 mths	10 10 12 mths	..	..	5 5 6 mths	8 8 12 mths	..	..	..	..	..	..
Fees for the Lectures and Hospital Practice, for the Licences of the Royal College of Physicians, Society of Apothecaries, and the Royal College of Surgeons	£89 5s.	or in	one	sum	84 0	..	..	..	..	90 0	Fee to Practice and all Lectures: £40 1st year, £40 2nd year, £20 3rd year, and £10 for each succeeding year; or £105 at one payment.				
To the Lectures alone	..	..	..	..	52 0	..	..	..	..	..					
To the Hospital Practice alone	..	..	..	..	36 15	..	..	..	..	26 5					
Unlimited	£105,	or in	one	sum	99 15	..	..	..	..	..					

LECTURES.	UNIVERSITY COLLEGE AND HOSPITAL.					WESTMINSTER.				
	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.
WINTER SESSION.			£ s. d.	£ s.	£ s			£ s.	£ s.	£ s.
MEDICINE	Dr. J. R. Reynold	Daily ex. M 9	6 6 0	..	9 9	Dr. Anstie	M Th F 3	5 0	..	7 0
SURGERY	Mr. Marshall	Tu W F 4	5 5 0	..	6 6	Mr. Holthouse	Tu W Th 3	5 0	..	7 0
DESCRIPTIVE ANATOMY	Mr. Ellis	Daily 12	7 7 0	..	10 10	Mr. Pearse	Tu W Th F 9	5 0	..	7 0
DEMONSTRATIONS	Mr. Ellis Mr. G. D. Thane Mr. W. Price	Daily				Mr. Cooke Mr. Davy Mr Ramsay	Daily 10—1	2 0	..	3 0
PHYSIOLOGY AND GENERAL ANATOMY	Dr. Sharpey	Daily ex. S 10	7 7 0	..	9 9	Dr. Maclure	M W F 4	5 0	..	7 0
CHEMISTRY	Dr. Williamson	Daily ex. S 11	7 7 0	..	9 9	Dr. Dupré	Tu Th 3 F 3.30	5 0	..	7 0
HOSPITAL PRACTICE—										
Physicians	Sir W. Jenner, Bart., M.D. Dr. Reynolds Dr. W. Fox Dr. S. Ringer Dr. H. C. Bastian	Daily 1 & 2	.. Hospital Practice and Clinical Instruction: Six months, £7; one year, £10; perpetual, £27	..	..	Dr. Basham Dr. Fincham Dr. Radcliffe Dr. F. Bird, *obs.*	M Th 1.30 W S 1.30 Tu F 1.30 Tu F 3	8 0 6 months	12 0 1 year	20 0
	Dr. Graily Hewitt, *obs.*	Three times a week								
	Dr. T. Fox, Skin Infirmary	S 9								
Assistant-Physicians	Dr. F. T. Roberts Dr. J. Williams, *asst. obs.*	..		..	..	Dr. Anstie Dr. Gibb Dr. Sturges Dr. Potter, *asst. obs.*	M Th 1 Tu F 1 W S 1 Tu F 1	8 0 6 months	12 0 1 year	20 0
Surgeons	Mr. Erichsen Mr. Marshall Sir H. Thompson	Daily 1 & 2		..	..	Mr. Holt Mr. Holthouse Mr. Pearse Mr. Cowell (*assist. surgs.*) Mr. Davy (*assist. surgs.*) Mr. Cooke (*assist. surgs.*)	M Th 1.30 W S 1.30 Tu F 1.30 M Th 1 Tu F 1	8 0 6 months	12 0 1 year	..
	Mr. Berkeley Hill Mr. C. Heath				27 0					
	Mr. W. Jones, *oph.*	M W F 1								
CLINICAL MEDICINE	Sir W. Jenner Dr. Reynolds Dr. W. Fox	M Tu Th F 1—3		..	..	By the Physicians	Weekly	..	..	..
	Dr. Roberts, *assist. prof.*									
	Dr. T. Fox, *skin dis.*	Once a fortnight								
CLINICAL SURGERY	Mr. Erichsen Mr. Marshall Sir H. Thompson	M W S 1—3	..	..	..	By the Surgeons	Weekly	..	..	..
	Mr. W. Jones, *oph.*	Fortnightly								
CLINICAL MIDWIFERY	Dr. G. Hewitt	Fortnightly	..	..	..	Dr. Bird	..	..	..	..
MORBID ANATOMY & PATHOLOGY	Dr. C. Bastian	M W F 4 *sum.*	4 4 0	..	6 6	Dr. Lee Dr. Allchin	S 9	..	..	..
SUMMER SESSION.										
MATERIA MEDICA	Dr. Ringer	Daily exc. S 10	4 4 0	..	6 6	Dr. Sturges	M Th F 3	3 3	..	4 4
BOTANY	Mr. Oliver	Daily exc. S 8	3 3 0	..	4 4	Mr. Bennett	M W F 9.30	3 3	..	4 4
FORENSIC MEDICINE	Dr. Maudsley	Tu W Th F 10	3 3 0	..	4 4	Dr. Gibb Dr. Lee	Tu W F 3	3 3	..	4 4
MIDWIFERY	Dr. Graily Hewitt	Tu W F S	4 4 0	..	6 6	Dr. Bird	Tu Th F 4	4 4	..	5 5
PRACTICAL CHEMISTRY	Dr. Williamson	Tu W Th F 11	4 4 0	..	7 7	Dr. Dupré	Tu Th S 10	2 0	..	..
COMPARATIVE ANATOMY	Dr. Grant, *with Zoology*	Daily except S 3, from Oct. to June	8 8 0	..	9 9	Mr. Carter Blake	W S 11	2 2	..	3 3
PRACTICAL AND OPERATIVE SURGERY	Mr. B. Hill Mr. M. Beck	M Th 4 *win.*	4 4 0	..	..	Mr. Davy	F 12	..	..	..
	Mr. C. Heath, *oper.*	Daily in April	4 4 0							
DENTAL SURGERY	Mr. Ibbetson	M Th 4 in Jan	2 2 0	..	..	Mr. Walker	W 9.30 *win.*	2 2	..	..
HYGIENE	Mr. Corfield	Tu F 12	1 1 0	..	3 3	..	..	..	..	..
NATURAL PHILOSOPHY	Prof. Foster	M W F 4 *win.*	6 6 0	..	..	Mr. Brooke	Tu 3 *sum.*	2 2	..	..
OPHTHALMIC SURGERY	Mr. W. Jones	Tu Th	2 2 0	..	..	Mr. Cowell	..	..	..	..
PALÆO-ZOOLOGY	Dr. Grant	Daily except S 3 *sum.*	1 1 0	..	..	..	..	..	..	..
HISTOLOGY AND PRACTICAL PHYSIOLOGY	Dr. B. Sanderson	Daily (ex. S) 9 S 11 *win.*	7 7 0	..	9 9	Dr. Allchin	Th 12 *win.*	..	..	..
MENTAL DISEASES	Dr. Sankey	M Tu W 3	2 2 0	..	..	Dr. Sutherland	..	..	..	..
PRACTICAL PHARMACY	Mr. Martindale	..	3 3 0	..	5 5	Mr. Beer.	..	3 3	..	5 5
Fees for the Lectures and Hospital Practice for the Licences of the Royal College of Physicians, Society of Apothecaries, and M.R.C.S.	1st year, £48 17s.;	2nd, £39 8s.;	3 months 3rd, £18	11s.	6 months 106 16	..	..	..	..	70 0
For the Hospital Practice alone	..	..	..	..	27 0	..	..	..	..	26 0
Perpetual to Lectures and Hospital Practice	..	..	..	..	..	..	..	..	..	75 0

ADDITIONAL INFORMATION RESPECTING THE METROPOLITAN SCHOOLS, ETC.

ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.

This Hospital comprises a service of 710 beds, of which 676 are in the Hospital in Smithfield, and 34 are for convalescent patients at Lauderdale-house, Highgate.

Whole fee for attendance on lectures and hospital practice 105 guineas, payable by instalments, or a single payment of 100 guineas. Payment in either of these ways entitles to a perpetual ticket.

Four House-Physicians and four House-Surgeons are appointed annually, on the payment of a nominal fee, and are provided with rooms by the Hospital authorities. The Senior Midwifery Assistant is appointed for twelve months, and is eligible for re-election for a second twelvemonth. The Junior Midwifery Assistant is appointed for six months, and is provided with rooms by the Hospital authorities. The Ophthalmic House-Surgeon is appointed for six months, and is eligible for re-election for a second term of six months. Diligent students are selected to hold these appointments, for which no fee is required.

The Clinical Clerks to the Physicians and to the Physician-Accoucheur, the Clerks to the Assistant-Physicians and Assistant-Surgeons, and the Dressers in the special departments, are chosen from the diligent students without payment of any extra fee. Sixteen Ward Dresserships are annually given to the students of

the second year who pass the best examinations in the subjects of study of the first and second years, or who may be otherwise specially recommended. Other Ward Dresserships may be obtained by payment of the usual fees.

Courses of Practical Surgery and of Practical Physiology have been instituted in accordance with recent regulations of the Royal College of Surgeons.

Special Departments:—Diseases of the Skin (Dr. Duckworth, Friday, at 1.30), Diseases of the Eye (Mr. Power and Mr. Vernon, Tuesday, Thursday, and Saturday, at 1.30), Diseases of the Ear (Mr. Thomas Smith, Friday, at 2.30), Orthopædic Surgery (Mr. Willett, Friday, at 12.30), Dental Surgery (Mr. Coleman, Friday, at 9 a.m.).

The following scholarships and prizes are awarded:—Senior Scholarship of the value of £50, Medicine, Surgery, Materia Medica, and Therapeutics. Senior Scholarship of the value of £50, Anatomy, Physiology, and Chemistry. Scholarships of the value of £25 each will be awarded to those students who are placed second in the examinations for the Senior Scholarships. Junior Scholarships of the value of £50, £30, and £20 are awarded after the general examination at the end of the summer and winter sessions. The Jeaffreson Exhibition, founded in 1868, to the value of £20, and tenable for two years, is awarded at the commencement of each winter session to the student who passes the best examination in the subjects of preliminary education. Wix Prize, founded 1842, is awarded for the best essay on "The Evidence to be deduced from Holy Scripture that the Study and Use of the Healing Art are in accordance with the Will of God." Hichen's Prize, founded 1851. Subject of examination—Bishop Butler's Analogy. Bentley Prize, founded 1842, for the best report of medical cases occurring in the wards of the Hospital during the previous year. It is expected that the reports will comprise the histories, progress, treatment, and results of not less than twelve cases, with observations thereupon. Foster Prize. Subject of examination—Practical Anatomy; senior. Treasurer's Prize. Subject of examination—Practical Anatomy; junior. The Kirkes Gold Medal. Subject of examination—Clinical Medicine.

Special classes are held for the matriculation, for the preliminary scientific, and for other examinations at the London University. Students preparing for other examining boards are arranged in classes and examined by the lecturers and demonstrators.

An examination of all students of the first year is held at the close of the first winter and first summer sessions.

A college for resident students exists in connexion with the Hospital. Resident Warden, Mr. Morrant Baker.

All communications to be addressed to the Warden of the College, St. Bartholomew's Hospital.

CHARING-CROSS HOSPITAL.

Gentlemen are received—1st. As matriculated students, or those who enter for their entire medical education at the Charing-cross Hospital Medical College. 2ndly. As occasional students, or those who enter to one or more particular classes. Matriculated students alone have the privilege of filling the offices of Registrar, Pathological Assistant, Assistant-Demonstrator, Clinical Clerks, Dressers, Dentist's Assistant, Resident Medical Officer, Resident Surgical Officer, and Physician-Accoucheur's Assistant, and of becoming candidates for the scholarships, medals, and various general class prizes.

The fee for the courses of lectures and hospital practice required by the University of London, the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, to non-matriculated students, is £80 17s.; for the hospital practice alone, £31 10s. The fee to matriculated students for the full period of the lectures and hospital practice required by the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, is £76 5s.; for the hospital practice alone, £28 19s. 8d. The fee for matriculation is £2 2s., to be paid on entering. Payment of fees may be made in five instalments.

The office of Registrar to the Hospital, and Pathological Registrar to the School, tenable for two or three years, for the efficient performance of the duties appertaining to which the Council award an annual stipend, is open to all matriculated students of the Hospital who have obtained their qualifications, as are also the offices of House-Physician, House-Surgeon, and resident Physician-Accoucheur's Assistant.

Scholarships, Medals, and Prizes. — Scholarships: The Llewellyn Scholarship of £25 is open to all matriculated students who have just completed their second academical year. The Golding Scholarship of £15 a year is open to all matriculated students who have just completed their first academical year. The following medals are awarded annually:—The gold medal for general proficiency; the governors' clinical silver medal; silver class medals, on all the subjects of the lectures; bronze class medals, on all the subjects of the lectures.

Free Scholarships.—Candidates for free scholarships are required to be sons of professional men of reduced circumstances and position, or of gentlemen in a corresponding station of society, and are to have had a classical education fitting them for the medical profession. They must have already commenced their medical studies, and, from unforeseen circumstances, be unable to complete their professional education without such assistance. They are to send in their applications and testimonials before September 1.

ST. GEORGE'S HOSPITAL.

Perpetual pupils pay at the time of entry a compounding fee of £105. They are admitted to the practice of the Physicians and Surgeons, to all the lectures (except Practical Chemistry), to compete for all prizes and exhibitions, to hold the appointments of House-Physician, House-Surgeon, Assistant House-Physician, Assistant House-Surgeon, Ophthalmic and Orthopædic Assistants, and Clinical Clerk and Dresser for two periods of three months each.

Gentlemen are admitted to the hospital practice and lectures required for the licence of the College of Physicians for the diploma of Member of the College of Surgeons, and for the licence of the Society of Apothecaries (with the exception of Practical Chemistry), on payment of the following fees—viz., £42 for the first year of study, £42 for the second year of study, and £10 10s. for each succeeding year. By payment of these fees pupils are entitled to hold the office of Clinical Clerk and Dresser, and to become candidates for the offices of Medical and Surgical Registrars, and Demonstrator of Anatomy, to each of which offices a salary of £50 is attached. An Obstetric Assistant, with a salary of £100 and board and residence is annually elected from amongst those students who have obtained a legal qualification to practise. Pupils may also enter to the hospital practice and lectures separately.

The appointments of House-Physician and House-Surgeon are made every six months, are four in number, and are tenable for one year. These appointments are awarded after examination, and are given without fee or payment, each officer being lodged and boarded at the expense of the Governors of the Hospital. The whole of the patients are under the charge of these officers in the absence of the Physicians and Surgeons.

Exhibitions and Prizes.—"The William Brown Exhibition," of £40 per annum, tenable for three years: This Exhibition is competed for by perpetual pupils who have commenced their third, but not completed their fourth winter session. It will be "bestowed on the candidate who shall show the best general fitness for the exercise of the medical profession, and whose moral conduct shall in all respects be satisfactory." The Treasurer's Clinical Prize of £10 10s., the gift of A. Shaw Stewart, Esq. Sir Charles Clarke's Prize for good conduct: The interest of £200 Consols, to be awarded annually to the student of the Hospital "who, by reason of his general good conduct during the preceding year, should be considered the most deserving." The Thompson Medal: A silver medal to be awarded annually for the best clinical report of medical and surgical cases observed in the Hospital during the preceding twelve months. Sir Benjamin Brodie's Clinical Prize in Surgery will be awarded to the perpetual pupil of the Hospital who shall have delivered to the Surgeons the best report of not more than twenty surgical cases which have occurred in the Hospital during the preceding twelve months. Dr. Acland's Clinical Prize in Medicine will be awarded to the perpetual pupil of the Hospital who shall produce the best report of not more than twenty medical cases which have occurred in the Hospital during the preceding twelve months. The Henry Charles Johnson Memorial Prize in Anatomy will be awarded to that pupil who shall, in the judgment of the Medical School Committee, exhibit the greatest proficiency in practical anatomy. General Proficiency Prizes:—To pupils in their first year, £10 10s.; to pupils in their second year, £10 10s.; to pupils in their third year, £10 10s.

For further particulars apply to Dr. Wadham, Dean of the School.

GUY'S HOSPITAL.

This Hospital contains nearly 720 beds.

Voluntary Examinations are held at four periods of the students' course, as follows:—1st. At entrance, commencing

on October 7, in Elementary Classics, Ancient and Modern History, and Mathematics. The candidate who most distinguished himself receives £25; the second candidate, £20; the third, £15. 2nd. At the end of the first sessional year, in all the subjects of that year:—one sum of £30, another of £25, and a third of £10 10s. (presented by one of the Governors). 3rd. At the end of the second sessional year, in the subjects which form the course of study up to that time—£35 and £30. 4th. At the end of the third sessional year, in all the subjects of the curriculum—£40 and £35. Honorary certificates are also given to candidates who pass creditable examinations.

Special Examinations. Two gold medals are given annually by the Treasurer to students who have completed their third, and not exceeded their fourth, year—the one for Clinical Medicine, the other for Clinical Surgery.

The fees for hospital practice and lectures are as follows:—For the first year, £40; for the second year, £40; and £20 for the third; and £10 for succeeding years of attendance. £105 entitles a student to a perpetual ticket. Materials used in practical courses are charged extra.

Students are selected according to merit for the following appointments:—House-Physicians, House-Surgeons, and Obstetric Residents (Senior and Junior), Surgeon's Dressers, Clinical Assistants, Dressers in the Eye Wards, Post-mortem Clerks, Obstetric Out-patient Clerks, Assistant-Physicians' Clerks, Assistant-Surgeon's Dressers, Dressers in the Surgery, Dental Surgeon's Dressers, Aural Surgeon's Dressers, Medical Clinical Clerks, Surgical Clinical Clerks, Extern Obstetric Attendants, Assistant-Surgeon's Clerks, Clerks in the Electrifying-room.

The Registrars and the Demonstrators in Anatomy and Chemistry assist the pupils in their studies.

For further information apply to Mr. Stocker, Apothecary to the Hospital.

KING'S COLLEGE.

The fees, amounting to £100, may be paid either in one sum on matriculation or in three amounts at the commencement of each winter session. Students are, however, recommended to add £2 2s. for a second course of Chemistry, as well as the fee for attendance on the medical tutor's class for one year—viz., £3 3s. All resident students are required to attend the tutor (Dr. E. B. Baxter) during their first year.

Resident Medical Officers, Clinical Clerks, and Dressers are chosen by examination from matriculated students who are pupils of the Hospital.

Scholarships.—Warneford Scholarships: The sum of £200 is set apart annually for scholarships in the Medical Department—viz., "For the encouragement of the previous education of medical students," two scholarships of £25 per annum for three years; "For the encouragement of resident medical students," one scholarship of £25 per annum for two years. College Scholarships: The following are given every year to matriculated students of this department:—1. One of £40 for two years, open to students of the third and fourth year; 2. One of £30 for one year, open to students of the second year; 3. One of £20 for one year, open to students of the first year. Daniell Scholarship; £20, tenable for two years, is open to every student of the College who has worked in the laboratory for at least six months. Sambrooke Registrarships: Two of £50 every year.

Prizes.—Leathes Prizes: Bible and Prayer-book to two matriculated medical students. Warneford Prizes: £40 is expended in the purchase of medals and books as prizes to two matriculated medical students. Class Prizes are awarded annually for proficiency in each subject of study; these consist of books of the value of £3. Two Medical Clinical Prizes, one of £3 for the winter session and the other of £2 for the summer session; and two Surgical Clinical Prizes of the same value are gived for attendance at the Hospital. Todd Medical Clinical Prize: This prize was founded in memory of the late Dr. Todd. It consists of a bronze medal and books to the value of £4 4s. Tanner Prize: £10, for proficiency in the study of Obstetric Medicine.

Residence of Students.—A limited number may reside within the College.

For further information apply to Professor Bentley, Dean of the Medical Department.

ST. MARY'S HOSPITAL.

The Hospital contains 170 beds—68 medical, and 102 surgical. There are special departments for the Diseases of Women and Children, and for Diseases of the Eye, the Ear, the Skin, and the Throat.

A Medical Tutor assists the students daily in the practical portion of their studies, and in preparing for the final examinations.

Appointments in the Hospital and School.—All these appointments are open to the pupils without additional fee, and are held in succession, so as to secure a complete system of clinical training. Five of these appointments exceed in value an equal number of scholarships of £50 each. All general students are required to perform the duties of Clinical Clerks and Dressers for a period of six months during the last two years of their curriculum. Students of the third year are appointed to assist the Physicians and Surgeons in charge of the out-patients. A Resident Registrarship within the Hospital has been created, with a salary of £100 a year and dispensary fees, tenable for one year *and open to re-election*, preference being given to past House-Surgeons and perpetual pupils. The Demonstrator of Anatomy is appointed annually, with a salary of £50 a year. The Medical Tutor is also appointed annually, at a salary of £100 a year. The holders of both these appointments are eligible for re-election.

Scholarships, Prizes, etc.—Three scholarships in Natural Science, of the annual value of £40, tenable for three years, and an exhibition in Natural Science of £20, for one year. One of the scholarships and the exhibition are awarded by open competitive examination immediately before the commencement of the winter session. A scholarship in Anatomy, of the annual value of £20 (the holder of which is styled Assistant-Demonstrator, and assists in the teaching of Practical Anatomy) is offered for competition amongst those students who have completed their second winter session; and a scholarship in Pathology, of the value of £20 (the holder of which is styled Assistant-Curator), for those students who have completed their third winter session. Examinations for prizes are held at the termination of each session in the various classes for students of the first, second, and third year. Two Prosectors are appointed annually, who each receive a certificate and £5 for their services in the dissecting-room.

The entrance fee for general students may be paid in instalments by arrangement with the Dean of the School. A fee of £1 1s. is required to be paid to the library and reading-room. Instruction in vaccination can be obtained; fee £1 1s.

Further information may be obtained from Dr. Cheadle, Dean of the School; or from Mr. Knott, the Registrar, at the Hospital.

THE LONDON HOSPITAL.

The next winter session will commence on Tuesday, October 1, 1872, when the introductory address will be given at 3 p.m., by Jonathan Hutchinson, Esq.

During the winter session lectures on Anatomy, Physiology, Chemistry, Pathology and Morbid Anatomy, Medicine, Surgery, and Dental Surgery will be given. Clinical lectures and clinical instruction will be regularly and systematically delivered on the cases occurring both in the clinical and in the ordinary medical and surgical wards. There will be clinical lectures on the cases in the wards for diseases of women, and clinical instruction in the obstetric out-patient rooms, as well as in the special departments for diseases of the eye, ear, and skin.

The summer session will begin on Thursday, May 1, and terminate on Thursday July 31, 1873.

During the summer session, lectures on Midwifery and Diseases of Women, Materia Medica, Botany, Comparative Anatomy, Practical Histology and the Use of the Microscope, Pathology and Morbid Anatomy, Practical Chemistry, Forensic Medicine, Syphilis, Diseases of the Eye and Use of the Ophthalmoscope, Diseases of the Skin, Diseases of the Throat and Use of the Laryngoscope, will be given.

Clinical lectures and clinical instruction will be delivered, as in the winter session, in connexion with every branch of practice.

Table of Fees.—General fee for perpetual attendance on all the lectures, and for attendance on medical and surgical practice, qualifying for examination at most of the medical and surgical boards, £90; composition fee for gentlemen entering at or before the beginning of their second winter session, their first year having been spent elsewhere, £70; perpetual fee for lectures and hospital practice, £100; perpetual fee for lectures alone, £50; perpetual fee for hospital practice alone, £50. Extra Fees: Practical chemistry (for apparatus, etc.), £2 2s.; subscription to the library (compulsory), £1 1s. *Note.*—The general fee and the perpetual fee are payable in two instalments of £45 and £50 each respectively, at the commencement of each of the first two years of attendance. If preferred,

the *perpetual* fee can be paid in three instalments—£45 at the commencement of each of the first two years of attendance, and £10 at the commencement of the third year. The composition fee is payable in two instalments of £35.

Scholarships and Prizes.—Seven scholarships will be offered for competition during the ensuing winter session. The two Buxton Scholarships will be awarded in October to the students who distinguish themselves most in the subjects appointed by the General Council of Medical Education and Registration as the subjects of the preliminary examinations. 1. A scholarship, value £30, to the student placed first in the examination. 2. A scholarship, value £20, to the student placed second in the examination. 3. A scholarship, value £20, will be awarded to the first year student who shall pass in April, 1873, the best examination in Human Anatomy. 4. A scholarship, value £25, will be awarded to the first year or second year student who shall pass at the end of the winter session the best examination in Anatomy, Physiology, and Chemistry. 5. A hospital scholarship, value £20, for proficiency and zeal in clinical medicine. 6. A hospital scholarship, value £20, for proficiency and zeal in clinical surgery. 7. A hospital scholarship, value £20, for proficiency and zeal in obstetrics. The Duckworth-Nelson Prize, value £10, will be awarded by competition at the end of the winter session, 1873, and will be open to all students who have not completed their education. The subjects of examination will be Practical Medicine and Surgery. Money prizes, to the value of £60 per annum, are awarded by the House Committee to the most meritorious of the dressers in the out-patient rooms. The special conditions may be learnt on inquiry. The offices of Resident Medical Officer, Junior Resident Medical Officer, four Medical Assistants, Clinical Clerks, Resident Accoucheur, Maternity Pupils, four House-Surgeons, Surgical Dressing Pupils, two Medical Clinical Assistants, two Surgical Clinical Assistants, Medical Registrar, Surgical Registrar, Assistant-Dentist, Post-mortem Clerks, and two Prosectors of Anatomy are open to the students.

Communications addressed to the Dean or Vice-Dean of the School, at the London Hospital Medical College, Turner-street, Mile-end, London, E., will receive immediate attention. Information may be obtained from Mr. James E. Adams, Treasurer, 10, Finsbury-circus, E.C.; Mr. Jonathan Hutchinson, Senior Surgeon, 4, Finsbury-circus, E.C.; Dr. Davies, Dean of the School, 23, Finsbury-square, E.C.; Mr. Waren Tay, Vice-Dean, 10, Finsbury-pavement, E.C.; Dr. Down, Treasurer, 37, Welbeck-street, W.; Dr. Samuel Fenwick, Harley-street, W.; from any member of the hospital staff, and from the lecturers at the College.

MIDDLESEX HOSPITAL.

This Hospital contains upwards of 300 beds, of which 185 are for surgical, and 120 for medical cases. There is a special department for cancer cases, affording accommodation for thirty-three in-patients, whose period of residence in the Hospital is unlimited. Wards are also appropriated for the reception of cases of uterine disease and of syphilis, and beds are set apart for patients from diseases of the eye.

Special attention is bestowed on the clinical instruction of the students, both in the wards and out-patient rooms. Classes, open to all the students, are held for practical instruction in the microscopic examination of healthy and diseased tissues, and also in the application of bandages and other surgical apparatus. Students are allowed to take out to read at their own homes books from the library of the school. Two entrance scholarships of the annual value of £25 and £20, tenable for two years, are offered for competition at the commencement of the winter session. Two Broderip Scholarships of the annual value of £30 and £20, tenable for two years, and two clinical prizes of six and four guineas, are annually awarded to those students who pass the most satisfactory examination at the bedside and in the post-mortem room. The Governors' Prize of twenty guineas is awarded annually to the student who shall have most distinguished himself during his three years' curriculum. Class prizes are also given, and six resident clinical appointments are annually awarded, after competitive examination, to students who have completed their education, and complied with the regulations of the school. The officers thus appointed reside and board in the Hospital free of expense.

The college tutor assists all general students free of charge, especially those who are preparing for examination, and his daily instruction is arranged with a view to avoid the necessity of students obtaining any private teaching apart from that of the medical school.

The fee for attendance on the hospital practice and lectures required by the Colleges of Physicians and Surgeons and the Society of Apothecaries is £90, which may be paid by instalments.

ST. THOMAS'S HOSPITAL.

The admission fee to hospital practice and all the lectures is £40 for the first year, and a similar sum for the second, £20 for the third, and £10 for each succeeding year; or £105 at one payment for unlimited attendance. Special entries may be made to any course of lectures, or to the hospital practice.

There are special departments for diseases of the eye, diseases of women and children, vaccination, diseases of the skin, diseases of the teeth, and mental diseases.

Prizes and Appointments.—The William Tite Scholarship will be awarded at the end of the winter session: A scholarship has been founded by Sir W. Tite, M.P., F.R.S., the proceeds of £1000 Consols, tenable for three years, on proof of continued residence and good conduct. Preference, in case of equality between students, to be given to the son of a medical man, and more particularly of one who has been educated at St. Thomas's Hospital, or is in practice at Bath. To the three most distinguished pupils for general proficiency, the following prizes are awarded:—First year's students—winter, £20, £15, £10; summer, £15, £10, £5. Second year—winter, £20, £15, £10; summer, £15, £10, £5. Clinical and obstetrical clerks and dressers are selected according to merit from among second year's students. The dressers and obstetrical clerks are provided with rooms and commons during their period of attendance in the Hospital free of expense. Third year's students—winter, £20, £15, £10. The Cheselden Medal, founded by George Vaughan, Esq., is awarded in respect of a special examination in Surgery and Surgical Anatomy. The Treasurer's Gold Medal is given annually for general proficiency and good conduct. The Grainger Testimonial Prize, of the value of £20, will be awarded biennially to the third or fourth year's students for a physiological essay, to be illustrated by preparations.

The House-Physicians, the House-Surgeons, and Resident Accoucheur are chosen from gentlemen who have obtained their professional diplomas. All are provided with rooms and commons. The two offices of Medical Registrar and Surgical Registrar are from time to time filled from among gentlemen who have completed their studies in the school. Each Registrar, on completing his annual report to the satisfaction of the Physicians and Surgeons, receives a gratuity of £40.

For further information apply to Mr. Whitfield, Medical Secretary, St. Thomas's Hospital, London, S.E.

UNIVERSITY COLLEGE, LONDON.

The fees for lectures and hospital practice required by the Colleges of Physicians and Surgeons and the Society of Apothecaries during the student's entire course amount to £106 16s., which may be paid as follows:—First winter, £37 6s.; first summer, £11 11s. Second winter, £32 1s.; second summer, £7 7s. Third winter, £11 4s.; third summer, £7 7s.

Entrance Exhibitions.—Three Entrance Exhibitions, of the respective values of £30, £20, and £10 per annum, tenable for two years, are annually awarded, upon examination by printed papers, to gentlemen who are about to commence their first winter's attendance in a medical school. The subjects of the examinations are—Classics, Elementary Mathematics, Natural Philosophy, and either French or German at the option of the candidate. The next examination will take place at the College on September 26 and 27. Notice of intention to compete, with a statement of the modern language in which the candidate wishes to be examined, must be left addressed to the Secretary, not later than 2 p.m. on Saturday, September 21, at the office of the College, where the Regulations may be obtained.

Scholarships and Exhibitions.—The Atkinson Morley Surgical Scholarship, of £45, tenable for three years, is annually awarded to the student who, upon examination, is found to possess the greatest proficiency in the theory and practice of Surgery. The Sharpey Physiological Scholarship, of about £95 per annum, tenable for three years, for proficiency in Biological Science. Filliter Exhibition: A prize of £30 is awarded annually, in July, to the most proficient student in the class of Pathological Anatomy.

Medals and Prizes.—Dr. Fellowes's Clinical Medals, one gold and one silver, awarded at the end of the winter and of the summer session to pupils who have most distinguished themselves by reports and observations on the medical cases in the Hospital. The Liston Gold Medal is awarded at the end of the

summer session to the pupil who has most distinguished himself by reports and observations on the surgical cases in the Hospital. The Alexander Bruce Gold Medal will be awarded for proficiency in pathology and surgery. The Cluff Memorial Prize is awarded every other year for proficiency in anatomy, physiology, and chemistry.

Class Medals and Prizes.—Besides the above, gold and silver medals or other prizes are awarded in each class.

The appointment of Assistant-Curator to the Museum of Anatomy and Pathology, of Demonstrators of Anatomy, of Resident Medical Officer to the Hospital, and of Surgical Registrar—all of which have emoluments attached to them—are almost invariably conferred upon students of the College.

Offices in the Hospital tenable by Students.—Physicians' Assistants, House-Surgeons, Midwifery Assistants, Physicians' Clerks, Surgeons' Dressers, Ward Clerks, and Ophthalmic Surgeons' Assistants are selected from the pupils, without additional fees.

Further information and detailed prospectuses may be obtained at the office of University College, Gower-street, W.C.

WESTMINSTER HOSPITAL.

The entry fee to lectures and hospital practice required by the College of Physicians and Surgeons and the Society of Apothecaries may be paid in one sum of £70, or in three instalments—£35 at the commencement of the first year, and £30 and £10 respectively at the commencement of the second and third years.

In addition to the practice of the Hospital, which contains 191 beds, the pupils of this School are admitted to the practice of the Westminster Ophthalmic Hospital, and to that of the National Hospital for Epilepsy and Paralysis.

Prize Appointments.—A House-Physician and House-Surgeon are appointed annually, by examination, from amongst the senior students, without the payment of any fee; and these officers are provided with board and lodging free of expense. There are Medical and Surgical Registrars, each of whom receives a salary of £40. A Medical Obstetric Assistant boards and resides at the Hospital without fee.

Prizes.—In addition to the appointments above enumerated, there is a scholarship of twenty guineas in Anatomy and Physiology, a prize of the value of £20 for general proficiency, two clinical prizes of the value of five guineas each. Prizes are also awarded to the most meritorious students of the first and second years.

Full particulars as to courses of lectures and mode of instruction will be found in the annual prospectus of this School, and any further information may be obtained by personal application to Dr. Sturges, the Dean of the School, or the Secretary of the Hospital.

ENGLISH PROVINCIAL SCHOOLS AND HOSPITALS.

QUEEN'S COLLEGE, BIRMINGHAM.

Professors of the Medical Faculty.—Winter Courses: Medicine, Dr. James Russell, Dr. Balthazar W. Foster; Surgery, Mr. Oliver Pemberton, Mr. Furneaux Jordan; Anatomy, Mr. Charles J. Bracey, M.B. Lond., and Mr. William Thomas, M.B.; Physiology, Dr. Richard Norris, Mr. T. H. Bartleet, M.B. Lond.; Chemistry, Dr. Alfred Hill, F.C.S.; Demonstrators of Anatomy, Dr. Robert Jolly, F.R.C.S.E. Summer Courses: Midwifery, Mr. John Clay, Mr. John Bassett; Diseases of Women and Children, Mr. Samuel Berry and Dr. R. C. R. Jordan; Forensic Medicine and Toxicology, Mr. Thomas Swain and Dr. Alfred Hill, F.C.S.; Practical Chemistry, Mr. Alfred Anderson, F.C.S.; Botany, Dr. William Hinds; Materia Medica and Therapeutics, Mr. J. St. S. Wilders and Edward Mackey, M.B. Lond.; Ophthalmic Surgery, Mr. J. Vose Solomon; Dental Surgery, Mr. Thomas Hawkins; Comparative Anatomy, Dr. Thomas Savage; Medical Tutor, Mr. Robert W. Edginton.

Hospital practice may be attended at either the General Hospital or the Queen's Hospital, which are equidistant from the College.

Resident Students.—Students may reside within the College, where they will be provided with rooms and board, and will be under the supervision of the Warden and Resident Tutors. Resident students are expected to attend the College Chapel, unless specially exempted by the Warden.

Resident Tutors.—The Professor of Classics, the Professor of Mathematics, and the Medical Tutor.

Scholarships and Prizes.—Two Warneford Scholarships, the Sands Cox Prize (£20), the Warden's Prize, and class prizes are awarded annually.

Fees.—The composition fee for all the lectures required by the examining boards is fifty guineas, payable by two equal instalments.

Students may reside within the College, under the supervision of the Warden and Resident Tutors. Fee, including rooms and board, £50 per annum.

In the Arts department students are prepared for the matriculation examination of the London University, or any of the preliminary examinations.

The prospectus of the medical department, and further information, may be obtained by application to the Rev. the Warden, at the College; to Professor Foster, M.D., 16, Temple-row, Birmingham, Physician to the General Hospital; to Professor Furneaux Jordan, 22, Colmore-row, Birmingham, Surgeon to the Queen's Hospital; or to Professor Swain, 62, Newhall-street, Birmingham, Honorary Secretary to the Professors.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

This Hospital is incorporated by special Act of Parliament as a Clinical Hospital.

Physicians, Dr. Fleming, Dr. Johnston, Dr. Heslop, Dr. Sawyer. Surgeons, Mr. West, Mr. Gamgee, Mr. Furneaux Jordan, Mr. J. St. S. Wilders. Obstetric Surgeon, Mr. John Clay. Dental Surgeon, Mr. C. Sims. Resident Physician and Medical Tutor, Dr. Oliver Leeson. Resident Surgeon and Surgical Tutor, Mr. Gilbert Smith.

Fees for medical and surgical practice, for six months, £10 10s.; for one year, £15 15s.; for three years, £31 10s. Midwifery fee, £2 2s.; dental fee, £1 1s.; both optional.

Several clinical prizes are offered for competition to students of the second, third, and fourth years. They vary from £2 2s. to £5 5s. in value.

The Hospital has special wards for diseases of women and children and venereal diseases. There is a lying-in department, under the superintendence of Mr. John Clay. Clinical lectures and instruction are delivered daily at the Hospital by the Physicians and Surgeons. Special courses of lectures and demonstrations are delivered on Diseases of Women and Children, Diseases of the Skin, Orthopædic Surgery, Bandaging and the Application of Surgical Apparatus, and Venereal Diseases. One of the Honorary Physicians gives special instruction in physical diagnosis, the use of the microscope, laryngoscope, and ophthalmoscope. The arts of prescribing and case-taking are taught by the Resident Physicians. Fees are to be paid to Mr. H. C. Burdett, Resident Secretary and General Superintendent to the Hospital. Special instruction in Dental Surgery by Mr. C. Sims. Fee, £1 1s.

GENERAL HOSPITAL, BIRMINGHAM.

Physicians, Dr. Bell Fletcher, Dr. Russell, Dr. Wade, Dr. Foster. Surgeons, Mr. Alfred Baker, Mr. O. Pemberton, Mr. T. H. Bartleet, Mr. W. P. Goodall, Mr. R. Jolly.

Perpetual fee for medical and surgical practice, thirty guineas.

Special instruction will be given in Diseases of Women and of the Skin; in the Use of the Ophthalmoscope and of the Laryngoscope; in Stethoscopy and Microscopy; Minor Surgery and Bandaging.

Prizes are awarded by the Medical Committee, and valuable resident appointments are filled by students selected by examination.

For additional information apply to Dr. Wade, Treasurer to the Medical Committee, 24, Temple-row, Birmingham.]

BRISTOL MEDICAL SCHOOL, SESSION 1872-73.

The winter session will commence on Tuesday, October 1, 1872. Medicine, Dr. Martyn and Dr. Fox. Surgery, Mr. Coe and Mr. Tibbits. General Anatomy and Physiology, Mr. Atchley and Dr. Spencer. Descriptive and Surgical Anatomy, Mr. Board and Mr. Dobson. Superintendence of Dissections, Messrs. Chute and Norton. Chemistry, Mr. Coomber.

The summer session will commence on May 1, 1873. Midwifery and Diseases of Women, Dr. J. G. Swayne. Forensic Medicine, Mr. W. P. Keall. Materia Medica and Therapeutics, Dr. G. F. Burder. Botany, Mr. A. Leipner. Practical Chemistry, Mr. Coomber. Pathological Anatomy, Dr. Martyn and Dr. Fox. Comparative Anatomy, Mr. Atchley.

Fee for perpetual attendance on all the above courses, except Comparative Anatomy, £57 15s.

Competitive examinations are held amongst students of the first, second, and third years respectively; and prizes of money, instruments, and books are annually awarded.

Medical and Surgical Hospital Practice and Clinical Lectures are attended at the Royal Infirmary or at the General Hospital.

Further information may be obtained on application to the Honorary Secretary, Dr. G. F. Burder.

BRISTOL GENERAL HOSPITAL.

The Hospital contains 140 beds. Physicians: Dr. Martyn, Dr. Burder, Dr. Fripp. Surgeons: Mr. Coe, Mr. Lansdown, N. C. Dobson, Mr. G. F. Atchley. Physician-Accoucheur: Dr. Swayne. Two scholarships of £15 each are awarded annually. Also a scholarship, called the Sanders Scholarship, for the study of Medicine and Surgery, being the interest of £500 (to be given annually), bequeathed to the Hospital by the late J. N. Sanders, Esq.

Fees.—Medical or surgical practice, for six months, £6; one year, £10; perpetual, £20. Extra fee for clinical clerk or dresser, £5 5s. for six months. Library fee, £1 1s. per annum. Dressers reside in the Hospital by rotation and free of expense.

Resident pupils (including board, lodging, and washing), £100 for the first year, £60 for each subsequent year. Or for five years, with apprenticeship to the Hospital, £260.

Further information will be afforded by Mr. Dobson, on application being made to him at the Hospital.

BRISTOL ROYAL INFIRMARY.

The Infirmary contains 242 beds. Physicians, Dr. Brittan, Dr. Fairborough, Dr. Beddoe, Dr. Fox. Surgeons, Mr. Leonard, Mr. Clark, Mr. Tibbits, Mr. Steele, and Mr. Board.

Fees.—For one year, Surgeon's pupil, £12 12s.; Dresser (extra fee), £12 12s. For two years (at one payment), Surgeon's pupil, £21; Dresser (extra fee), £21. For three years (at one payment), Surgeon's pupil, £26 5s.; Dresser (extra fee), £26 5s. Dressers reside in the house in weekly rotation. Physician's pupil, for six months, £8; one year, £15; eighteen months, £20; perpetual, £25. Clinical Clerks are appointed without extra fee. A gold medal and other prizes are awarded annually. Patients admitted in 1871—In-patients, 2579; out-patients, 20,540; total, 23,119.

LEEDS SCHOOL OF MEDICINE.

The winter session will commence on Monday, October 1, 1872. Anatomy, by Mr. James Seaton, Dr. Robert T. Land, and Mr. John A. Nunneley. Physiology, by Messrs. C. J. Wright and James Walker. Principles and Practice of Medicine, by Dr. John D. Heaton, and Dr. T. C. Allbutt. Principles and Practice of Surgery, by Messrs. Claudius G. Wheelhouse, T. Pridgin Teale, and T. R. Jessop. Chemistry, by Mr. J. Chapman Wilson. Materia Medica, by Dr. John E. Eddison. Midwifery, by Mr. W. Hall. Forensic Medicine, by Mr. Thomas Scattergood. Botany, by Mr. Edward Atkinson. Comparative Anatomy, by Mr. C. G. Wheelhouse and Dr. T. C. Allbutt. Assistant-Demonstrators of Anatomy, Messrs. Robert Parr Oglesby and Edmund Robinson. Demonstrations in Operative Surgery, by Messrs. C. G. Wheelhouse, Pridgin Teale, and T. R. Jessop. Demonstrations of Skin Diseases, by Dr. Allbutt, at the Infirmary. Ophthalmoscopic Demonstrations, by the Surgeons of the Eye and Ear Department of the Infirmary. Total fees, entitling to all the lectures and hospital practice required by the licensing boards, £88 4s. These fees may be paid at once, or in two instalments at the commencement of the first and second years. Entrance fee to library and reading-room, £1 1s., to be paid by all students on entrance. Instructions in vaccination, as required by the College of Surgeons and the Poor-law Board, is given by Mr. Holmes, of Burmantofts, one of the public vaccinators. Fee, £1 1s. At the close of each session, examinations for prizes are held, when silver and bronze medals, books, and certificates of honour are presented according to merit. Two clinical prizes of £10 each, a Forensic Medicine Prize of £10, and two chemical scholarships are awarded to students. House-Surgeoncies, clinical clerkships, and dresserships are open to the students.

Honorary Medical Officers of the Hospital.—Consulting Physician: Charles Chadwick, M.D. Consulting Surgeons: William Hey, F.R.C.S., and Samuel Hey, F.R.C.S. Physicians: John Deakin Heaton, M.D., T. Clifford Allbutt, M.D., and John Edwin Eddison, M.D. Surgeons: C. G. Wheelhouse, F.R.C.S.; T. Pridgin Teale, M.A., F.R.C.S.; T. R. Jessop, F.R.C.S.; and James Seaton, L.R.C.S.

Terms of Attendance upon the Hospital Practice.—The fees for attendance upon the medical practice alone, or upon the surgical practice alone, are as follows, being the same in each case:—One winter session, £7 7s.; one summer session £6 6s.; twelve months, £12 12s.; eighteen months, £15 15s.; three years, £21. Applications for medical practice are to be made to Dr. Heaton, Claremont, between 9 and 10 a.m. Applications for surgical practice are to be made to Mr. T. Pridgin Teale, 20, Park-row, between 10 and 12 a.m.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

The introductory address will be delivered on October 1, 1872, at 3 p.m., by Mr. W. Mitchell Banks.

Hospital Practice, Royal Infirmary.—Physicians: Dr. Turnbull, Dr. Waters, Dr. Glynn. Surgeons: Mr. Stubbs, Mr. Bickersteth, Mr. Hakes. Assistant-Surgeon: Mr. Harrison. House-Surgeons: Dr. Cleaver and Mr. Matthews. Pathologist: Mr. Banks. Dental Surgeon: Mr. Snape.

Terms for Hospital Attendance and Clinical Lectures:—For six months' medical practice, £5 5s.; one year, £6 6s. For six months' surgical practice, £6 6s.; one year, £8 8s.

Lectures, Winter Session.—Medicine, Dr. Waters. Surgery, Mr. Harrison. Physiology, Dr. Caton. Anatomy, Mr. W. M. Banks. Dissection, Mr. Coughtrey. Pathology, Dr. Davidson. Chemistry, Dr. Brown. Practical Physiology, Rushton Parker, M.B.

Lectures, Summer Session.—Midwifery, Dr. Steele. Diseases of Children, Dr. Gee. Materia Medica, Dr. Nevins. Medical Jurisprudence, Dr. E. Whittle. Toxicology and Practical Chemistry, Dr. Brown. Botany, Dr. W. Carter. Comparative Anatomy and Zoology, Dr. Dickinson.

Exhibitions.—Four exhibitions (value £31 10s. each), consisting of six months' free board and residence in the Royal Infirmary.

The fee for all the lectures required by the Colleges of Surgeons and Physicians and the Apothecaries' Hall is forty-five guineas (exclusive of Practical Chemistry).

LIVERPOOL NORTHERN HOSPITAL.

The winter session will commence on Monday, October 2. Physicians: Dr. Davidson and Dickinson. Surgeons: Mr. Manifold, Mr. Lowndes, and Mr. Branston Nash. Junior Surgeon: Mr. John Bradley. Dental Surgeon: Mr. James Lloyd.

The Hospital contains 146 beds, which are mainly devoted to severe accidents and cases of acute disease. There is a special ward for the treatment of the diseases and accidents of children. About 4500 cases are annually treated at the Hospital, of which about 1500 are in-patients. The visits of the Physicians and Surgeons are made between one and two o'clock p.m. daily. Clinical lectures are regularly delivered by the Physicians and Surgeons during the winter and summer sessions. Clinical clerkships and dresserships are open to all the students, without additional fee. Clinical prizes will be awarded at the termination of the winter session.

Fees for Hospital Practice and Clinical Lectures.—Perpetual, 25 guineas; one year, 10 guineas; six months, 7 guineas; three months, 4 guineas. Students can enter to the medical or surgical practice separately, on payment of half the above fees. The Hospital receives one resident pupil, fee 60 guineas per annum. Attendance on the practice of this Hospital qualifies for all the Examining Boards.

For further particulars apply to the House-Surgeon, Mr. Vasey.

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY (INCORPORATED WITH OWENS COLLEGE).

The winter session will commence October 1.

An address, introductory to the College session generally, will be given in the Town Hall, Manchester, on Monday, October 7.

Winter Session, 1872-73.—Physiology, Mr. Smith. Descriptive Anatomy, Mr. Lund. Anatomical Demonstrations, Mr. S. M. Bradley. Chemistry, Mr. Stone. Medicine, Dr. Roberts and Dr. Morgan. Surgery, Mr. Southam. The Eye, Mr. Hunt. Practical Physiology, Mr. Smith. Practical Surgery, by the Surgeons of the Hospital.

Summer Session.—Midwifery, Dr. Thorburn. General Pathology and Morbid Anatomy, Dr. Simpson. Materia Medica, Mr. Somers. Forensic Medicine, Mr. Harrison. Botany, Mr. Grindon. Practical Chemistry, Mr. Stone. Comparative Anatomy, Mr. Bradley.

Perpetual fee to the whole of the lectures required, £42, which may be paid in instalments.

Hospital practice at the Royal Infirmary, where clinical lectures are regularly delivered by the Physicians and Surgeons of the institution; composition fee £42.

Scholarships.—In addition to prizes, amounting to 36 guineas, for general proficiency, three scholarships for perpetual students will be offered for competition—one of £20 for third year's students; one of £15 for second year's students; one of £10 for first year's students; also the Dumville surgical prize, value about £20.

Further particulars may be obtained from Mr. Southam, Director of the School, 10, Lever-street, Manchester; and prospectuses may be had at the College or the School, 10, Faulkner-street.

UNIVERSITY OF DURHAM.—COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

Winter Session, commencing October 1, 1872.—Physiology, Dr. Hume. Anatomy, Dr. Nesham, Mr. Armstrong, and Mr. Russell. Medicine, Dr. Charlton and Dr. Philipson. Surgery, Dr. Heath. Chemistry, Professor Marreco, M.A.

Summer Session.—Midwifery, Dr. Gibson. Botany, Mr. Thornhill and Mr. H. E. Armstrong. Medical Jurisprudence (vacant). Materia Medica, Dr. Arnison. Therapeutics, Dr. Humble. Practical Chemistry, Professor Marreco, M.A. Operative Surgery, Dr. Heath. Pathological Anatomy, Dr. Gibb. Pharmacy, Mr. Proctor.

Fees for Lectures.—Composition fee for all the lectures qualifying for the Licence in Medicine and the Mastership in Surgery of the University of Durham, the Licence and Membership of the Royal College of Physicians, the Diploma of the College of Surgeons, and the Licence of the Apothecaries' Society, payable on entering to the first winter session, £52 10s. Perpetual ticket for Pharmacy curriculum, £12 12s. Separate courses of lectures, each £4 4s. The composition fee entitles the holder to attend the lectures on Botany, Chemistry, Materia Medica, and Pharmacy, and to use the Museum of Materia Medica in the library of the College.

Hospital Practice.—This can be attended at the Newcastle Infirmary, which contains 230 beds. Midwifery, Diseases of the Eye, and Insanity can be specially studied. The laboratories, libraries, and museums are open daily.

Fees for Hospital Practice.—Twelve months, £7 7s.; six months, £5 5s.; three months, £4 4s.; perpetual fee, £17 17s.; or, if paid by instalments, first year £7 7s., second year £6 6s., third year £5 5s. These fees also are payable in advance.

Medical Scholarships in the University of Durham.—Four scholarships, of £25 a year each, tenable each for four years. Two resident clinical clerkships, four resident dresserships, and four non-resident dresserships are conferred for merit. Dickinson Memorial Scholarship, £15, tenable for one year, for general proficiency. By a recent Act of Convocation, students may now proceed to the degrees of M.D. and C.M. of the University of Durham by keeping the necessary terms in Arts either at Durham or Newcastle.

College Medals.—At the end of each session a silver medal and certificates of honour will be awarded in each of the required classes.

Further particulars may be obtained from Mr. Luke Armstrong, Registrar, or of Dr. Arnison, Secretary.

Clinical clerkships are open to the students.

T. O. Wood, L.R.C.P., Medical Superintendent of the Dunston Lodge Lunatic Asylum, will deliver a course of lectures on Psychological Medicine, illustrated by cases in the Asylum, to students in their third and fourth years, during the latter half of the winter session. Due notice will be given of the time.

Medical Tutor and Demonstrator, J. Resch, M.A., M.B., M.C., who will superintend and assist the students in their studies, and during the summer session will give a complete course of Practical Physiology.

SHEFFIELD SCHOOL OF MEDICINE.

The winter session will commence on October 1. Anatomy, Descriptive and Surgical, Mr. Skinner and Mr. A. Jackson. Demonstrations of Anatomy, Messrs. E. Skinner, Clark, and T. H. Morton. Physiology, Mr. Thos. Leeds and Mr. S. Morton. Principles and Practice of Medicine, Dr. Frank-Smith. Principles and Practice of Surgery, Mr. W. F. Favell and Mr. Parker. Chemistry, Mr. Allen. Dental Mechanics, Mr. G. Mosely. Clinical Medicine, Dr. De Bartolomé, Dr. Law, and Dr. Frank-Smith. Clinical Surgery, Mr. Barber, Mr. W. F. Favell, and Mr. Parker.

Summer session, commencing May 1, 1873. Midwifery and Diseases of Women, Dr. Keeling and Dr. Hime. Materia Medica and Therapeutics, Dr. Young. Medical Jurisprudence and Toxicology, Mr. Baker and Mr. Harrison. Botany, Mr. Birks. Practical Chemistry, Mr. Allen. Dental Surgery, Dr. Merryweather. Demonstrations of Pathology and Microscopy, Mr. Hallam (at the Infirmary). Demonstrations of Operative Surgery, Mr. Favell and Mr. Parker, F.R.C.S. Demonstrations of Practical Histology and Physiology, Dr. Thomas. Practical Surgery, Mr. Hallam.

Medical and Surgical Practice.—Sheffield General Infirmary.—Physicians, Dr. De Bartolomé, Dr. Law, Dr. Frank-Smith. Surgeons, Mr. Barber, Mr. Favell, Mr. Parker. House-Surgeon, Mr. Hallam.

The Infirmary contains 160 beds for in-patients; shortly to be increased to 200.

The fees for perpetual attendance at the Infirmary are £15 15s. for Medical, £21 for Surgical, practice. For twelve months' practice: Medical, £10 10s.; Surgical, £6 6s. Six months': Medical, £6 6s.; Surgical, £6 6s.

Public Hospital and Dispensary.—100 beds. Physicians, Dr. J. Hall, Dr. Law, and Dr. Mitchell. Surgeons, Mr. Chesman, Mr. A. Jackson, and Dr. Keeling.

Sheffield Hospital for Diseases of Women.—Medical Officers: Dr. Jackson, Dr. Keeling, Dr. Hime, Mr. Woolhouse.

For further information apply to the staff of the institution.

Table of Fees, including Demonstrations.—Anatomy and Physiology, first course, £6 6s., second course, £4 4s.; Practice of Medicine, first course, £4 4s., second course, £2 2s.; Practice of Surgery, first course, £4 4s., second course, £2 2s.; Chemistry, first course, £4 4s.; Midwifery and Diseases of Women, first course, £3 3s.; Materia Medica, first course, £3 3s.; Medical Jurisprudence, first course, £3 3s.; Botany, first course, £3 3s.; Practical Chemistry, first course, £3 3s.

Perpetual fee for attendance on all the lectures required by the Royal College of Surgeons and the Apothecaries' Hall, £40.

All further information may be obtained on application to the Hon. Secretaries, Dr. Frank-Smith, 115, Norfolk-street, and Mr. A. Jackson, St. James's-row, Sheffield.

MEDICAL SCHOOLS AND HOSPITALS IN SCOTLAND.

UNIVERSITY OF EDINBURGH.—1872-73.

Principal—Sir Alex. Grant, Bart., LL.D.

The session will be publicly opened with an introductory address by the Principal, on Friday, November 1, 1872. The classes for the different branches of study will be opened as follows, and will meet daily (Saturdays excepted) unless otherwise stated:

Faculty of Medicine.—Materia Medica, Professor Sir Robert Christison, Bart., M.D.; Chemistry, Professor Crum-Brown, M.D., D.Sc.; Surgery, Professor Spence; Institutes of Medicine or Physiology, Professor Bennett, M.D.; Midwifery and Diseases of Women and Children, Professor Simpson, M.D.; Clinical Surgery, Professor Lister; Clinical Medicine, Professors Bennett, Laycock, Maclagan, and Sanders; Anatomy, Professor Turner, M.B.; Natural History, Professor Wyville Thomson; Practice of Physic, Professor Laycock, M.D.; General Pathology, Professor Sanders, M.D.; Anatomical Demonstrations, Professor Turner; Botany, Professor Balfour, M.D.; Medical Jurisprudence, Professor Maclagan, M.D. The lectures on Botany, Natural History, and Medical Jurisprudence are given in the summer session.

Royal Infirmary, at noon, daily. Practical Anatomy, Monday, October 1, under the superintendence of Professor Turner. Practical Chemistry, under the superintendence of Professor Crum-Brown. Practical Physiology, under the superintendence of Professor Bennett.

During the summer session, lectures will be given on the following subjects:—Botany, Professor Balfour; Practical Physiology, including Histology, Professor Bennett; Medical

Jurisprudence, Professor Maclagan; Clinical Medicine, Professors Bennett, Laycock, Maclagan, and Sanders; Clinical Surgery, Professor Lister; Anatomical Demonstrations, Professor Turner; Practical Chemistry, under the direction of Professor Crum-Brown; Practical Anatomy, under the superintendence of Professor Turner; Natural History, Professor Wyville Thomson; Medical Psychology and Mental Diseases, with practical instruction at an asylum, Professor Laycock; Operative Surgery, Professor Spence; Practical Pathology and Morbid Anatomy, Professor Sanders; Diseases of Women, Professor Simpson.

A table of fees may be seen in the Matriculation Office and in the Reading-room of the Library.

SCHOOL OF MEDICINE, EDINBURGH.

The practical anatomy rooms and chemical laboratories open on October 1. The introductory address will be delivered by Dr. Angus Macdonald on Friday, November 1, at eleven o'clock. Lectures commence on Monday, November 4.

Winter Session, 1872-73.—Surgery, Dr. P. H. Watson, Dr. Joseph Bell, Dr. Chiene, and Dr. John Duncan; Chemistry (lectures, Practical Chemistry, and Analytical Chemistry), Dr. Stevenson Macadam; Midwifery and Diseases of Women and Children, Dr. Matthews Duncan; Physiology (Royal Infirmary), Dr. Arthur Gamgee; Clinical Medicine (Royal Infirmary), Drs. Rutherford Haldane, George W. Balfour, and Grainger Stewart, and Dr. Matthews Duncan (for Diseases of Women); Clinical Surgery (Royal Infirmary), Dr. P. H. Watson and Mr. Annandale; Anatomy (lectures, Anatomical Demonstrations, and Practical Anatomy), Dr. P. D. Handyside; Medical Jurisprudence, Dr. Littlejohn; Practice of Physic, Dr. Rutherford Haldane, and Dr. Claud Muirhead; General Pathology, Dr. John Wyllie; Vaccination, Dr. Husband.

Summer Session, 1873.—Classes open on Thursday, May 1.—Materia Medica and Therapeutics, Dr. Thomas R. Fraser; Midwifery and Diseases of Women and Children, Dr. Keiller and Dr. Angus Macdonald; Medical Jurisprudence (Royal Infirmary), Dr. Littlejohn; Clinical Medicine (Royal Infirmary), Drs. Rutherford Haldane, G. W. Balfour, and Grainger Stewart, and Dr. Matthews Duncan (for Diseases of Women); Clinical Surgery (Royal Infirmary), Dr. P. H. Watson, Mr. Annandale; Anatomy (Practical Anatomy, Surgical Anatomy—demonstrations and examinations), Dr. P. D. Handyside; Chemistry (Practical Chemistry, Analytical Chemistry), Dr. Stevenson Macadam; Vaccination, Dr. Husband; Diseases of the Eye (with practical instruction in the use of the ophthalmoscope), Dr. Argyll Robertson; Diseases of Children, Dr. Stevenson; Surgical Appliances and Operative Surgery, Dr. Joseph Bell; Operative Surgery and Surgical Anatomy, Dr. Chiene; Practical Surgery, Dr. Duncan.

Fees.—For a first course of lectures, £3 5s.; for a second, £2 4s.; perpetual, £5 5s. To those who have already attended a first course in Edinburgh the perpetual fee is £2 4s. Second course of Midwifery, £1 3s. Practical Anatomy (six months' course), £3 3s. Anatomical Demonstrations, £2 2s.; when taken along with Practical Anatomy, £1 1s.; perpetual, £4 4s. Practical Chemistry, £3 3s.; Analytical Chemistry, £2 a month, £5 for three months, or £10 for the session of six months. Vaccination, £1 1s. For summer courses of Clinical Surgery, Clinical Medicine, Practical Anatomy (including Anatomical Demonstrations, Operative Surgery, and Diseases of the Eye), each £2 2s.

The minimum cost of the education in this School of Medicine for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons, including the fees for the joint examination, is £90 4s., which is payable by yearly instalments during the period of study; whilst the minimum cost for the single qualification of either Physician or Surgeon, including the fee for examination, is £80.

ROYAL INFIRMARY, EDINBURGH.

In this Hospital a portion of the beds is set apart for Clinical Instructors by the Professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the Ordinary Physicians and Surgeons. Special instruction is given on Diseases of Women, Physical Diagnosis, etc., and on Diseases of the Eye. Separate wards are devoted to fever, venereal diseases, diseases of women, diseases of the eye; also to cases of incidental delirium or insanity. Professors of Clinical Medicine, Dr. Bennett, Dr. Laycock, Dr. Maclagan, Dr. Sanders. Extra Physicians and Lecturers on Diseases Peculiar to Women, Dr. J. Matthews Duncan, Dr. Alex. R. Simpson. Ordinary Physicians and Lecturers on Clinical Medicine, Dr. Rutherford Haldane, Dr. Geo. W. Balfour, Dr. T. Grainger Stewart. Assistant-Physicians, Dr. Claud Muirhead, Dr. Thos. R. Fraser. Consulting Surgeons, Dr. Dunsmure, Dr. J. D. Gillespie. Professor of Surgery, Mr. Spence. Ordinary Acting Surgeons, Dr. P. H. Watson, Mr. Thos. Annandale (Lecturers on Clinical Surgery), Dr. Joseph Bell. Professor of Clinical Surgery, Mr. Lister. Ophthalmic Surgeons, Mr. Walker, Dr. D. A. Robertson. Extra Surgeon for treatment of Ovarian Diseases, Dr. Thomas Keith. Assistant-Surgeons, Dr. John Duncan, Dr. John Chiene. Dental Surgeon, Dr. John Smith. Pathologist, Dr. James B. Pettigrew. Hospital tickets.—Perpetual, in one payment, £10; annual, £5 5s.; half-yearly, £3 3s.; quarterly, £1 11s. 6d. Separate payments for two years entitle the student to a perpetual ticket. *Appointments.*—No fees are payable for any medical or surgical appointments in this Hospital. The following appointments are open to students:—1. Four Resident Physicians and four Resident Surgeons. 2. Non-Resident Clinical Clerks are appointed by the Physicians and Surgeons. 3. Dresserships. Each Surgeon appoints from four to nine Dressers. 4. Assistants in the Pathological Department.

UNIVERSITY OF ABERDEEN.—FACULTY OF MEDICINE.

Winter Session, commencing on Wednesday, October 30.—Anatomy, Professor Struthers, M.D., £3 3s. Practical Anatomy and Demonstrations, Professor Struthers and the Demonstrator, £2 2s. Chemistry, Professor Brazier, £3 3s. Institutes of Medicine, Professor Ogilvie, £3 3s. Surgery, Professor Pirrie, £3 3s. Practice of Medicine, Professor Macrobin, M.D., £3 3s. Midwifery and Diseases of Women and Children, Professor Inglis, £3 3s. Zoology, with Comparative Anatomy, Professor Nicol, £3 3s. Medical Jurisprudence, Professor Ogston, £3 3s.

Summer Session, commencing on the first Monday in May.—Botany, Professor Dickie, £3 3s. Materia Medica (100 lectures), Professor Harvey, £3 3s. Practical Anatomy and Histology, Professor Struthers and the Demonstrator, £2 2s. Practical Chemistry, Professor Brazier, £3 3s. Zoology, with Comparative Anatomy, Professor Nicol, £3 3s.

Matriculation fee for the winter and summer sessions, £1. For the summer session alone, 10s.

Royal Infirmary: Perpetual fee to hospital practice, £6; or first year, £3 10s.; second year, £3. Clinical Medicine, Drs. Smith Beveridge and A. Fraser, £3 3s. Clinical Surgery, Drs. Pirrie, Kerr, and Fiddes, £3 3s. Pathological Anatomy, Dr. Rodger, £2 2s. Practical Ophthalmology, Dr. A. D. Davidson. Dental Surgery, Mr. Williamson.

For further information, apply to Dr. Macrobin, Dean of the Faculty of Medicine.

UNIVERSITY OF GLASGOW.—FACULTY OF MEDICINE.

The classes open for the winter session on Monday, October 21, 1872, when an introductory lecture will be given by Professor Leishman.

Chemistry, Practical Chemistry, and Chemical Laboratory, Dr. Anderson, £3 3s. Practice of Physic, Dr. Gairdner, £3 3s. Anatomy, Anatomical Demonstrations, and Practical Anatomy, Dr. Allen Thomson and Demonstrator, £6 6s. Materia Medica, Dr. Cowan, £3 3s. Forensic Medicine, Dr. P. A. Simpson, £3 3s. Surgery, Dr. Macleod, £3 3s. Midwifery, Dr. Leishman, £3 3s. Institutes of Medicine, Dr. A. Buchanan, £3 3s. Pathology, Dr. J. Coats, £3 3s. Clinical Medicine and Clinical Surgery, Physicians and Surgeons of Royal Infirmary.

Further information may be obtained from the Registrar of the University.

ANDERSON'S UNIVERSITY, GLASGOW.

The winter session will be opened on Tuesday, October 29; the summer session on the first Tuesday of May. Anatomy, Professor George Buchanan, M.D., and Demonstrator; Chemistry, Professor Thorpe, Ph.D., F.R.S.E.; Institutes of Medicine (Physiology), Professor E. Watson, M.D.; Surgery, Professor Dunlop, M.D.; Materia Medica, Professor Morton, M.D.; Practice of Medicine, Professor McCall Anderson, M.D.; Midwifery (in summer), Professor J. G. Wilson, M.D.; Medical Jurisprudence (in summer), Professor Pierce A. Simpson, M.D.; Botany (in summer), Mr. Hennedy; Ophthalmic Medicine and Surgery, Dr. Wolfe.

Class Fees.—For each of the above courses of lectures, first

session, £2 2s.; second session, £1 1s.; afterwards free. Anatomy Class Fees: For both courses (lectures and demonstrations on Practical Anatomy), first session, £4 4s.; second session, £4 4s. The dissecting-room is free for two sessions to those who attend both courses of Anatomy. After the second year the fee for admission to the dissecting-room is £1 1s. per session.

The fees for all the lectures in the Medical School required of candidates for the diplomas of Physician and Surgeon amount to £30.

Diploma in Medicine and Surgery.—Gentlemen who have studied in this School are eligible for examination before any of the Royal Colleges, and in Glasgow they may obtain the diplomas of Physician and Surgeon or General Practitioner, which entitles to registration under the Medical Act, with the right to practise Medicine and Surgery in any part of the kingdom.

A syllabus, with full information, may be obtained by applying to Mr. Arthur Forbes, 146, Buchanan-street, Glasgow, Clerk to the Medical School.

GLASGOW ROYAL INFIRMARY.

The winter session commences on November 1, 1872. Hour of visit and of lectures at 9 a.m. Physicians, Drs. Stevens, Perry, M'Call Anderson, Scott Orr, W. J. Gairdner, and Maclaren. Surgeons, Drs. Dewar, Macleod, Buchanan, Watson, and Morton. Pathologist, Dr. Joseph Coats.

Beds, 550. Attendance at Dispensary, 2 p.m.

The valuable pathological museum is open to all students who desire to examine the preparations.

Five Physicians' and five Surgeons' Assistants perform the duties of House-Physicians and House-Surgeons. These offices, held for one year, are open to students who have completed their fourth year of study. They are lodged and boarded in the Hospital for £25 per annum. Dressers to the surgical wards and Clerks to the Dispensary are appointed without fee.

Fees admitting to the medical and surgical practice of the Hospital and Dispensary:—For the first year, £3 3s.; second year, £3 3s.; third and perpetual, £1 1s.; for six months' attendance, £2 2s.; three months', £1 11s. 6d. Practical Pharmacy, six months, £3 3s.

Fees for clinical lectures, on Medicine, £3 3s., on Surgery, £3 3s.

Medical Superintendent, Dr. M. Thomas. Secretary, Mr. H. Lamond, 64, West Regent-street.

SCHOOLS AND HOSPITALS IN IRELAND.

SCHOOL OF PHYSIC, UNIVERSITY OF DUBLIN.

The school was established by Act of the Irish Parliament 4th George III., cap. 84, and is under the joint government of the Board of Trinity College and the King and Queen's College of Physicians.

Institutes of Medicine, Professor Law. Materia Medica and Pharmacy, Professor A. Smith. Surgery, Professor R. Smith. Anatomy and Surgery, Professor M'Dowel. Practical Anatomy, Dr. Bennett. Chemistry, Professor Apjohn. Practice of Medicine, Professor Moore. Midwifery, Professor Sinclair. Botany, Dr. E. Perceval Wright. Medical Jurisprudence, Professor Travers. Zoology, Professor Alexander Macalister, M.D. Physics, Professor John Leslie, M.A. Hospital practice and clinical lectures at Sir Patrick Dun's Hospital.

SIR PATRICK DUN'S HOSPITAL.

Consulting Physician, William Stokes, M.D., Regius Professor of Physic. Consulting Surgeon, Robert Adams, M.Ch., Regius Professor of Surgery. The Clinical Lectures in Medicine and Surgery are delivered by—Physicians: Robert Law, M.D., King's Professor of the Institutes of Medicine; William Moore, M.D., King's Professor of the Practice of Medicine; Aquilla Smith, M.D., King's Professor of Materia Medica and Pharmacy; Edward B. Sinclair, M.D., King's Professor of Midwifery. Surgeons: Thomas E. Little, M.D.; Robert W. Smith, M.Ch., Trinity College, Professor of Surgery; Edward H. Bennett, M.Ch., University Anatomist; Richard G. Butcher, M.D., University Lecturer in Practical Surgery. The Physicians and Surgeons attend for clinical instruction on alternate days.

Hospital fee for twelve months, including nine months' Clinical Lectures, nine guineas. Attendance on this Hospital is recognised by all licensing bodies.

ST. VINCENT'S HOSPITAL, DUBLIN.

The winter session will commence on Friday, November 1, 1872. Physicians: Dr. Francis J. B. Quinlan and Dr. Robert Cryan. Surgeons: Dr. Edward D. Mapother and Mr. William H. O'Leary. Surgeon-Dentist: Mr. William J. Doherty. Apothecary: Mr. Boland.

Further particulars may be learned on application to the Secretary, or at the Hospital during the hours of attendance.

THE QUEEN'S UNIVERSITY IN IRELAND.—QUEEN'S COLLEGE, BELFAST, FACULTY OF MEDICINE.

The lectures will commence on Tuesday, October 29th. Anatomy and Physiology, Dr. P. Redfern. Chemistry, Dr. Thomas Andrews. Practice of Medicine, Dr. James Cuming. Practice of Surgery, Dr. A. Gordon. Materia Medica, Dr. J. S. Reid. Midwifery, Dr. R. F. Dill. Medical Jurisprudence, Dr. J. F. Hodges. Natural Philosophy, Dr. Everett. Zoology and Botany, Dr. R. O. Cunningham. The demonstrations in Anatomy are delivered by Dr. Charles. The courses of Botany and Practical Chemistry, and a second course of Experimental Physics, will commence in May. After the session 1872-73 the lectures in Midwifery and in Medical Jurisprudence will be summer courses.

Fees.—Anatomy and Physiology—First course, £3; each subsequent course, £2. Anatomical Demonstrations and Practical Anatomy—each course, £3. Practical Chemistry, £3. Other medical lectures—first course, £2; each subsequent course, £1.

Two medical scholarships are awarded to the students of each year of the medical course. The examinations commence on October 20.

Belfast General Hospital.—Clinical Instruction—Perpetual fee, payable in one sum of £10 10s., or in two instalments of £5 5s. each on entering for the first and second years. Hospital fee, 10s. 6d. each session. Four resident pupils are appointed each session.

Belfast Lying-in Hospital.—Fee for the session, £3 3s.

QUEEN'S COLLEGE, CORK, FACULTY OF MEDICINE.—Session 1872-73.

Anatomy, Physiology, and Practical Anatomy, Dr. J. H. Corbett. Practice of Medicine, Dr. D. C. O'Connor. Practice of Surgery, Dr. W. Tanner. Materia Medica, Dr. P. O'Leary. Midwifery, Dr. J. R. Harvey. Natural Philosophy, Mr. John England. Chemistry and Practical Chemistry, Dr. M. Simpson. Zoology and Botany, Dr. J. R. Greene. Clinical Medicine and Clinical Surgery, at the North and South Infirmaries, by the Physicians and Surgeons of these institutions. Clinical Midwifery, at the Lying-in Hospital. The medical session will be opened on Monday, November 4, 1872, and the lectures will commence on the same day.

Eight scholarships, value £25 each, are awarded to students of Medicine.

For further information apply to Mr. Robert John Kenny, Registrar.

QUEEN'S COLLEGE, GALWAY, FACULTY OF MEDICINE.

Anatomy and Physiology, and Practical Anatomy, Dr. Cleland. Practice of Medicine, Dr. N. Colahan. Practice of Surgery, Dr. J. V. Brown. Materia Medica and Medical Jurisprudence, Mr. S. M'Coy. Midwifery and Diseases of Women and Children, Dr. R. Doherty. Chemistry, Dr. T. H. Rowney. Natural Philosophy, Dr. A. H. Curtis. Botany and Zoology, Dr. A. G. Melville. Logic and Mental Philosophy, Dr. T. W. Moffett. The County Galway Infirmary, Town, and Fever Hospitals are in the immediate vicinity of the Queen's College. They are visited every morning by Professors of the College, who deliver clinical lectures.

Eight scholarships of the value of £25 each, and exhibitions varying in value from £10 to £18, are appropriated to students pursuing the course for the degree of M.D.

Fees.—Anatomy and Physiology, £3, first session; afterwards, £2. Practical Anatomy, £3; Practical Chemistry, £3; Operative Surgery, £3; other classes, £1 for each course extending over one term only—£2 for each course extending over more than one term—and £1 for each reattendance on the same. The College session is divided into three terms. The first term commences on October 15, 1872, and ends on December 21, 1872.

For further information, apply to the Registrar, T. W. Moffett, LL.D.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—SCHOOL OF SURGERY.—Session 1872-73.

The public lectures and the usual winter course will commence on October 30. Anatomy and Physiology, Dr. Mapother. Descriptive Anatomy, Dr. Bevan and Mr. Morgan. Surgery, Mr. Hargrave and Dr. J. S. Hughes. Practice of Medicine, Dr. Benson. Chemistry, Dr. Barker. Materia Medica, Dr. Macnamara. Midwifery, Dr. Sawyer. Medical Jurisprudence, Dr. Davy. Practical Chemistry, Dr. Barker. Botany, Dr. Minchin. Hygiene, Dr. Cameron. Dissections, under the direction of the Professors of Anatomy and the Demonstrators, Drs. Croly, Stoney, Stoker, Ormsby, Kilgarriff, Wheeler, and Kane, commence on October 1.

The summer session commences in April and terminates in July, including Materia Medica, Medical Jurisprudence, Botany, Practical Chemistry, Midwifery, Ophthalmic and Aural Surgery, and Hygiene.

The fee for each of the above courses is £3 3s., except Comparative Anatomy and Hygiene, which are free. Practical instruction in Operative Surgery is given by the Professors of Surgery separate from the surgical lectures. Fee, £5 5s.

For further information, application to be made to the Registrar, John Brennen, Esq., at the College.

DR. STEEVENS' HOSPITAL, DUBLIN,

Contains 250 beds, with distinct wards for fever, syphilis, diseases of the eye, and diseases of females. There are also in connexion with the Hospital a Maternity Department and an extensive Dispensary for out-patients. Systematic courses of lectures are delivered during the winter and summer sessions on all subjects required by the Colleges, Halls, and the Public Service. Students enjoy the advantages of a reading-room, museum, and lending library. There is accommodation in the Hospital for two medical and six surgical resident pupils as Dressers. Fee, £21, including Hospital certificate. Special private classes are held for the preparation of gentlemen for the licensing bodies and competitive examinations. Senior middle and junior exhibitions will be awarded at the end of the session to those whose answering exhibits general proficiency in every branch of their professional studies. There will also be prizes for the best reports of cases which have occurred in the Hospital during the session. Two Midwifery Assistants are each year (month of November) selected by competitive examination, salary £30 per annum. The dissecting-rooms will be opened on the first Monday in October for Practical Anatomy. The Lecturers and Demonstrators attend throughout the day. The sessional courses of lectures will commence on the first Monday in November. Fees—Hospital, £7 7s.; lectures, £3 3s. each course; Perpetual, to all educational courses required by Colleges, Halls, and Public Service, 75 guineas, payable in two instalments.

Further particulars on application to the Resident Surgeon, at the Hospital; or to E. Hamilton, M.D., Secretary, 120, Stephen's-green.

THE ADELAIDE HOSPITAL, PETER-STREET, DUBLIN.

Physicians, Dr. Henry H. Head and Dr. James Little. Surgeons, Dr. Albert J. Walsh, Dr. John K. Barton, and Mr. Benjamin Wills Richardson. Obstetric Physician, Dr. Lombe Atthill. Ophthalmic Surgeon, H. Rosborough Swanzy, M.B. Assistant-Physician, Dr. Walter G. Smith. Assistant-Surgeon, Montgomery A. Ward, M.B., M.Ch.

The central position of this Hospital renders it peculiarly convenient to gentlemen attending lectures at the University, College of Surgeons, or Ledwich School. The arrangements for clinical teaching have been made as complete as possible, and are such as not to interfere with attendance at the medical schools. There are fever wards apart from the Hospital, and two wards for infants and children. Special hours are devoted to clinical instruction in the Diseases peculiar to Women, the Diseases of the Eye, and Cutaneous Diseases; and students are individually instructed in the Use of the Stethoscope, Ophthalmoscope, Laryngoscope, and Microscope. Two resident pupils are selected half-yearly. Prize examinations are held at the termination of the session.

Further particulars can be obtained from Dr. Atthill, 11, Upper-Merrion-street, or any other member of the medical staff.

CARMICHAEL (FORMERLY RICHMOND HOSPITAL) SCHOOL OF MEDICINE.

The winter courses of lectures commence November 1. Lecturers: Theory and Practice of Surgery and Operative Surgery, Mr. W. Stokes. Theory and Practice of Medicine, Dr. Gordon. Anatomy and Physiology, Dr. Harvey and Dr. Purser. Anatomy, Descriptive, Practical, and Surgical, Dr. Corley and Dr. Yeo. Chemistry, Theoretical and Practical, Dr. Campbell. Midwifery and Diseases of Women and Children, Dr. Jennings. Dissections, which commence in October, are superintended by Messrs. Corley, Purser, Yeo, Harvey, Shaw, Madden, Mayne, Clarke, and Kelly.

Carmichael Premiums.—Premiums to the value of £60, on the foundation of the late Richard Carmichael, Esq., and the "Mayne" Scholarship, value £15, are awarded at the termination of the session.

Summer Session.—Lecturers: Botany, Dr. Blakely. Materia Medica and Pharmacy, Dr. Fraser. Medical Jurisprudence, Dr. O'Reilly. Practical Chemistry, Dr. Campbell.

Fees.—The fee for each course of lectures delivered at this School is £3 3s. Fees for all the courses of lectures required by the Royal College of Surgeons of London, £43; Edinburgh, £46; and Ireland, £63.

For further information, apply to Dr. Corley, Registrar, 30, Lower Baggot-street, Dublin.

LEDWICH SCHOOL OF ANATOMY, MEDICINE, AND SURGERY, PETER-STREET, DUBLIN.

Anatomy, Physiology, and Pathology, etc., Mr. E. Ledwich Mr. T. P. Mason, and Mr. W. H. O'Leary. Theory and Practice of Surgery, Messrs. Wharton and Barton. Sugical and Descriptive Anatomy, Demonstrations, and Dissections, Messrs. Mason, Ledwich, Glanville, Robinson, and O'Leary. Theory and Practice of Medicine, Drs. Little and Eames. Midwifery and Diseases of Women and Children, Dr. J. Ringland. Materia Medica and Therapeutics, Dr. M'Dowell. Forensic Medicine and Hygiene, Dr. R. Travers. Theory of Chemistry, Practical Chemistry, and Natural Philosophy, Dr. Cameron. Botany, Dr. Maunsell.

A course of operations to be performed by the students, under the superintendence of the lecturers (subjects, etc., included), £5 5s.

Certificates of attendance on these lectures are received by Trinity College, Dublin, and all the examining boards.

The fee for each of the above courses will be £3 3s.

Further information may be obtained from any of the lecturers, or from Edward Ledwich, Secretary, 7, Harcourt-street, Dublin.

CITY OF DUBLIN HOSPITAL.

Physicians: Drs. J. Hawtrey Benson and John M. Purser Surgeons: Messrs. Jolliffe Tuffnell, H. G. Croly, William Thornley Stoker, Esq., M.D., and William J. Wheeler, M.D. Ophthalmic and Aural Surgeon, Dr. Loftie Stoney. Consulting Physicians: Professor Apjohn, Charles Benson, M.D., Consulting Surgeon: William Hargrave, F.R.C.S.I. Clinical lectures will be delivered by the Physicians and Surgeons, and special courses on Diseases of the Eye and Ear will be given by Dr. Stoney. The certificates of attendance are received as qualifications by all the colleges, halls, and boards. For further particulars, apply to Dr. Stoker, 43, Harcourt-street.

HOSPITALS, ETC., FOR SPECIAL INSTRUCTION.

At Downing College, Cambridge, every alternate year an election to a Fellowship takes place, the holder of which must be engaged in the active pursuit of the studies of Law or Medicine. These Fellowships are of the annual value of £200, and are tenable for twelve years. They are not vacated by marriage, and the Fellows are not required to reside. There are now two vacant Fellowships, one of which will be filled up in 1872 or 1873, and the other in 1873. Foundation Scholarships of £50 per annum (in some cases with rooms and commons) are offered annually for distinction in Natural Science, tenable until the B.A. Degree, and in case of special merit for three years longer. Minor Scholarships of £40 per annum, tenable for two years, are offered each year for competition before entrance, and in awarding one or more of these considerable weight is given to proficiency in Natural Science.

Queen's College, Liverpool.—The session will commence on Monday, October 7. The College is in connexion with the University of London, and its classes comprise the subjects required for the Matriculation, B.A., B.Sc., and Preliminary Scientific M.B. Examinations of that University. Instruction in Practical Chemistry is given in the College Laboratory by Professor Hamilton. Provincial examinations of the London University are held at Queen's College. Fees: Separate classes, £2 2s. to £4 4s. per session; Practical Chemistry, £5 5s.

St. Luke's Hospital for Lunatics, Old-street, E.C.—Physicians—Dr. Henry Monro and Dr. William Wood. Surgeon—Mr. Alfred Willett. Resident Medical Superintendent—Reginald Eager, M.R.C.S., L.A.S., and M.D. Univ. Lond. The Visiting Physicians are allowed by the Committee to take pupils. Patients admitted gratuitously, or on payment according to their circumstances. For information address the Secretary, Mr. George Seymour.

Royal Orthopædic Hospital, 315, Oxford-street.—Medical Officers.—Surgeons—Bernard E. Brodhurst, Esq., F.R.C.S., 20, Grosvenor-street; Jno. D. Hill, Esq., F.R.C.S., 17, Guildford-street, Russell-square. Legally qualified practitioners are free to witness the practice of the Hospital. Pupils on the following terms:—For six months, £3 3s.; for twelve months, £5 5s.; perpetual, £10 10s. Operations, Thursdays, 2 p.m. The annual course of lectures will be duly announced.

The Hospital for Sick Children, 48 and 49, Great Ormond-street, W.C., and Cromwell House, Highgate.—Physicians—Dr. West and Dr. Dickinson. Assistant-Physicians—Dr. Samuel Gee, Dr. W. B. Cheadle, Dr. J. J. Phillips, Dr. John Murray, and Dr. R. J. Lee. Surgeon—Mr. Thomas Smith. Assistant-Surgeons—Mr. Howard Marsh, Mr. J. W. Haward. Surgeon-Dentist—Mr. Thomas Edgelow. 127 beds. In-patients, 1871, 678. Out-patients attending, 12,221. The practice of the Hospital, in both in- and out-patient departments, is open at nine every morning. Fee for six months' attendance, £3 3s.; perpetual, £5 5s. Samuel Whitford, Secretary.

London School of Dental Surgery and Dental Hospital of London, 32, Soho-square, W.—The winter session will commence on Tuesday, October 3. Mechanical Dentistry, Mr. J. S. Turner; Metallurgy, Mr. G. H. Makins; Dental Surgery and Pathology, Mr. Cartwright; Dental Anatomy and Physiology, Mr. C. S. Tomes. Dental Surgeons to the Hospital—Messrs. Fox, Underwood, Gregson, Coleman, H. Harding, and Hill. Assistant Dental Surgeons—Messrs. Moon, Medwin, C. S. Tomes, Lane, Bartlett, and S. H. Cartwright. Dental House-Surgeon—Mr. Robert Hepburn, jun. Treasurer—Mr. Cartwright.

Great Northern Hospital, Caledonian-road.—Consulting Surgeon—Mr. Skey. Physicians—Drs. Leared, Hardinge, Cholmeley, F. C. Webb, Jephson, and Crucknell. Obstetric Physician—Dr. Gustavus C. P. Murray. Diseases of the Eye—Mr. B. J. Vernon. Surgeons—Messrs. Gay, W. Adams, T. Carr Jackson, W. Spencer Watson, Osman Vincent, and J. A. Bloxam. Aural Surgeon—Mr. Harvey. Dentists—Messrs. Statham and Chas. J. Fox. Chloroformist—Mr. G. Eastes. House-Surgeon—Mr. T. Allan. Junior Resident Medical Officer—Mr. T. C. Williams. Dispenser—Mr. Ring.

National Hospital for the Paralysed and Epileptic, 23 and 24, Queen-square, Bloomsbury.—The Hospital contains 64 beds; the County Convalescent Branch, at Finchley, 25 beds. The Physicians attend every Monday, Tuesday, Wednesday, and Friday, at half-past two o'clock. In- and out-patients' electrical-room practice at that hour. Physicians—Drs. Ramskill, Radcliffe, Hughlings-Jackson, and Buzzard. Assistant-Physicians—Dr. Charlton Bastian, Dr. Elam, Dr. Maclure. Medical Superintendent—Dr. Tibbits. Medical Registrar—Dr. Gowers. Medical practitioners and students will be admitted on showing their cards.

West London Hospital, Hammersmith-road, W.—Number of beds, 68; in-patients, 408; out-patients, 21,000. Consulting Physician—Dr. Henry Bence Jones, F.R.S. Consulting Physician-Accoucheur—Dr. W. O. Priestley. Consulting-Surgeons—Messrs. Samuel Armstrong Lane and William Bird. Physicians—Dr. Goddard Rogers and Dr. Henry Maudsley. Physician for Diseases of Women—Dr. Wiltshire. Surgeons—Mr. William F. Teevan and Mr. Alfred Cooper. Surgeon for Diseases of the Eye—Mr. B. J. Vernon. Junior Physicians—Dr. F. Sims and Dr. Thorowgood. Junior Surgeons—Mr. J. A. Bloxam and Mr. H. T. Butlin. Surgeon-Dentist—Mr. H. E. Sewill. Chloroformist—Mr. J. S. Wyman. Analytical Chemist—Mr. William Crookes, F.R.S. Resident Medical Officers—Two House-Surgeons and an Apothecary. The practice of this Hospital is open to all students and members of the medical profession. Gentlemen desirous of acting as clinical clerks or dressers can obtain all information on application to the Secretary at the Hospital.

Pharmaceutical Society of Great Britain, Bloomsbury-square, London.—School of Pharmacy.—Session 1872-73.—The session will commence on Tuesday, October 1, and extend to the end of July, 1873. Lectures on Chemistry and Pharmacy will be delivered by Professor Redwood on Monday, Tuesday, and Wednesday mornings at nine o'clock, commencing on Monday, October 7. Also lectures on Botany and Materia Medica by Professor Bentley. The first and second parts of this course, extending over the winter months, will be delivered at 17, Bloomsbury-square, on Friday and Saturday mornings at nine o'clock, commencing Friday, October 4. The third part of the course, on Systematic Botany, will be delivered at the Royal Botanic Gardens, Regent's-park. Fees: For Registered Apprentices and Associates of the Society, for either of the above courses, One Guinea; for either part separately, Half-a-Guinea. For those not connected with the Society, Two Guineas for either of the above courses; One Guinea for either part separately. Laboratory: The suit of Laboratories for Practical Instruction in General and Pharmaceutical Chemistry will be opened on Tuesday, October 1, under the direction of Professor Attfield. Fee for the entire session of ten months, Twenty-five Guineas. The Laboratories are open from ten a.m. till five p.m. Students can enter at any period during the session. Two Scholarships (the Jacob Bell Memorial Scholarships), of £30 a year each, are open to competition annually in July. The Board of Examiners meet monthly to grant Certificates of Competency. For further information, apply to Elias Bremridge, Secretary and Registrar.

Wolverhampton and South Staffordshire General Hospital.—Two hundred beds. Attendance recognised by the Examining Boards. Pupils resident and non-resident. The Hospital contains large male and female accident wards, general medical and surgical wards, a children's ward, a ward for diseases of women, and a fever wing. The out-patient department, commodious and convenient, is semi-detached from the main building. Fees for Hospital Practice: One year, Ten Guineas; perpetual, Twenty Guineas. Physicians—Dr. Millington and Dr. Totherick. Surgeons—Mr. Vincent Jackson, Mr. J. O'Brien Kough, Mr. C. A. Newnham. House-Surgeon—Mr. Burton Ravenhill. Physicians' Assistant—Dr. Carter. Operations are performed in the Theatre every Thursday morning, at eleven o'clock. The fees must be paid to Mr. F. Foster, Secretary to the Hospital. The practice in the Hospital is very extensive, the number of cases being large and important. Practical instruction in Surgery to first-year students, and Dresserships for students after two years' professional education, both in accordance with the Royal College of Surgeons of England, may be obtained at this Hospital; also, Clinical Clerkships. For particulars apply at the Hospital to Vincent Jackson, Honorary Secretary of the Medical Committee.

PRIVATE TEACHERS.

Mr. J. Erle Benham, 20, Devereux-court, Temple, E.C. (formerly of King's College, London), has commenced to take his classes, and to give private instruction for the next examinations.

Dr. Coales, M.A., 119, Gower-street, W.C., prepares candidates for the Prelim. Sc. and Matriculation Examinations of the University of London, and for the examinations in Arts at the Royal College of Surgeons, Apothecaries' Hall, etc.

Mr. Edward B. Goodwin (Caius College, Cambridge), 319, Camden-road, N., receives pupils, resident and otherwise, for the Preliminary Examinations at the College of Surgeons and Apothecaries' Hall, for matriculation, etc. Mr. Goodwin is assisted by a graduate of London University.

Mr. Hanbury, M.A., 24, Old-square, Lincoln's-inn, W.C., reads with his class for the Preliminary Examination in Arts College of Surgeons, and for the Matriculation Examination of London University. Mr. Hanbury is assisted by efficient lecturers in French and Chemistry. Resident pupils are received.

Mr. Massey Harding, F.R.C.S. and L.S.A., will open a class in the second week of October for the preparation of students for the examinations at the Apothecaries' Hall.

Mr. H. M. Hewitt, M.A. Camb. and Lond., 82, Gower-street, W.C., will have a day and also an evening class for the College of Surgeons Preliminary Examination in December. The matriculation class commences October 4.

Mr. J. Hooper, M.A., 13, Camden-street, Oakley-square, N.W., assists backward pupils or prepares candidates for the Preliminary Medical and other examinations.

Mr. Thomas Lyle (of the University of London), Forest House, 89, Forest-road, Dalston, N.E., prepares gentlemen for the Examination in Arts at the Apothecaries' Hall and the College of Surgeons; also for matriculation at the London University. Resident pupils received.

Mr. Murray, B.A., Arkteon House, Wray-crescent, Tollington-park, N., prepares for the Preliminary Examinations at Royal College of Surgeons and Apothecaries' Hall, and the matriculation at University of London.

Mr. J. Pincott, F.R.G.S., Telham House, Brixton-hill, S., prepares students for the Preliminary Examination of the Royal College of Surgeons and the Matriculation of the London University.

Rev. F. Pearce Pocock, M.A. Cantab., A.K.C., Alfred House, Bow, E. prepares candidates for the Arts Examination of the London University, College of Surgeons, and Apothecaries' Hall.

The Drs. Power continue daily their classes preparatory for the various competitive and pass examinations, at the Lecture-rooms, 8, Red Lion-square, Holborn, W.C.

South London School of Chemistry and Pharmacy, 231 and 285, Kennington-road, S.E. Director, Dr. Muter. Daily lectures in Classics, Mathematics, Chemistry, Physics, Botany, Materia Medica, and Natural History. Laboratory open for Practical Chemistry from ten till five.

Dr. Steggall, 2, Southampton-street, Bloomsbury-square, gives instruction to medical men and students in all the branches of their studies.

Mr. Weightman, M.A. Cantab., receives pupils for the Preliminary Examination and Medical Jurisprudence, at his chambers, 1, Mitre-court, Temple, E.C.

[For fees, etc., see Advertisements.]

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture IX.

(*Continued from page* 221.)

The existing representatives of the *Artiodactyla*, or Ungulates with even toes, are divided into four principal groups—the *Suina* or pigs, the *Tylopoda* or camels, the *Tragulina* or chevrotains, and the *Cotylophora*(a) or true ruminants.

Of the *Suina* there are two families, the *Suidæ* and the *Hippopotamidæ*. The common pig may be taken as a representative of the first, especially as it is in many respects the least specialised form of the whole group. It is of all ungulates the least limited to any particular class of diet, and in its dentition it is one of the few existing mammals which retains the full and normal compliment of teeth, at one time widely prevalent throughout the placental division of the class. The mouth is elongated and narrow, and among the modifications of the adjacent parts subservient to the function of procuring the food, the well-known elongation of the nose and upper lip into a snout, with a distinct ossicle developed in the fore part of the septum, may be mentioned. The large canine teeth of the upper jaw, instead of growing with their points downwards, turn outwards and then curve upwards; and it may be noticed that in the young boar, long before the tooth has commenced this course, the lip is grooved or folded outwards for its reception, and firmly united to the gum just behind it. The palate has a series of very strongly marked, hard, oblique, transverse ridges on each side of the middle line. The mucous membrane lining the cheeks is soft, with a slightly folded surface, but without any distinct papillæ as in the ruminants, but on the soft palate are numerous eminences like the fungiform papillæ of the tongue. The sides of the fauces are smooth, with numerous glandular openings, but no distinct tonsils. The tongue is long and narrow, though widening out somewhat near the rounded anterior termination. It is flat, especially in front, and has the "intermolar eminence" less marked than in most ungulates. Its surface is evenly covered with fine, soft, filiform, conical papillæ, among which numerous conspicuous fungiform papillæ are scattered, and there are two large circumvallate papillæ posteriorly. Behind these the conical papillæ become very large and soft. It is not very unlike the tongue of a dog.

The parotid gland is a very large lobulated mass, of a somewhat crescentic form, with the concavity turned forwards, extending downwards from the ears, over the angle of the jaw, almost to the middle line below. Its duct leaves its anterior inferior angle, and, curving upwards along the anterior border of the masseter muscle, enters the cheek opposite the crown of the first upper true molar. The submaxillary gland is comparatively small and rounded, its volume to the parotid being but as one to nine. It lies behind the angle of the jaw, almost entirely covered by the lower part of the parotid. Its duct has the usual course, and opens in the floor of the mouth by the side of the frænum linguæ without any distinct papilla. The sublingual glands may be divided into two—one, which resembles the accessory submaxillary of the dog, consisting of a slender, elongated, glandular mass, placed alongside the duct of the last, extending as far back as almost to touch the gland, and having a separate duct which opens in the mouth close to that of the submaxillary; and another, which resembles the sublingual gland of the rabbit, with eight or ten ducts opening into the floor of the mouth by the side of the middle of the tongue. The buccal glands are also well developed, but there is no distinct zygomatic gland.

The stomach is of a short, rounded oval form, and simple externally, except for a conical and rather thin-walled pouch which projects from the upper and posterior part, to the left of the cardiac orifice. This is the first indication of the superaddition of cavities to the œsophageal end of the stomach, which we shall find gradually increasing in size and number in other species of Artiodactyles. The thick epithelium of the œsophagus extends some distance over the lining of the upper wall of the stomach, on the right as far as the transverse ridge which marks off the antrum pyloricum, and on the left to the edge of the pouch mentioned above, though without passing into it. As noticed by Hunter, and illustrated by several of his preparations, the coats of the stomach near the cardiac orifice are arranged "as if designed to conduct the food towards the pylorus"; an indication of the groove which serves so important a function in the ruminants' stomach. The pylorus is guarded by a large oval pad on the side of the lesser curvature, with its long diameter coinciding with that of the canal, and fitting into a concave surface below, so that the aperture is crescentic. A similar arrangement was noticed in the sloth bear and proteles among the carnivora, and prevails generally among the Artiodactyles, and in some of the Edentata.

The intestinal canal is very long (about twenty times the length of the animal), but not of large calibre. The colon is about one-fourth of the whole. The duodenum makes a moderate-sized loop to the right before it crosses beneath the ascending colon; after numerous coils the small intestine ends by ascending to the base of the cæcum, which lies loosely, but rather to the left than to the right side, and with its apex upon the bladder. It is of an elongated conical form, sacculated, and slightly curved. The ileum has at its lower end a Peyer's patch of great size—three-quarters of an inch in width, and three feet in length in a young pig—terminating at the ileo-cæcal aperture. The first part of the colon has a remarkable disposition, unlike anything which we have yet spoken of, but characteristic, with certain modifications, of the greater number of the Artiodactyles. It is folded into a compact, sub-conical, spiral coil, which lies superficially on the left side of the abdomen below the stomach, bound closely together by peritoneal attachments, and having much the general form and aspect of a snail-shell, but of oval instead of circular outline. After three diminishing turns in one direction, from the outside and base towards the apex of the broad cone, the intestine suddenly reverses its course, and, dipping between the second and third coil, passes out at the base of the spine, and follows the ordinary course of the colon, ascending in front of the duodenum, with which, as usual, it is closely connected by mesentery; then it passes across to the left hypochondriac region, and then, as descending colon, pursues a nearly straight course into the pelvis. The bloodvessels of the mesentery run in perfectly straight lines.

The liver, as in most ungulates, has no suspensory or round ligament. In fœtal pigs the umbilical vein passes freely across the abdominal cavity, but as life advances completely disappears. The umbilical fissure is well marked, and divides the liver nearly equally into segments. The right and left central lobes are nearly equal in size, but the right is rather the broader; it has no cystic fissure in the edge. The left lateral is twice the size of the right lateral. The caudate lobe is small, and not very distinctly marked off from the right lateral. The Spigelian lobe is very small, as in most other ungulates, forming scarcely any projection, though it is distinctly marked off on the left side by the fissure of the ductus venosus. The gall-bladder is small and oval, lodged in a fossa near the left edge of the right central lobe. The bile-duct enters the duodenum half an inch from the pylorus; the pancreatic duct separately, from four to six inches below the pylorus.

In arranging the *Suina* according to the degree of complexity of the stomach, the singular African genus *Phacochœrus*, or wart hog, which has a highly specialised dentition, would come first. Its stomach is quite simple, without the cardiac pouch found in the common pig, and with the œsophageal cuticle extending a very little distance into the cavity. The pyloric valve is like that of the pig; the liver is less completely divided, the left lateral fissure being very short, the caudate lobe quite rudimentary, and the transverse fissure so near the posterior edge of the liver that the Spigelian lobe is almost obsolete. There is a gall-bladder of elongated form.(b)

The common hogs, and the *Potamochœri* or African river hogs, which closely resemble them in the structure of their digestive organs, would come next. The babirussa of the

(a) So called from the cotyledonous arrangement of the placenta, which in the other three groups is diffuse, as in the Perissodactyles.

(b) For the visceral anatomy of the wart hog, *see* Owen, *Proceedings of the Zoological Society*, 1851, p. 63.

Malayan Archipelago follows, as its stomach is described(c) as being divided primarily into two great sacs—cardiac and pyloric—with a distinct curved blind pouch to the former, much more developed than that of the pig. The colon is said to form four loops, placed transversely in front of the small intestines, instead of the spiral coil. There is a gall-bladder; and the great development of the parotid glands, extending from the ear and angle of mandible as far as the shoulders, must be noted.

The anatomy of the only existing New World representative of the *Suina*, the peccary (genus *Dicotyle*), was well described as long ago as 1683 by Tyson,(d) and subsequently by Hunter.(e) The stomach is of very peculiar form. It may be considered as consisting of two principal divisions, separated by a constriction of the lower border of the organ, and communicating by a transverse aperture. These are—1, the left, cardiac, preparatory, or absorbent, division; and 2, the right, pyloric, or digestive division. The former is much the larger of the two. The œsophagus opens into it, though its canal is continued by a groove with elevated margins along the upper border of the stomach into the pyloric compartment. The cardiac compartment is further divided by a strong ridge on the upper side, immediately to the left of the œsophageal orifice. The part beyond (to the left of) the ridge is dilated(f) and produced on each side (front and back) into large, conical, blind sacs, curving downwards like a pair of horns. This part evidently corresponds to the small sub-conical cardiac pouch of the pig's stomach. The epithelial lining, thick, corrugated, and of dark colour, instead of being confined—as in the pig—to the neighbourhood of the œsophageal orifice, extends over the greater part of the cardiac compartment, though not into the thin-wall cæcal sacs. It also encroaches a short distance into the pyloric compartment. The latter is a thick-walled pyriform sac, curved upwards. The mucous membrane is thick, soft, and has several permanent longitudinal folds. Near the pyloric orifice the cavity contracts, and the muscular walls on all sides are greatly increased in thickness.

The remainder of the alimentary canal is much as in the pig, having a cæcum, and the colon being spirally coiled near its commencement. Unlike the other members of the family, the peccary has no gall-bladder.

The stomach of the hippopotamus, an aberrant member of the *Suina*, is still more complex than that of the peccary. It may, however, be divided primarily into a left or cardiac and a right or pyloric portion. The former is the larger and more complicated. It consists of an elongated narrow curved tube, with numerous partial transverse septa, continuous at one end with the œsophagus, and opening at the other by an oblique valvular aperture into the pyloric division. At the œsophageal end of the tube are two large, cylindrical, curved cæcal pouches, having considerable analogy to those of the peccary; but they are more distinctly marked off from the rest of the cavity and more directly connected with the œsophagus, and some complex folds of the lining membrane would appear, by various degrees of contraction, to direct the food passing down from the œsophagus into either one or the other of them, or into the main tubular compartment. These three cardiac cavities have a thick epithelial lining, and are covered with short cylindrical papillæ, mostly collected on linear ridges on the inner surface. The last or pyloric compartment, in which alone (according to Mr. N. H. Martin)(g) the tubular peptic glands are found, is elongated and pyriform, sharply curved upon itself, with a thick, soft, vascular lining membrano thrown into reticulating folds, those that run transversely being most conspicuous. The pylorus has not the distinct valvular pad found in the pigs, but has several longitudinal ridges around it; immediately beyond it the intestine has a moderate dilatation, but the bile-duct does not enter into this as it does in the peccary and pig, but at a considerable distance lower down.

The intestinal canal is very long, measuring in an adult animal (according to Dr. Peters) 138 feet, and its calibre is rather narrow. It differs from that of all known ungulates in having no cæcum, and scarcely any external division between small and large intestine, though internally the distinction is marked by the cessation of the villi of the former, the commencement of strongly marked longitudinal folds, and the presence of a large patch of follicles, guarded by raised reticulating productions of the mucous membrane. The colon is comparatively short, about one-tenth of the whole intestine, and, instead of the spiral convolution found in most Artiodactyles, its first or ascending part is thrown into about six transverse folds, and then it pursues the usual course of transverse and descending colon.

The liver of the hippopotamus (Fig. 32) differs from that of

Fig. 32.

Fig. 32.—Under surface of the liver of a young hippopotamus born at the London Zoological Gardens, February 21, 1871: *l* left lobe, *r* right lobe, *s* Spigelian lobe, *c* caudate lobe, *vc* vena cava, *u* umbilical vein, *g* gall-bladder.

the true pigs, in its simplicity, having neither umbilical nor lateral fissures. The upper surface is perfectly plain, but the Spigelian and caudate lobes form distinct ridges on the under surface; the latter is attached almost as far as its apex. Dr. Crisp found no gall-bladder in the specimen he dissected; but this does not accord with the observations of all others(h) who have had the opportunity of dissecting this animal.

Though the stomach of some of the *Suina* has thus been shown to be nearly, if not quite, as complex in its structure as that of any animals of the order, it does not appear that this complexity is in any way associated with the physiological act of rumination. The food which enters the left or cardiac compartment of the stomach to undergo softening and absorption of such portions as are capable of being taken into the system before the transforming action of the gastric juice is brought to bear upon it, passes directly on to the pyloric or peptic compartment. In the remaining members of the order, however, a singular process called *rumination* occurs. The contents of the cardiac compartment of the stomach before passing to the pyloric are regurgitated (first by compression of the cavity by the abdominal parietes, and then by inverted peristaltic action of the œsophageal muscular fibres) into the mouth, and undergo a further trituration by the molar teeth, and mixture with the secretions of the salivary and buccal glands; they are then swallowed again, passing this time directly into the true digestive or pyloric cavity.

In the family of Chevrotains (*Tragulina*), containing some small deer-like animals from Southern Asia, and one from the West of Africa (see Fig. 33), the cardiac or left part of the stomach consists of a great blind sac (*b*), folded on itself in a sigmoid manner, called the paunch or *rumen*, from the base or œsophageal end of which a more hemispherical diverticulum (*c*), only partially subdivided from it, projects forwards, called the *reticulum*. These, though commonly reckoned as two stomachs, may really be considered as portions of one great cavity, as the septum dividing them is very incomplete, and the structure of their walls is essentially the same, being lined with a thick epithelium continuous with that of the œsophagus. Their mucous coat, however, is differently disposed, being over the greater part of the rumen raised into large flattened papillæ, and in the reticulum into intersecting ridges, surrounding hexagonal spaces (like the cells of honeycomb), which ridges are, however, covered with papillæ, though

(c) See Vrolik, "Recherches d'Anatomie comparée sur le Babyrussa." *Nieue Verhand. eerste Klasse K. Nederl. Inst.*, 1843, x.

(d) "Tajacu, seu Aper Mexicanus Moschiferus," or the Anatomy of the Mexico Musk Hog. (*Philosophical Transactions*, No. 153, Nov. 20, 1683.)

(e) *Op. cit.*, vol. ii., p. 125.

(f) This is described by some anatomists as a third primary compartment.

(g) See Mr. 'J. W. Clark's paper on "The Visceral Anatomy of the Hippopotamus" (*Proceedings of the Zoological Society*, 1872, p. 185).

(h) The visceral anatomy of the hippopotamus is chiefly known from very young animals. *See*, especially, Gratiolet "Recherches sur l'Anatomie de l'Hippopotame, 4to, Paris, 1867; also Crisp, *Proceedings of the Zoological Society*, 1867, pp. 601 and 689; and Clark, *ibid.*, 1872, p. 185; Peters, "Reise nach Mossambique," p. 180.

of much smaller size than in the rumen. Functionally, too, they appear to form one cavity. A narrow opening, a short distance to the left of the œsophagus, leads into the pyloric compartment (*e*) or the true digestive stomach, technically called the reed or *abomasus*. This is of a fusiform, or rather

Fig. 33.

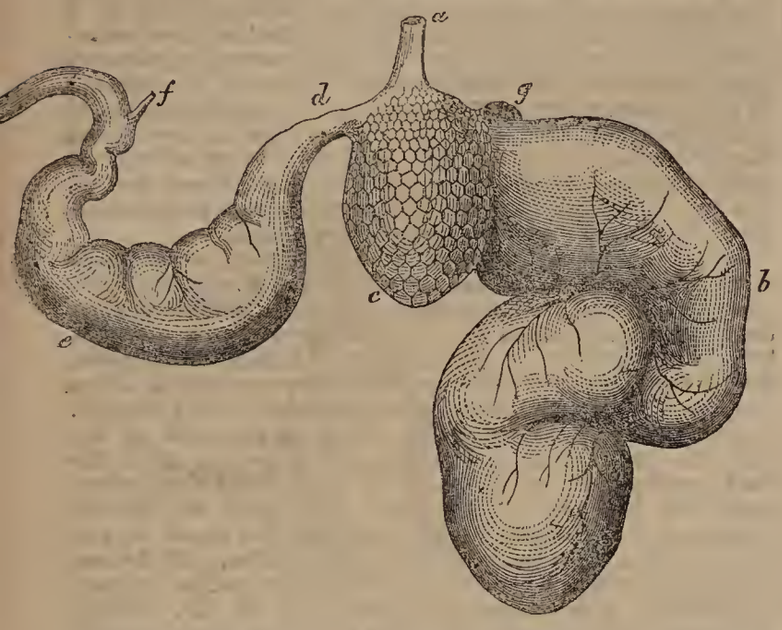


Fig. 33.—Anterior surface of the stomach of the African chevrotain, *Hyomoschus aquaticus* (from *Proceedings of Zoological Society*, 1867, p. 958): *a* œsophagus, *b* rumen, *c* reticulum, *d* rudiment of psalterium, *e* abomasus, *f* biliary duct, *g* spleen.

elongated pyriform, shape, being widest near its proximal end, and diminishing towards the pylorus, and is curved upon itself. Its mucous lining is thick, soft, and vascular, abounding in peptic glands (not present in the other compartments), and having more or less distinct elevations or folds, mostly in the longitudinal direction. In some rodents, and in the pig and the peccary, a groove with elevated edges has been noticed running from the œsophagus to the right along the upper border of the stomach. A similar groove, with thick and muscular borders, plays a very important part in the animals now under consideration, in conducting the food, after it has been remasticated, directly into the pyloric compartment.

In the chevrotains the epithelial lining of the first division of the stomach extends a short distance beyond the constriction to near the spot marked *d* in the figure. In the large majority of ruminants (all the *Cotylophora*) there is here a peculiar oval dilatation of the cavity, commonly considered the third stomach or the *psalterium*. The mucous membrane of its outer and lateral walls is developed into a series of parallel longitudinal folds of unequal length, which almost fill up the cavity, and the free edges of which converge to the lower or inner border, along which the direct passage is continued. The sides and edges of these lamellæ are in many species covered by pointed papillæ, and the thick epithelium of the cardia is continued over them. This appears to be a sort of filter or strainer placed between the two compartments to insure that nothing but the finely pultaceous or liquid material from the second mastication should pass into the abomasus.

Such is the general arrangement of the stomach of all the *Cotylophora*, including the various species of oxen, sheep, goats, and antelopes, the deer, and the giraffe. The chief modifications that are found in the different species are, slight differences in the form and proportions of the various compartments, and in the size and form of the villi of the rumen and the ridges of the reticulum. The essential difference of the nature and function of the two main divisions of the stomach is well exemplified by their proportions at different periods of life. In the early fœtus, long before either compartment has acquired any particular functional importance, the relative size of the cavities and general form of the stomach is almost exactly that of the adult.(i) At birth, however, the growth of the peptic stomach or abomasus has outrun that of the others, and, as long as the animal is exclusively nourished by its mother's milk, these, being almost without function, continue relatively very small; but they gradually develope to their ultimate proportions, as the altered nature of the food requires a special preparatory treatment.(k)

As regards the other portions of the digestive apparatus, the *Cotylophora* agree in many particulars. They have no incisor teeth in the upper jaw, the cutting lower front teeth (eight in number) biting against a callous fibrous pad covering the premaxillary bones. The palate is strongly ridged. In the sheep these ridges are simple; in the deer, and particularly the giraffe, they are largely developed, and serrated or denticulated at their free edge. The mucous membrane lining the cheeks is in all the species of the group, as well as in the *Tragulina* and *Tylopoda*, covered with strong, conical, sharp-pointed papillæ. The tongue has an intermolar elevation. Its anterior part is depressed, long, narrow, and extensile, being (notably in the giraffe) used as an organ for grasping food. The circumvallate papillæ are usually numerous, the fungiform papillæ conspicuous, and in many species, as the sheep and the ox, the dorsal surface of the intermolar elevation is covered by broad, smooth, flat-topped elevations which pass by insensible gradations into the ordinary small conical papillæ which cover the anterior part of the tongue.

The salivary glands are largely developed, especially the parotid, the duct of which follows a curved course round the lower border and anterior edge of the masseter muscle, and enters the mouth (in the sheep) opposite the crown of the first true molar tooth. The submaxillary duct opens on a small papilla, in front of the frænum linguæ, and the principal duct of the sublingual (duct of Bartholin) very near to it.

The small intestines form innumerable small convolutions along the edge of a broad mesentery. There is always a simple cylindrical cæcum of moderate size, and the colon is of small calibre, and has a spiral coil, which differs from that of the pig, in lying almost in one plane.

The liver is (see Fig. 34) small, compared to the size of the animal, and of comparatively simple form. It is elongated transversely, deeper towards the left than the right end. The only division seen on the upper surface is the umbilical fissure (*u*), forming a well-marked notch to the left of the middle line, though the round ligament has usually completely disappeared.

Fig. 34.

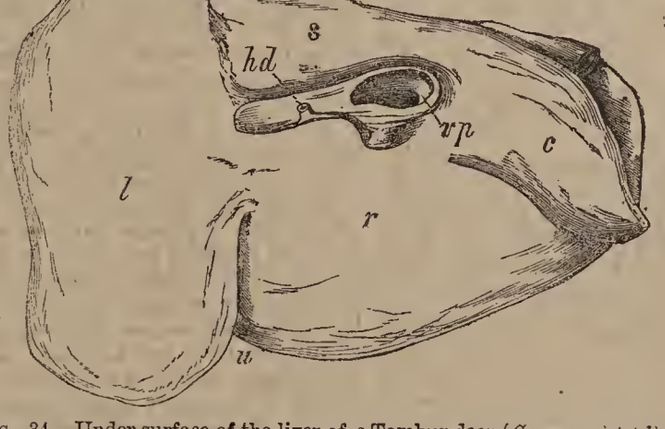


Fig. 34.—Under surface of the liver of a Tambur deer (*Cervus aristotelis*): *u* umbilical fissure, *l* left lobe, *r* right lobe, *s* Spigelian lobe, *c* caudate lobe, *vp* vena portæ, *hd* hepatic duct.

In this simplicity of conformation it resembles the human liver, but on the under surface a characteristic difference is seen in the great development of the caudate lobe (*c*). As a general rule the Spigelian lobe (*s*) is a mere flat tract, bounded by the vena cava behind and the portal fissure in front, and scarcely marked off by a distinct fissure from the left lobe (*l*); it is continuous on the right, as usual, with the caudate lobe. But in some deer (as in *Moschus moschiferus*) it developes a large tongue-like appendage, which hangs over the portal fissure; and this occurs occasionally, on a smaller scale, as an individual peculiarity in the sheep.

As a general rule a gall-bladder is present in the hollow-horned ruminants (oxen, sheep, goats, and antelopes), and absent in the deer. There are, however, exceptions; thus the musk deer (*Moschus moschiferus*) has a gall-bladder, and Dr. Crisp gives a list of two other species of deer (l) in which it

(i) J. Gedge, *Journal of Anatomy*, vol. ii., 1868, p. 323. Prep. Mus. Roy. Coll. Surg., Physiol. Series, No. 555.

(k) For details upon the structure of the stomach of the ruminants, see the numerous works on the anatomy and physiology of the domestic animals. The most recent is that by Martin Wilckens, entitled, "Untersuchungen über den Magen der Wiederkauenden Hausthiere." Berlin, 1872.

(l) *Proceedings of the Zoological Society*, 1832, p. 132.

was present, and eight antelopes in which he did not find it; but further observations are required to know how much may be due to individual peculiarity, for in the giraffe it is occasionally found, though far more often absent. Its presence is the rule in the *Tragulina*.(m)

A LECTURE ON CROUP.

By ROBERT C. R. JORDAN, M.D. Lond.,
Acting Physician to the Children's Hospital, and Professor of Diseases of Children at Queen's College, Birmingham.

(*Continued from page* 223.)

To sum up briefly the chief points which I have endeavoured to lay before you, you must first remember that there are two distinct diseases often confounded together under the name of croup. The one is a catarrhal inflammation of the larynx and trachea, differing only from other catarrhal inflammations by its position; the other is the blood disease known under the name of diphtheria, and differing only from the commoner forms of throat diphtheria by its extension into the larynx and trachea. In the first disease remedies can do much, and we should give them a fair and steady trial before resorting to tracheotomy; in the latter case medicines can do but little, and we should not waste time in using them when an operation is likely to be necessary. The following examples of diphtheritic exudation illustrate how varied is the amount of deposit in different cases:—

No. 1 is a sketch taken from the throat of Wm. R., aged 10, who was admitted into the Children's Hospital on October 13, 1869. The uvula, which was much swollen, was perfectly plastered over with deposit, as if a cap had been fitted on to it. There were patches also on both tonsils. There was not enough difficulty of breathing to render an operation even a subject of discussion. The epiglottis and larynx were evidently, therefore, not invaded. No albumen was present in the urine, and the boy made a steady and good recovery.

No. 2 was drawn at the post-mortem examination of J. S., aged 2 years, who was brought to the Hospital on June 2, 1870. He was then in a moribund state, and died a few hours after admission, and was not seen by me whilst alive. The case is remarkable from the small amount of deposit which produced the fatal result. At the examination the false membrane was found to be confined to the epiglottis and to the anterior horns of the thyroid cartilage. There was a thick, tough, and slightly ash-coloured membrane, extending over the whole anterior part of the epiglottis and deeply fringing it posteriorly, running along its sides to the horns of the thyroid (as seen in drawing shown). The epiglottis was swollen, stiff, and prominent, but the larynx and trachea were perfectly natural and free from deposit. If this case had been brought under treatment earlier, it would very probably have been saved by an operation, and perhaps it is a pity that it was not performed, even though the child seemed dying when admitted.

In No. 3 tracheotomy was performed, but the results were unfavourable. The deposit, as seen in the sketch, lined both tonsils, and the whole of the posterior part of the epiglottis, as well as the whole interior of the larynx, so that the ventricles were scarcely visible. The membrane extended down as far as the fourth ring of the trachea. All these parts looked as if they had received a coating of whitewash—so dense was the deposit.

In No. 4 we have the exudation even more complete. It occurred in a little child of only eleven months old, and no operation was attempted. It was admitted into the Hospital on September 27, 1869, at 10 a.m., and died at 5 p.m. the same day. The post-mortem examination showed a firm fibrine-like tube lining the trachea so completely that it could be removed in a cylindrical mass. Upwards this extended into the larynx, and it is no exaggeration to say that before it was opened it seemed to be literally corked up by a firm solid plug of this fibrine-like exudation; in the throat this became ash-coloured, but it coated both surfaces of the epiglottis, and extended to the sides and base of the tongue. Downwards the deposit was continued into the bronchi. Here, however, its firmness and consistency became less, so that on the left side it lost its tube-like character even in the primary division, but on the right side it kept up this character in the primary bronchus; but after this it seemed as if the secondary bronchi were merely lined with a muco-purulent fluid. This was greater in quantity on the right side than the left, and the lung-tissue was more engorged and infiltrated with it. I have notes of another case in which tracheotomy was unsuccessfully performed, and where the post-mortem appearances much resembled those just detailed. There is a statement in the notes taken at the time which will be easily understood and believed:—"Tracheotomy performed, but in my opinion the operation gave no relief, the breathing being as frequent and laboured as ever." Of course the operation was useless, but the impossibility of diagnosing such a state of the whole respiratory apparatus made it perfectly justifiable.

As a contrast to this, I will give a brief account of a case where the operation was successful:—A little girl, S. M., aged 3½ years, was admitted into the Children's Hospital, Birmingham, on the afternoon of October 17, 1871. The breathing was croupal to an extreme degree, as also very laboured and diaphragmatic, the sternum being drawn in forcibly with every breath. There was one diphtheritic patch on each tonsil, another on the uvula, and exudation was also plainly visible at the back of the pharynx. Though in great danger, the lips were not in the least purple, and the skin was not dusky; the respirations were very hurried, and the pulse very quick and feeble. Emetics were ordered, and, after a lapse of five hours—*i.e.*, at 9 p.m.—a consultation was held on her condition. As she was evidently growing worse, it was decided to operate at once. Tracheotomy was accordingly performed by Mr. George Elkington, under chloroform. The relief was most marked, and at 10.30, when we left her to the care of the House-Surgeon, she was sleeping quietly; her pulse numbered 144, and her respirations only 36. It should have been stated that there was a slight amount of albumen present in the urine. It is needless to follow up the details of a gradual but steady recovery. From the time of the operation she took no medicine, but milk or beef-tea, with fifteen minims of brandy every hour. The temperature never after this rose above 101·5°, and the highest point reached by the pulse was 142, and by the breathings 42. The albumen disappeared after a few days; the tubes were finally removed on the 22nd, and the child is noted on the 25th as breathing very little through the wound; and by November 3 she was able to return home.

Every case will not turn out so well as this, yet there are two points to which I would direct your attention. The first is, to remove the tube as soon as the child can breathe without it; and the second is, to give every care and attention to the frequent cleansing of the inner tube. Half an hour's dyspnœa, with a plugged-up orifice, will go far to make a promising case prove fatal. Every child whose trachea has been opened requires instant and constant attention, by night and by day, if it is meant to recover.

Sudden deaths from laryngismus in diphtheritic cases where the operation has been, so to speak, successful, and the patient apparently cured, have more than once come under my notice; for these I can give no reason, and a post-mortem examination has revealed none. At present, therefore, I can only suggest that they may be one of the manifestations of that wonderful influence which diphtheria exercises on the nervous system, shown, however, more usually by paralysis than spasm.

In conclusion, I would wish to say that this slight sketch of the two forms of disease known as croup has no pretensions to novelty, and the leading facts may be found in your text-books—indeed, I would particularly refer you to Trousseau on the subject; but it is given to you because, in my opinion, the importance of diagnosis between them is undervalued. I would wish, therefore, to urge its necessity upon you, and to beg you in every case of croup which may in future years come under your care to pause awhile, and determine whether it be catarrhal or diphtheritic before you decide upon your line of treatment.

Postscript.—The following cases of diphtheria which have lately fallen under my care present some points of interest, and will form, therefore, a fitting appendix to the previous paper. Both of them, unfortunately, proved fatal, yet the cause of death in either case is so self-evident that no discredit is thrown by their means on early operative interference:—

Agnes F., a delicate-looking girl of 4 years old, was admitted under my care into the Children's Hospital, Birmingham, on March 20, 1872. She was in a very depressed and

(m) Among recent contributions to our knowledge of the visceral anatomy of the Artiodactyles, besides those referred to above, are Alphonse Milne-Edwards, "Recherches sur la famille des Chevrotains," *Ann. Sciences Nat.*, 1864, ii.; Flower, "Notes on the Visceral Anatomy of *Hyomoschus aquaticus*," *Proc. Zool. Soc.*, 1867, p. 954; Owen, "On the Anatomy of the Giraffe," *Trans. Zool. Soc.*, vol. ii., p. 217; Cobbold, Article "Ruminantia," "Cyclop. Anat. and Physiology"; Murie, "On the Giraffe," "Annals and Mag. Nat. Hist." Series 4, ix.; Murie, "On the Prong-Buck" (*Antilocapra Americana*), *Proc. Zool. Soc.*, 1870, p. 334; "On the Saiga" (*Saiga tartarica*), *Ibid.*, p. 451.

feeble state; the face rather pallid than purple; the pulse extremely quick, so as not to be counted with accuracy; the respirations were 48 in the minute, and every breath was accompanied with much labour, the sternum being very strongly retracted at each inspiration, but the croupal sound was so marked as to mask every other stethoscopic sign; no marked dulness was, however, to be detected at any part of the chest either anteriorly or posteriorly. The back part of the fauces and upper portion of the pharynx were coated with diphtheritic deposit, but there was no swelling about the throat or cervical glands, and no albumen in the urine. It was evident that, if anything was to be attempted in the way of operation, it must be done at once; and though, under any circumstances, the prognosis seemed very unfavourable, yet this was the only chance for life. Some brandy and milk were therefore given, and tracheotomy performed at 11 a.m. by my colleague, Mr. G. Elkington; but it gave no relief whatever to the breathing, and the little patient sank five hours after, in spite of the free administration of ether and brandy with beef-tea, both by the mouth and by enemata. The temperature remained at 102·6° Fahr. both before and after the operation, and the number of respirations also remained unchanged.

The post-mortem appearances twenty-four hours after death were as follows:—The diphtheritic membrane extended above to the fauces and upper part of the pharynx; but, besides coating the larynx, it passed downwards, forming a perfect cast of the trachea, and even extending to the minutest bronchi. So perfect was the tube that it would have been quite possible to take the membrane out as a cast like a tree and its branches, to the fourth divisions of the bronchi on both sides. It was by far the most complete specimen of a diphtheritic membrane ever seen by me, and formed a perfect link between diphtheria and plastic bronchitis. The fact of no relief following the operation is of course easily explained.

The second case, John T., aged 4½ years, was brought to me amongst the out-patients at the Children's Hospital on the afternoon of April 5, 1872. A careful examination showing no deposit on the fauces or tonsils, and the history, moreover, being very imperfect, induced me to hope that it would prove a case of laryngeal catarrh only; but the next morning's visit revealed a decided diphtheritic patch on the left tonsil, and the dry stridor heard over all the trachea was too marked for any mere congested condition of its mucous membrane. The difficulty of breathing and the croupal sound increased considerably during the day, and in the evening it was deemed best not to wait until the morning, but to operate at once. Tracheotomy was accordingly performed at 9 p.m. by Mr. Elkington, and the relief obtained was most immediate: the respirations were taken easily and deeply, and the stridor ceased completely. They were the same in number (38) as before the operation, but the change in character was most marked. He had taken chloroform, and now lapsed into a quiet sleep, and was left in a very comfortable condition, the pulse 132, the respiration 38, and the temperature 37·9° Cent. (nearly 100° Fahr.) The urine had been examined carefully during the day, and contained no albumen, but a copious deposit of pale-coloured lithates. He was ordered no medicine, but ten minims of brandy in milk every second hour.

April 7.—He has passed a quiet night, and on my morning visit was actually playing with some toys. There had been some cough, and some tenacious mucus got rid of. The temperature was the same as last night, and the respirations were 44, pulse 132. Urine again examined; it contained no albumen. In the evening the temperature rose to 38·8° C., and, though the respiration and pulse had rather fallen in frequency, he was clearly not quite so well—there was more thirst, and also slight subsultus; but at 12 p.m. he is noted as sleeping quietly.

On the morning of the 8th there was again an increase of temperature, which now reached 39·2° Cent. The pulse and respirations were still nearly the same—pulse 132, respirations 48—though showing a slight increase; yet he breathed with no apparent effort. Careful examination showed slight dulness at the base of the right lung posteriorly, and crepitation was also audible there, though not of a fine character. The breathing sounds were everywhere rather feeble. The tube was left out for half an hour, and he could blow a feather with his mouth so as slightly to move it. In the evening the temperature was still rising, and had now reached 39·9° Cent.; pulse 138; respirations 56. He was restless and irritable; it was still hoped that the slight dulness of the right lung accounted for this increase. The urine was examined; it was now clear, but contained no albumen.

9th.—Has been sick during the night. The temperature had risen to 40·1° Cent.; pulse 144; respirations 54. There is now a scarlatinal rash clearly visible on the abdomen and the legs; the urine contains albumen enough to fill one quarter of the test-tube when settled; the breathing was sufficiently restored to enable the tube to be removed.

10th.—The temperature has fallen to 38·8°, but there is a deep purple rash over the whole body, and it was feared that the fall in temperature was only the prelude to sinking; and such proved to be the case, the child dying on the morning of the 11th.

No post-mortem was permitted, but the trachea and larynx were removed by enlarging the wound. There was slight deposit still remaining in the upper part of the trachea and lower portion of the larynx, but the remainder of the mucous membrane was most intensely congested and swollen.

The above is a brief abstract of very copious notes (taken chiefly by the House-Surgeon, Mr. Whitehead) of this interesting case. Enough, however, is left to illustrate the points worthy of comment. The first of these is the decided absence of diphtheritic deposit on the day of application; of this there could be no doubt. The subsequent deposit on the tonsil was only slight, but well and clearly marked.

The second point is the appearance of a marked scarlatinal rash on the 9th. As the child was placed in an almost empty scarlatina ward, it is impossible to state with certainty whether the diphtheria was part of the scarlatina, or whether the latter was taken in the Hospital. We have acted on the last supposition, and entirely separated the two wards for the future, and established a little separate room for diphtheritic cases; yet, though many had been amongst scarlatinal patients before, no similar accident had ever happened. This of course is no proof, as indeed was clearly shown by two of our own resident medical officers, one of whom caught scarlatina after being in hospital nearly two years, and the other after eight months; yet both of these had been at least three times daily in the scarlatinal ward during all that period. My own views would be decidedly opposed to any supposition of identity between diphtheria and scarlatina, or even to their mutual convertibility. The sore throat in severe scarlet fever, with its white ashy slough, its deep ragged ulcer, and its enormously swollen cervical glands, presents quite as many points of contrast as of resemblance to the deposit in diphtheria; yet that there is much analogy between the two diseases cannot be doubted, and the co-existence of the dual poisons in the system, from whatever cause it arose, is worthy of note. As bearing on this point the following case may be recorded:—

In June, 1871, Harry R., aged 6 years, came under my care for scarlatina. Every symptom was well marked, and as there was a large family he was completely isolated from the rest, and every precaution taken. On the fourth day of the rash, when it had nearly gone, he was taken with symptoms of coryza, and on the following morning his face was covered with decided measles, which also ran its usual course. There was nothing remarkable in either of the diseases, save in their co-existence. His convalescence was long, and complicated by albuminuria and dropsy; but as he was a strumous child this was almost to be expected. The source of the scarlatinal infection could not be traced, but measles was at the school which he attended. This last disease spread through all the children of the family, yet fortunately the scarlet fever was confined to him alone. In this case there could be no possible doubt of the double poisons being present at the same time.

Another point of interest in the case was the appearance of albumen coincidently with the scarlatinal rash. This is not a rare feature in scarlatina, though more frequently the kidney mischief is a sequela. A curious case lately occurred to me, in which a patient with scrofulous kidneys caught scarlet fever. The albumen which was before present in the urine entirely disappeared during the period of the rash. It reappeared again after the rash was gone, apparently in part as a sequela of the fever, since there were abundant small granular casts mixed with the larger waxy ones. He is still under my care, after a period of some months, and the urine is still albuminous, but the casts are again only of the large waxy variety. The presence or absence of albumen in diphtheria seems to me to be amenable to no fixed law; it is sometimes present in comparatively mild cases, and, as in the first case narrated, sometimes absent in severe ones; in this case its appearance was clearly dependent on the scarlatina, not on the diphtheria.

The Chelsea Guardians have resolved to erect a new infirmary for that parish.

ORIGINAL COMMUNICATIONS.

CASE OF TRACHEOTOMY,

IN WHICH THE TUBE, HAVING BECOME DETACHED FROM ITS SHIELD, ESCAPED INTO THE TRACHEA, AND WAS REMOVED BY A SECOND OPERATION FOURTEEN MONTHS AFTERWARDS.

By JOHN W. OGLE, F.R.C.P., and HENRY LEE, F.R.C.S.

William L., aged 32, a stableman, of intemperate habits, was admitted into St. George's Hospital in March, 1865, with typhus fever. He was discharged in May, and returned to his work. In March, 1866, he was readmitted, and stated that he had never been well since he left the Hospital, but that he had become seriously ill three weeks previous to his readmission, with cough and difficulty of breathing. He spoke in a whisper. The face was much congested, and the lips blue; and there was much dyspnœa, with frequent harsh cough, and much rattling and wheezing in the trachea. On auscultation the whole of both lungs was found to be the seat of loud rhonchi, and the upper part of the right lung in front was dull on percussion, and admitted but little air. The heart's sounds, which were themselves natural, were conducted over, and very audible in, this part of the lung. The pulse was quiet and feeble. After being in the Hospital a few hours, it was found that there was abundant expectoration of purulent matter mixed with blood. Pain was also complained of in the larynx, and when examined externally a degree of hardness and thickness was found to exist about the larynx. There was no pain or difficulty in swallowing, neither did any such come on in the course of the illness. Salines and diaphoretics were given, and leeches were applied to the throat.

Some improvement took place, but five days after admission the symptoms became aggravated, the dyspnœa increased, and the voice more stridulous. In spite of treatment, the patient became worse, and tracheotomy had to be resorted to. Relief to symptoms followed, and in the middle of May the patient was discharged as an out-patient, having been provided with a single plain silver tracheotomy-tube, which he was directed to wear constantly, removing it when necessary for the purpose of cleansing it. He went on wearing the tube, but neglecting to come as an out-patient, as directed, until 1869, when, about the month of March, the shield of the tracheotomy-tube became detached from the canula. This accident was repaired by a smith, and for a time the tube was again worn regularly until August 12, 1870, when the shield again became detached, and this time the canula slipped inwards and down the windpipe. A few weeks afterwards, and not until then, the patient again applied at the Hospital for the third time, and was admitted and placed under Dr. Ogle's care, suffering from great dyspnœa, cough, and mucous expectoration and hoarseness. The patient produced the shield of the tube which had become detached. At that time he had the sensation as if the tube were situated just above the sternum. Nothing unnatural was seen at the back of the throat on opening the mouth. The opening in the trachea was nearly, but not quite, closed up. It was proposed to him that he should have chloroform, and that a search should be made for the portion of the tube which he asserted had dropped into the windpipe; but this he refused to have done. Auscultation did not help in determining what was the locality of the tube in the air-passage. Dr. Ogle was about to have the larynx examined with the laryngoscope, when the patient left the Hospital, September 21, 1870.(a) After this time Dr. Ogle saw him once or twice at his own residence, when he appeared much in the same state as when he left the Hospital.

This patient presented himself at the Hospital on November 5, 1871, with considerable distress on account of difficulty of breathing, cough, and pain in the upper part of the throat. He said that he had coughed the tube up into his throat and could feel it there. Mr. Lee and Dr. Ogle being in the Hospital at the time, the patient was placed under the influence of chloroform, and as he lay upon his back Mr. Lee proceeded again to perform tracheotomy. Dr. Ogle having listened to the chest, and found that over the whole of the lungs loud mucous râles could be heard, a longitudinal incision was first made in the median line, and the parts dissected from the front of the trachea on either side; an interval was allowed for the bleeding to cease. A probe-pointed bistoury was then introduced through the opening which remained from the former operation, and about three rings of the trachea were divided downward. These were very firm, and gave the sensation of being (in part, at least) ossified. A probe introduced through the opening thus made, and passed upward, struck against some metal substance. A pair of curved forceps was now introduced in the same way, and a thin piece of metal about an inch in length extracted. The forceps were introduced a second time, and a larger piece, about the same length, was seized and withdrawn.(b) Nothing more could now be felt by the probe. Some bloody mucus escaped from the mouth. The edges of the wound were brought together, and the patient was sent to bed.

In Sir B. Brodie's case, recorded in vol. xxvi. of the Medico-Chirurgical *Transactions*,(c) the foreign body which had been for some time in the trachea was extracted by the patient being placed with his head downwards after the operation for tracheotomy had been performed; and in that case the foreign body was expelled through the mouth, and not through the wound. It passed readily through the glottis (having no sharp angles or projecting points to prevent it) as soon as the spasm produced by its contact was relaxed. The operation in this case, by permitting the patient to breathe through the artificial opening, allowed sufficient time for that relaxation. But in the case now related such a proceeding would not in all probability have been followed by any similar success. The sharp points and eroded surface of the metal would have produced much more spasm than a piece of money, even if they did not present an absolute mechanical impediment to its passage.

The following case, not hitherto published, occurred in the practice of the late Mr. Goolden, of Maidenhead, under the observation of Mr. Lee, in 1835:—

A boy was playing with a fourpenny-piece, when it suddenly disappeared from his mouth, and from the physical symptoms there was every reason to believe that it had descended into the trachea. By Mr. Lee's advice, the boy was placed across a table, and while his feet were held on one side, his body was allowed to fall over the other. Most severe spasm, lividity of the countenance, and great general distress were immediately produced. These disappeared as soon as the boy was placed in the erect position. The experiment was tried several times, and on each occasion had to be discontinued from the same cause. After a time this patient was sent to St. Thomas's Hospital, when one day soon after his admission he was seized with a violent fit of coughing, and became sick. He went to the water-closet, and, as he said, distinctly heard the coin strike against the pan into which he was vomiting. After this he was relieved of all his symptoms.

The distress and general disturbance of the system which this patient experienced when the experiments were made of placing his head downwards, were much greater than would be accounted for by the want of air alone.

In this case, again, the nature of the foreign body allowed of its escape through the glottis, a circumstance which would have been well-nigh impossible in the case first related in this paper. The wound in the throat in this instance made during the second operation was nearly healed on the 21st, but the opening made at the first operation remained. No further symptoms of irritation in the larynx or trachea were experienced.

(a) A brief notice of the case up to this period will be found in the "Hospital Practice" of the *Medical Times and Gazette* for November 5, 1870.

(b) Both these pieces of silver were of a very dark colour, very soft and pliable, and at their edges quite friable.

(c) Recorded in his collected "Works," vol. iii., p. 124.

THE PHYSIOLOGY AND CLINICAL USE OF THE SPHYGMOGRAPH.

By F. A. MAHOMED,
Assistant Medical Officer to the Central London Sick Asylum.

No. VIII.

(*Vide Photo-lithographic Plates published on August* 10, 1872.)

Aortitis Deformans: its Effects on the Pulse-wave; Cases illustrating it—Aortic and Mitral Disease combined—Cardiographic Distinctions between them.

So far the cardiac lesions that have been referred to are those which commence in the heart itself, as some form of endocarditis; but the mechanism of the aortic valves may be thrown out, and their efficiency lost, by changes commencing in the aorta and not in the heart, as in aortitis or endarteritis deformans. By these terms are meant those changes described

by Dr. Moxon in the Guy's Reports for 1871, and including the various stages of the atheromatous inflammation. These cases have so different a history, both pathologically and clinically, from those produced by the ordinary endocardial lesions, that it becomes important to distinguish between them. This, by the stethoscope alone, is a matter of the greatest difficulty—in fact, there appear to be no points of diagnosis except perhaps that of history, when a preceding attack of rheumatism will lead one to suspect an endocardial origin; or the habit of lifting heavy loads, or being subject to severe strains from any cause, may suggest a dilated and inelastic aorta. The sphygmograph, however, will often throw light upon this point. That it should do so may be anticipated, when it is considered how greatly the pulse-wave must be affected by an alteration in the mechanical properties of the tubes through which it passes.

The chief effects produced on the pulse-wave by the loss of elasticity in the aorta and large arteries are—First, the absence of the equable contraction of the artery, producing the steady and gradual collapse during the systolic portion of the tracing, which commences immediately the artery has attained its maximum expansion—viz., from the summit of the upstroke; instead of this, an atheromatous artery is suddenly distended, remains so for a short period, and then almost as suddenly collapses. Secondly, the diminution of the dicrotic wave, from the loss of the elastic contraction of the aorta by which it is produced. Although these signs of aortitis may be defined so clearly, still they are much more complicated and liable to error than at first sight appears, for the prolonged expansion above noted, due to the loss of elasticity in the arterial walls, may also be produced to some extent, though not so markedly, by hypertrophy of the heart; while it is impossible to say how much the loss of dicrotism is owing to the degeneration in the arterial coats, and how much to aortic regurgitation. The case may become yet more confused when it is considered how often an hypertrophied ventricle, bad valves, and an atheromatous aorta, are all combined in one patient. Though the subject is beset with these numerous sources of fallacy, and the conditions appear to run one into the other, there still remains a broad distinction to be drawn in the generality of cases, and a glance at the sections of tracings in Pls. v. and vi. affords striking proof of this, for the most inexperienced eye will discern a well-marked difference in the two classes of cases. In the tracings of regurgitation the percussion-wave is much more marked than in those of aortitis. In the former, too, the pulse is a collapsing one, so that if a line be drawn from the apex of one upstroke to the base of the next, no part of the downstroke corresponding to the same interval will touch the line, but, on the contrary, will be considerably below it; while in aortitis, if a similar line be drawn, the curves of the downstroke will generally touch it and often rise above it. Fig. 2 in Pl. v., which resembles in form the tracings in Pl. vi., it will be remembered, had also an atheromatous aorta.

The first two tracings in Pl. vi. possess great interest. T. S., an artilleryman, aged 27, was admitted under the care of Dr. Moxon, December 20, 1871. In July of the same year his illness commenced with pain in the left side, and difficulty of breathing. He was then thought to have pericarditis, and was treated for it. His legs have swollen during the last three or four months. On admission he was anæmic, and had general anasarca, with dyspnœa, and pain over the præcordial region. The urine was albuminous. The præcordial dulness was increased. The apex of the heart beat two inches below the nipple. A murmur was heard at the base, supposed to be pericardial; but Dr. Moxon did not consider it to be so, as he had heard a systolic and very soft diastolic murmur at the base previous to his admission. The tracing obtained (Fig. 1, Pl. vi.) rather negatived the presence of regurgitation, as the dicrotic wave was well marked; it varied peculiarly in its size with each beat, bearing apparently a certain relation to the movements of respiration, while the prolonged expansion and following sudden collapse gave indications of atheroma. On January 11 a distinct "to-and-fro" murmur was audible. His orthopnœa and anasarca increased; pulmonary apoplexy ensued, and death occurred on March 6, 1872. Fig. 2 was obtained about three weeks before his death. His pulse has altered greatly. The dicrotic wave is very much diminished—in fact, has almost disappeared—indicating that the regurgitation has greatly increased; the height of the tidal wave has increased; and the systolic expansion is still more prolonged, owing to the advanced state of atheroma in the aorta. At the post-mortem the heart was found to weigh nineteen ounces and a half, and to be generally hypertrophied; the left ventricle was dilated. The aorta was much diseased; it was dilated, rough, irregular, inelastic, and afforded a good specimen of aortitis deformans. Just at the point of contact of two of the valves, the aorta had become pouched, so that the aortic orifice was dilated, and permitted of regurgitation taking place. In this case, as the aorta became more deformed, insufficiency of the valves was gradually produced. The great increase of regurgitation that took place is well shown by the Figs. 1 and 2, and has been already referred to.

The next tracing in the plate does not strictly belong to this class, though the condition produced is very similar. W. E., a travelling hawker, aged 40, was admitted under Dr. Owen Rees on January 9, 1872. He was a temperate man, and gave no history of rheumatism or syphilis. His general health had been good. He had suffered from palpitation of the heart for twelve months, and from dyspnœa for three months; the latter had increased daily. For three weeks he had been unable to swallow solid food. His urine was slightly albuminous. The apex of the heart beat two inches below, and directly under, the left nipple. There was a prominent pulsating tumour on the right side, between the fourth and fifth costal cartilages. A loud systolic and a diastolic bruit were audible over the aorta; they were transmitted to the apex and all over the chest. While in the Hospital he suffered from hæmoptysis and the usual symptoms of pneumonia. Death occurred on January 17, 1872, eight days after admission. Upon examination the heart was found to weigh the enormous amount of thirty-six ounces. Both sides, especially the left, were hugely dilated and hypertrophied. There was immense widening of the aortic valves, which were also insufficient; the posterior measured two inches and a quarter in diameter; they were thickened at their edges, and allowed of free regurgitation. The aorta was greatly dilated and had lost its elasticity, but was not atheromatous; it was greatly pouched, and formed an aneurismal dilatation towards the right side. There was slight pulmonary apoplexy and some pneumonia. The other organs were healthy, and no reason for the enormous hypertrophy could be found. It may perhaps be attributed to the aorta having first lost its elasticity and become dilated, owing to the nature of his occupation, which compelled him to carry heavy loads; double work may thus have been thrown on the heart by the loss of the elastic recoil, and the hypertrophy thus produced. The case has, therefore, been placed in this class, as the pathological condition closely resembles the other cases. The symptoms during life simulated aneurism of the aorta, and with that idea the tracings of both radials were obtained, but were found not to differ. Fig. 3, obtained from this patient, shows an immense length of upstroke, a sustained expansion due to the loss of elasticity; the dicrotic wave also has nearly disappeared, on account of the large amount of regurgitation and the absence of the arterial contraction.

The same form of pulse is represented in Fig. 4, though with less hypertrophy accompanying it. T. W., aged 55, was admitted into Guy's, under Dr. Habershon, on January 1, 1872. He gives no history of syphilis or rheumatism. He had suffered from œdema of the lower extremities and shortness of breath for a week before admission, and had great dyspnœa. Over the base of his heart a "to-and-fro" bruit was heard; at the apex there was a systolic one. The apex-beat was diffused; the pulse was described as having the "water-hammer" character; the arteries were hard and tortuous. His symptoms were those of aortic valvular disease, but the tracing obtained of his pulse indicated atheroma of the aorta. He died eighteen days after admission. At the autopsy his heart was found somewhat hypertrophied. The aorta valves were ulcerated, and one of them was perforated, permitting rather free regurgitation. The mitral valve was thickened, and the chordæ tendineæ were short, probably permitting slight regurgitation. There was slight fatty degeneration of the posterior column of the mitral valve. The aorta was extremely atheromatous and dilated; the sinuses of Valsalva were pouched; there was a small aneurism behind one. The lungs were in the first stage of acute pneumonia, supervening on chronic. Dr. Moxon considered it a case in which the disease had commenced in the aorta. The pulse presents the same characters as the last, except that the upstroke is shorter, the hypertrophy being less.

A. K., aged 41, admitted under Dr. Wilks on April 24, 1871, is another instance of aortitis producing aortic regurgitation, and simulating endocardial disease. He suffered from great dyspnœa, ascites, general œdema, and jaundice; his liver was much enlarged. The apex of the heart beat about midway between the sternum and the nipple. There was a loud "to-and-fro" bruit over the aorta, and the pulse was described as characteristic of aortic regurgitation. Death occurred about six weeks after admission. A post-mortem showed that death

had been caused by dilatation of the aorta and its orifice, produced by aortitis deformans, there being no valvular disease. There was hypertrophy and dilatation of the left ventricle. The pulse-tracing (Fig. 5) presents the same characters as the preceding one.

In Fig. 6 an extreme degree of deformation of the aorta existed. D. C., aged 35, was admitted, under Dr. Habershon, on January 10, 1872. He formerly worked at loading ships, and often lifted heavy weights. There is no history of constitutional syphilis. He has suffered from occasional palpitation of the heart for two years; is troubled by a cough, accompanied with expectoration containing blood, and much dyspnœa. The apex of the heart beats between the fifth and sixth ribs, an inch and a half below and two inches to left of nipple. A "to-and-fro" bruit is audible over the aorta; the sounds at the apex are clear. Under the right sterno-mastoid musele, but felt on each side of it, is a swelling two inches and a half broad: the swelling extends across the median line. Over it is a snorting single bruit, and a purring tremor may be felt. The aorta in this case was probably much dilated, and bulging in all directions; perhaps it might be considered to constitute an aneurism of the arch. He left the Hospital in much the same condition as he entered. The pulse in the two radials did not differ. Fig. 6 indicates a very great degree of hypertrophy and dilatation, for the upstroke and tidal wave are enormous. The tidal wave also is sustained, and the dicrotic absent.

In the case of F. P., also a patient of Dr. Habershon's, there was a systolic and diastolic aortic bruit, accompanied with aortie pulsation, an hypertrophied heart, and bad arteries, and the condition was probably much the same as in the preceding cases. Fig. 7, the tracing obtained of his pulse, possesses the same charaeters as those already noticed, with the exception of the small wave immediately preceding the main upstroke, which may occasionally be seen accompanying a diseased aorta. Its mode of production, however, is very obscure.

Fig. 8, obtained from a patient under Dr. Wilks, in July, 1871, is a typical tracing of this class. His symptoms were very obscure; he was suffering from some mental derangement, and it was noted that the first sound of the heart was prolonged at the base. There was no other symptom of cardiac disease, but the prolonged distension of the artery during systole leaves no doubt as to the condition of the aorta.

W. G., whose pulse-tracing is represented in Fig. 9, was a patient under Mr. Cooper Forster. He had a systolic and diastolic murmur at the base of the heart, over the aortic valves, and down the sternum. All his arteries felt rigid and hard, and the pulse-tracing presents the characteristics of aortitis. This may be taken as an example of a case in which that disease may be diagnosed by the sphygmograph, in the absence of further evidence.

The last figure in this section was taken from a man with extensive arterial disease. R. J., aged 47, was admitted under Dr. Habershon, on January 10, 1872; he had been ill a year with dyspnœa, pain at the epigastrium, especially when he swallowed his food. The apex of his heart beat three inches below and half an inch to the outer side of the nipple. A double bruit was audible at the base. At the apex the sounds were apparently normal, but indistinct. He went out in May unimproved, his dysphagia and dyspnœa being increased. The complete absence of the dicrotic wave in the tracing (Fig. 10) indicates free regurgitation, and the prognosis would be accordingly very bad, the reverse of Fig. 8, where the dicrotic wave is very considerable.

The three cases included in the last section in the plate are some in which both aortic and mitral disease are present. They have been introduced in order to show the variable effects produced on the pulse as one or other form of disease predominated.

In R. S., a lad under the care of Dr. Pavy, both valves were affected. His heart was greatly enlarged, bulging out the ribs, and making its pulsations visible over the lower part of the left side of the chest. There was a "to-and-fro" bruit to be heard at the base of the heart, and a systolic one at the apex, in the axilla, and posteriorly. Fig. 11 represents his pulse-tracing. The upstroke is long, and the pressure employed considerable, indicating the hypertrophy, while the dicrotic wave is diminished, the pulse quite regular, and resembling that of aortic disease, which probably existed far in excess of the mitral. Fig. 12 was obtained from the apex-beat of the heart in the same case. It is perhaps worthy of notice that the highest point of the tracing (that is, the period of maximum intensity of the contraction) is at the termination of the systole instead of at the commencement; and this appears to be usually the case in aortie disease, while in mitral disease it is at the commencement of the systole, which is remarkably unsustained.

The case of C. W., a patient of Dr. Pye-Smith's, was very similar, except that in him the mitral valve was apparently most involved. In this instance, also, there was great enlargement of the heart and bulging of the ribs, and a very strongly marked and visible pulsation. Fig. 13, which illustrates his pulse, presents a marked disproportion between the percussion and tidal waves, showing the contraction to be powerful, while only a small quantity of blood was thrown into the vessels. The peculiarly sustained dicrotic wave indicates the venous obstruction that existed, owing to the obstacle to the blood-flow produced by the free mitral regurgitation. Fig. 14, which was obtained from the apex of the heart, does not fully represent the force of its contraction, for too much pressure had to be put upon the spring in order to confine its movements to the size of the paper on which the tracing was taken. It shows, however, that the maximum intensity of the contraction took place at its commencement.

The last case illustrated in this place—that of R. T., a man under the care of Dr. Wilks—is another in which both aortic and mitral valves were diseased, the latter being by far the worst. A fairly loud systolic and a soft diastolic bruit were heard at the base and down the sternum, while a loud systolic one was audible at the apex and posteriorly. The heart's action was very irregular. Fig. 15, obtained from his radial, is a good specimen of a mitral pulse; its great irregularity, small tidal wave, and sloping upstroke, are unmistakable signs of the valvular lesion which exists. There is no indication of the aortic disease. Fig. 16 was obtained from the apex of his heart, and is highly characteristic of mitral disease, the systole being very unsustained.

From these few illustrations of the pulse in the most common forms of cardiac disease, though necessarily scanty and incomplete, a general idea of the value of the sphygmograph in these cases may be obtained. It will be seen how impossible it is to found a diagnosis on its evidence alone; and yet what important assistance it may give to the physician when used in conjunction with the stethoscope! How valuable the information it affords as to the mechanical condition of the circulation; how perfect a means of watching the action of a remedy or the cause of a disease; how true an indication of hypertrophy; how correct a gauge of the heart's competency; and, lastly, how great an aid to prognosis! But its sphere of usefulness does not end here; there yet remain to be considered the results obtained by its use in general diseases.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

OPERATIONS.

1. *Varicocele*—2. *Excision of Hip*—3. *Exploration of Hip after Excision*—4. *Secondary Excision of Elbow, with use of iron rod and wire*—5. *Excision of Knee*—6. *Herniotomy.*

The following operations were performed on September 4:—

1. *Varicocele.*—Mr. Sydney Jones operated in a well-marked case of this disease, as usual, on the left side. The testis was atrophied, and the patient suffered from much aching pain. Mr. Jones proceeded in the same way as he adopts for ordinary varicose veins of the legs, and which he has invariably found to succeed. The vas deferens being held out of harm's way, two harelip-pins were passed behind the veins, and thick silk used so as to compress the opposed sides of the veins, but not so tightly as to cause ulceration; a tenotomy-knife was then introduced so as to divide subcutaneously the veins between the two pins. The patient was then transferred to bed, and an ice-bag applied. Mr. Jones stated that the pins were allowed to remain from seven to fourteen days; the time varying according to the amount of irritation produced.

2. *Excision of Hip* was next done in a boy, aged about 12, who had had mischief for nearly two years. There was no wound, but fluctuation could be detected in front of the joint. Knocking upwards of the limb, pressure in front of and behind the joint, as well as over the trochanter, caused ex-

crueiating pain; much suffering was also induced by inversion and eversion of the limb. These symptoms, taken in connexion with a phthisical predisposition of the patient, induced Mr. Jones to operate. A T-shaped incision was made over the joint, and the capsule opened; pus and inflammatory exudation escaped. Mr. Jones followed the plan he usually adopts—viz., to saw through the neck of the femur with a narrow saw, without turning out the head from the acetabulum; thus detached, a little leverage with a scoop easily enucleates the head. The head was in parts quite bared; elsewhere the cartilage was necrosed, and separated from carious articular surface. With the exeeption of a small bared patch of acetabulum (the arca of a fourpenny-piece), this artieular surface was covered with granulations. The gouge having been lightly applied to this bare patch, the limb was adjusted on a braeketted splint, extension being used from the opposite limb.

3. Another case was brought into the operating theatre, in which Mr. Sydney Jones had removed the head of the femur two months previously for hip disease. Then, besides the femur, a sequestrum was removed from the acetabulum, and the rami of the pubes and ischium were found bared. The boy did well after this operation, and was remarkably relieved. There was, however, during the last ten days profuse diseharge, and this induced Mr. Jones to re-explore the wound in the hope of finding a separated sequestrum. Much gritty matter was turned out; the exposed rami were found disposed to granulate; the sawn surface of the femur was healthy and granulating. From the free opening made by this second operation much benefit was anticipated.

4. *Operation for Failure of Resection of Elbow—Use of Iron Peg fixed with thick Copper-wire.*—In this case a man with anchylosis of elbow after disease had been operated upon by reseetion in Calcutta. Movement, three times daily, was commeneed on the next day after resection, and diligently persevered in, with the result that his forearm was likc a flail on his upper arm—the forearm hung loosely from his arm. In the site of his old joint movement might be made in any direction; but when the arm and forearm were securely fixed, either by a splint, or by a firm grasp at the elbow, the power of the hand and forearm was perfect. In order to obviate the neeessity of the man wearing permanently a splint, Mr. Sydney Jones resected afresh the bone ends two months and a half ago; but although the parts were kept rigidly in contact on a splint, no reparative material was thrown out to unite the resected surfaces. The wound healed in from ten to fourteen days, and the condition was the same as before the fresh resection was made.

On September 4 Mr. Sydney Jones bared the bone ends, and disseeted up for a short distance the periosteum from the humerus above, and from the radius and ulna below; the bones were then freshly pared, and, with an ordinary awl, a perforation was made of the humerus and ulna. Through the perforation an iron rod about the size of a No. 6 catheter was passed, so as to make the two ends projeet externally at the two ends of the wound. A loop of copper écraseur-wire then fixed the bones and iron rod, and was made to pass through the lower end of the wound; the rest of the wound was elosed by wire sutures, Through the upper angle escaped the upper end of the wire rod; through the lower angle the lower end of the rod and the wire. Mr. Jones stated that the length of time allowed for the iron rod to remain would depend upon the effect produced; when the rod was removed the wire could easily be made to follow.

5. *Resection of Knee-joint.*—This was performed in a woman, aged about 25, who had been the subject of knee-joint disease for from seven to eight years. At first the joint had been acutely inflamed, but sinee the subsidenee of this the limb had been more or less useless. Points of tenderness and pain always remained at the inner side of the joint, and more acute inflammation occasionally supervened, involving the joint and causing œdema of the leg below the knee. She had been laid upon several occasions, for variable periods, during the last seven or eight years. Mr. Sydney Jones, having tried for a lengthened period rigid rest on splint and counter-irritation by the actual cautery, without any benefit, excised the knee-joint. This was disorganised by recent and old deposit; in many places the bones were bared, and on resecting the tibia three or four patches of necrosis were sawn through; the remnants were gouged out from the pared end of the tibia, and, all diseased synovial structure having been carefully dissected away, the sawn surfaces were accurately adapted and fixed on the excision-splint ordinarily used at St. Thomas's.

6. The sixth case operated on by Mr. Sydney Jones was one of strangulated femoral hernia in a woman in her 81st year. She had been the subject of hernia for a number of years, but had never worn a truss. Her symptoms of strangulation commenced two days previously; she had had violent vomiting, and severe pain, with distension, in her abdomen. The hernia was small, about the size of a walnut, and an appendage could be traced in front, which Mr. Jones said might be either a bit of fat, a pouch from sac, or a gland. On incision it was found to be a nodule of fat. The sac was opened for the sake of exploring the state of its contents. A small knuckle of intestine was found, dark-coloured, but apparently with its vitality unimpaired. By a straight hernia-knife the inner side of the sac and Gimbernat's ligament were divided, and the intestine easily returned. On Saturday she was doing well; there had been no further sickness, and the abdominal tenderness and distension had subsided. Some sloughing of cellular tissue subsequently occurred in the neighbourhood of the wound. With this exeeption she has done well.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF PRURIGO.

(Under the care of Dr. TILBURY FOX.)

THE term "prurigo" is used in a very loose manner, and often to denote the irritable pimply rash which follows the attaek of pedieuli upon the skin. The disease produced by the pedieuli vestimentorum is now, however, very generally ealled phthiriasis; and by prurigo is meant, according to Hebra and others, a disease whieh is eharaeterised by the development of eertain largish papnles, which are accompanied by intense itehing, and are primary formations. Prurigo, as thus defined, includes Willan's prurigo mitis and formicans, but not the prurigo senilis, which is phthiriasis or lousiness, or senile atrophy. The following are the notes of a ease of true prurigo recently attended in the out-patient department of University College Hospital, together with Dr. Tilbury Fox's remarks upon it:—

History.—J. H., aged 47, came to the out-patient department of the skin infirmary at University College Hospital on Saturday, May 6, 1871, complaining of a breaking out in the skin. The woman is a laundress, who had recently been obliged to work harder than usual of late, in consequence of her having a sick husband. She generally works from 8 a.m. until 8.30 p.m., and sometimes 9 p.m., in a wash-house the first two or three days, and the other two or three ironing in a hot, close room. She works close to a red-hot stove, and has been doing this kind of work for about seventeen years. She has been living badly for the last few years. Has been regular up to the present time, but has always had "awful labours." Her first husband died seventeen years ago. She had fourteen children by him, and not one was born alive. She never went more than seven months. Her first husband was "a very gay man." Has had three miscarriages and seven children with her second husband. Of these seven children, three were born alive—one lived to be five months, one two months, one eighteen days old. None of them had a single spot about them, but all had "snuffles." The other four children were born dead—one at seven months and the three others at the full time. None appeared to be at all diseased. It seems that the woman was often delivered by instruments; some children came feet first, and so on; in fact, the labours were generally difficult and irregular. As far as can be ascertained, this woman never had any eruption about her before the present time, or had sore throat or rheumatism—in fact, not a sign of syphilitie infection can be made out; and the woman is very communicative. She "used to breed with a deal of water."

History of Present Attack.—The patient first noticed something wrong with the skin about ten years ago, and then observed "a breaking out" and itching about the ankles and outside of the arms. The rash was composed of little pimples, which itched greatly, and she then scratched them. The itching was "terrific at night," and "bad all day long"; and it was increased by her getting hot at the ironing in the laundry. She went at different times to a dispensary, and got no better. The only thing that relieved her was the applieation of eold water. She has been "better at times," but never thoroughly clear. She has never had any signs of constitutional syphilis as far as can be gathered.

Present State.—The woman is fairly nourished, darkly pigmented in the face and skin generally. She has a rash about the legs, the lower part of the body, and the arms. Around each ankle the eruption takes the form of a circular band, two inches or more in width, encireling the leg. It

looks like the bark of a tree, and feels horny and rough, but it is studded over with pruriginous papules; and pruriginous papules—that is to say, hard knotty points with scratched tops, covered with dried blood—are scattered about the edge in a discrete form. The aggregated aspect of the main patches is due to crowding together of the papules and the effusion into the skin of plastic matter. There are a few shotty pimples about the front of the leg. Both ankles are similarly affected. The whole outer part of each arm is covered by large papules, flesh-coloured at base and dark at their apices, distinct the one from the other, feeling hard and rough. There are some thirty or forty below the elbow on the outer aspect, a few subcutaneous little lumps feeling like little knots farther down, and also above, over the front of the shoulder, and on the front of the clavicular region. Over the scapulæ are some few similar spots. These appearances are present on both sides. The skin is deeply pigmented. There are no small hæmorrhagic spots. There is a group of pruriginous spots on the outer side of each thigh, over the head of the thigh-bone; and distributed over an area the size of the palm of the hand, and at the lower part of the body behind on either side, exactly corresponding to the gluteal regions, the disease is similarly marked, whilst it covers the entire front of the abdomen, from side to side, below the level of the umbilicus, only the pruriginous papules are more scattered. The skin generally is thickened and pigmented. So, then, the only spot where the eruption is confluent is about the ankles. The pruriginous papules are conical, large, the size of a shrivelled pea in most cases at the apex, and a split pea at the base, the top being scratched off. They are solid lymph formations. There are few scratches, and there are no hæmorrhagic specks as one sees in phthiriasis, and there are no pediculi to be found.

Comments.—Dr. Fox remarked that her general system had been much disturbed. What with her worry and anxiety, her miscarriages, and a rapidly increasing family, and bad feeding, she had got out of health just at the time that she changed her mode of life and went to the laundry. No doubt the alternate stimulation of the skin by heat in the ironing-room and the chilling in the wash-house of the laundry sufficed to excite changes in the cutaneous innervation, which were followed in her case by cell-change in the papillary layer of the skin, producing itchy papules. The character of the rash consisted in the presence of discrete papules, red-coloured, the size of hempseeds or split peas, in connexion with intense itching, and, as primary phenomena, the papules, on being scratched, becoming covered by blood-crusts, or "pruriginous." There were also papules only recognisable by the touch. The skin subsequently, as the consequence of scratching, became thickened and pigmented. These are the characters of prurigo. The itching was increased by warmth of all kind. It has yet to be determined how far the disease is connected with actual change about the nerve filaments of the skin.

Treatment.—The indications were clear; tonics were given. There was no reason to think the excretory organs were not doing good work. The tonics selected were quinine and steel and cod-liver oil. Locally it was necessary to soothe the skin by alkaline and bran baths, using palliatives for the itching in the form of a lotion made of digitalis and prussic acid. Subsequently a mild mercurial ointment was used. Removal as much as possible from the hot laundry was counselled, and the woman soon got well. Most trust was put in soothing treatment and good feeding.

WESTMINSTER HOSPITAL.

TREATMENT OF STRICTURE.

(Under the care of Mr. HOLTHOUSE.)

W. F., AGED 47, labourer, thin and haggard-looking, was admitted into Mark ward, under the care of Mr. Holthouse, on June 20, 1872, with several urinary fistulæ in the perineum and scrotum, and two abscesses of some size in the cleft between the thigh and the scrotum of each side. The whole of these parts were greatly swollen, hard, and brawny, and emitted a strong urinous smell. When the patient made water the stream was divided between these artificial outlets and the natural passage, the greater part coming through the former.

History.—Six years ago he had gonorrhœa, and two years afterwards he noticed that the stream of water was smaller, and it continued to diminish in size till he could scarcely pass any without great straining; then abscesses formed and broke in the perineum and scrotum, and urine came from them, until he at length found it necessary to apply for advice.

On the day after admission he was seen by Mr. Holthouse, who, finding that attempts had already been made to pass a catheter, had him taken into the operating theatre, and chloroform administered. Mr. Holthouse first opened the abscesses, which contained a thin urinous pus; he then slit up several sinuses which communicated with each other, and afterwards attempted to pass a No. 1 silver cathether into the bladder. In this he did not succeed, not being able to get the instrument beyond the bulb. The patient was therefore carried to bed. Hot fomentations were ordered to be constantly applied to the perineum and scrotum, a suppository of morphia (gr. ss.) to be introduced into the rectum every night, and a warm bath daily.

On the following day (June 22) the patient felt much relieved, and the urine flowed more freely through the several outlets.

June 24.—Looks better; the swelling of the scrotum and perineum has diminished. Introduced a No. 4 silver catheter into the bladder, and drew off nearly a quart of urine. Full diet was ordered, but no medicines. Catheter to be introduced night and morning, and the other treatment to be continued.

July 1.—Continues improving. A No. 6 catheter passes readily; the wounds in the perineum are healthy-looking, and but little urine escapes through the fistulæ. He was ordered half a pint of porter, zinc ointment to the wounds and to be smeared over the perineum and scrotum to protect the skin. An olive-headed elastic catheter was introduced and tied in the bladder.

5th.—Found him suffering from paraphymosis, and the prepuce could not be drawn forwards till the constriction was divided. The elastic catheter was withdrawn, and not reintroduced.

8th.—A No. 10 catheter can now be passed into the bladder without difficulty, and but little urine comes through the fistulæ, which are fast healing.

12th.—A No. 10 gum elastic catheter was fixed in the bladder, where it was allowed to remain till the 19th, no urine having come through the openings in the perineum.

22nd.—Has not had a catheter passed since the 19th, and the urine is now voided in a full stream, but still there is a slight oozing from the perineum when he makes water. Elastic catheter No. 10 reintroduced and fixed.

29th.—Catheter causes no irritation, and is still retained.

August 10.—The catheter was not removed till the 5th, when all the sinuses had healed. He now makes water freely, and entirely through the natural passage, and has gained greatly in flesh and strength.

Discharged cured.

CORNWALL ROYAL INFIRMARY.

MOVABLE KIDNEYS.

(Under the care of Dr. JAGO.)

IN the *Medical Times and Gazette* for July 10, 1858, there are reported "two cases of supposed movable kidney," which had been under my care. To ascertain how far my diagnosis that the movable abdominal bodies were harmless might be justified by the future, I have recently made inquiries about the patients. The first, I find, "rejoined her husband in Australia" several years after the above date, and it is not improbable that she is still alive. M. S., the other, though still carrying the "tumour" that had formerly so much troubled her mind, was a few months since (when last heard of) in wonderful health and spirits, and almost oblivious of the movable body whose presence she had herself detected twenty-three years ago.

On April 22, 1869, I made the following note at the Infirmary:—M. H., out-patient, aged 28, of middle stature, and well made, of generally healthy though anxious and hysterical aspect, complains of menorrhagia and leucorrhœa, and of a pain in the back below the right scapula, which she thought must be owing to the dragging of a movable tumour lying within the abdomen, whose existence she had herself discovered four years ago, and which had remained unaltered in character and size in spite of persevering treatment, local and constitutional.

The body alluded to I found to be smooth, and of the size and form of the kidney. It seemed to be attached by a broad band to a portion of the abdominal wall, situated a little to the right of the vertebral column, at about the junction of the dorsal and lumbar parts. When she lay on her back it could be grasped two or three inches below the ribs, and the band acted as a *radius vector* in such a way that it permitted the body to be carried up under the liver, well to the left, and

around down below the transverse line passing through the navel, also round by the right, but with less play than towards the left. I had no doubt I had to do with a kidney furnished with a mesonephros.

I have been informed by a medical friend that he had an opportunity of examining this case about a year after I had, and that the patient shortly after left this county. He agreed in my diagnosis.

Finally, on March 28 of this year, I witnessed a post-mortem examination of a case in which I had, during the lifetime of the patient, ascertained the mobility of the right kidney. A woman, aged 53, was undergoing rapid emaciation from vomitio, and I was trying every portion of the abdomen in quest of some physical cause that might account for it, when I observed that the right kidney was not fixed to the back, though the left was. When I pressed upon its lower end it slipped away from my hand, shooting upwards, and turning on its upper end, either to the right or left, according to the direction of the pressure. However, if its upper border were pressed upon, though it descended sensibly, it did so comparatively only to a slight extent. When grasped between the fingers the lower end could be lifted from the back, though the hilus could not be fairly reached, and the upper end could barely thus be lifted. If tightly seized at the bottom, from its smoothness it eluded the grasp. Hence, though in this instance the kidney was not nearly so loose as in the other cases I have recorded, it was decidedly movable.

At the post-mortem this kidney was found separable from its lumbar bed about three inches at the lower margin, and two at the upper, with the renal vessels free enough not to impede such movements. The peritoneum was adherent to all its anterior surface, and also laterally along the border towards the lower portion, so as to continue the attachment in some places somewhat posteriorly; but it did not, in any sense, meet from opposite sides to enclose the renal vessels so as to constitute a mesonephros. The membrane passed more or less laxly from the kidney to the lumbar structures, and thus tethered its upper end more shortly than the other.

The result of this autopsy is such that, although the play of the kidney was comparatively limited, I should abandon the idea of a mesonephros in cases of greater play, in the absence of post-mortems to verify it.

To sum up the four examples of movable kidney I have met with:—All the patients were women, and the organ always the right. The first case was complicated by excoriated os uteri and irritability of the bladder, which was exaggerated by pushing the kidney downwards; the third with menorrhagia and leucorrhœa. There were signs, symptoms, or history which raised the question of malignant disease in the first, second, and fourth cases. The second and third patients were victims of hysteria.

Dr. Roberts, of Manchester, in his work on "Urinary and Renal Diseases," having noticed my two previously published cases, I sent him my notes on the third. In his reply of September, 1869, he informs me that since his book was published he has had an opportunity of post-mortem inspection in a well-marked case of movable kidney. There was an "unusual length of the renal vessels. There was no mesonephros."

RUPTURE OF THE UTERUS AND SUCCESSFUL GASTROTOMY.—Dr. Fourrier, of Compiègne, relates in the *Bull. de Thérapeutique* for August 15, in great detail, one of the most remarkable cases on record. We have only space to note the chief points. He was called on December 18, 1871, to a woman, 29 years of age, in whom on the 14th rupture of the uterus had taken place, with discharge of the child (between seven and eight months) into the cavity of the abdomen. The woman was apparently sinking from exhaustion, and after putting her under chloroform gastrotomy was performed. The child, together with the placenta and membranes, having been removed, the left iliac fossa was found to be lined with a blackish membrane in shreds, which was afterwards determined to be the peritoneum in a state of gangrene. Coagula concealed the aperture in the uterus, but neither after the accident nor during the operation had there been hæmorrhage of any importance. The case went on well, with some fluctuations, until January 14, when enteritis and what was at first feared to be purulent infection set in. Quinine was given in large doses with good effect, and the patient eventually did well. By February 19 she was considered quite well, and in May menstruation reappeared. She has been seen several times since, and continues quite well.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
"	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
"	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, SEPTEMBER 21, 1872.

SANITARY DUTIES AND PRIVATE INTERESTS.

WE see that the Poor-law Medical Association is bestirring itself about the question whether the Poor-law Medical Officers shall or shall not combine sanitary with their curative functions. Common sense decides that they ought to do so. They are already in the habit of visiting the mass of the people in their own homes. They are employed to combat the diseases which have their origin in overcrowding and filth; and it is they who are first made aware of those first cases of imported disease—such as small-pox or scarlatina—which, if not isolated or nipped in the bud, may be the seed-bed of a widespread and fatal epidemic. That the Poor-law Officer should recognise the existence of epidemic and infectious disease, that he should register it, bring it to the notice of the local authority, and dictate the measures to be adopted for suppressing any local nuisances, for isolating and removing the sick, and for weeding out overcrowding, seems to be no more than every medical man ought to do in every family to which he is called. What is the use of employing Poor-law Medical Officers to treat the sick, if they will not protect the healthy,—which latter function is the more important of the two. And in any thinly peopled widespread population, why should three people be employed to do what one energetic man can do singly? The Poor-law Medical Officer visits a man ill with fever on Snettisham Heath. He finds a filthy pigsty, and a drain overflowing near the well. The same pen that orders the man's removal to the cottage or workhouse hospital, can surely order an immediate notice to be served for the abatement of the nuisance, without also employing a Medical Officer of Health and an Inspector to go over the same ground. The argument in this matter was put with irresistible force by Professor Acland at the late Social Science meeting at Plymouth.

But this is too simple a matter to please everybody. That a Poor-law Medical Officer should do for his patients and employers what every private medical attendant is bound to do, seems to some minds inconceivable. There is a school of medical men who are not ashamed to say of their Poor-law brethren that they must not undertake sanitary duties because

they are too flunkeyish and corrupt. A respectable hospital surgeon at Plymouth, whose name we suppress because there is no doubt that he will be glad to retract his opinions some day, is found to say—

"It is not too much to say that the position of a private practitioner is quite incompatible with the faithful and satisfactory carrying out of the duties of a Health Officer. It is not in human nature to suppose that such a man will be likely to carry out his sanitary duties satisfactorily to his employers and with comfort to himself: he must be influenced more or less by the feeling that he is depending for his daily bread on the support of those whose pockets he is called upon to touch in the administration of his public duties; and this would especially apply to rural districts, where the Parochial Medical Officer is often, if not generally, the private medical attendant of those to whom he would have to administer sanitary laws. It is not a fair position to place any man in, to make him the engine of insisting on the carrying out of sanitary work against his patient's inclination. Would it be pleasant for him to condemn his patient's meat as unfit for human food? or, if he were also a public analyst, to report that his patient's merchandise was extensively adulterated? It appears important, then, that the Medical Officer of Health should be debarred from private practice on the above ground."

The answer to this is—that public opinion repudiates, and Professional opinion abhors, the idea that such a flunkey should be a member of a liberal profession, and that any man who is so afraid of boards of guardians is unfit, even now, to attend to the interests of the sick poor in a curative capacity. How can he dare order meat and wine? How can he venture to beard the guardians, and demand space and ventilation and good nursing in the workhouse?

Another argument is used in favour of depriving the Poor-law Medical Officers of the sanitary duties which they only can execute thoroughly. It is that they must be prepared to be analysts of food. Now, we assert that the loss of life and health from adulteration in any shape is not one-thousandth part of what arises from overcrowding and filth; that the duties of Public Analyst, including the examination of water and gas, should be performed by a professed chemist, who need not be a physician; and that to appoint a mere chemist to be Officer of Health, instead of a man who knows the poor, their haunts, habits, occupations, diseases, and vices, is to make the office altogether perfunctory.

THE LOCAL GOVERNMENT BOARD AND THE PORT OF LONDON.

The Local Government Board has entered on the duties assigned to it by the Public Health Act, and has issued its first order. It is to the Corporation of the City, who, at their own request, were constituted by Parliament the sanitary authority for the Port of London. The order assigns to the Lord Mayor, Aldermen, and Commons all the powers, duties, capacities, liabilities, and obligations created by the existing Nuisances Removal Acts, and empowers and directs the Corporation to appoint a Medical Officer of Health, and a proper person to be Inspector of Nuisances for the Port. By a curious oversight, the Act, in specifying the Port of London as a sanitary district, omits to add "or of any part thereof,"—a qualifying clause which is used in reference to ports in general. The statutory definition of the Port of London makes it comprehend the river and its banks from the Nore Light to Teddington—a distance of between sixty and seventy miles—which might furnish employment for at least half a dozen Medical Officers of Health and a regiment of Inspectors. It is clear that for sanitary purposes the area of the Port must be greatly diminished; and it is probable, as is suggested in an article in the *Times* on the subject, that the Port for sanitary purposes will be limited to that part of the river where ships are moored, and will include the docks on both banks. This extent would indeed afford ample work for a Medical Officer of Health, and for several Inspectors, seeing that in 1870 40,839 ships of all kinds entered and cleared the Port; and the last census shows that 5251 of the population of London live in ships. To order the appointment of one Inspector for 40,839 ships does not evince, on the part of the Local Government Board which gives the order, the possession of a very grave sense of the duties to be performed. Considering the danger to the community of the introduction of disease from abroad, the defective hygienic condition of much of the mercantile marine, and the vast interests at stake, we should have thought that the appointment of at least two Medical Officers of Health, who might divide between them the enormous area, and of half a dozen Inspectors, would have been more consonant with the spirit of the Public Health Act and with the wishes of the Corporation, who have come forward voluntarily to undertake the responsibilities of the sanitary authority, and who, it cannot be doubted, are quite prepared to perform those duties with that thoroughness and public spirit which pre-eminently distinguish the citizens of London. As it is, the order reads very much like a direction "How not to do it." The question of expense is the very last that should be considered in such a case. Of all the sanitary districts in the kingdom there is not one in which the interests at stake are so enormous, in which danger is more constantly present, and in which the payment of a few salaries would be of so little moment as in the case of the Port of London. And yet the whole duties of inspecting and superintending the hygienic condition of more than 40,000 ships, many miles of docks and wharves, and of preserving the largest civilised and richest city in the world from the introduction of cholera plague and other contagious diseases, is to devolve on one Medical Officer and one Inspector.

EPIDEMIC OF CEREBRO-SPINAL MENINGITIS IN MONTREAL.

In the last number of the *Canada Medical and Surgical Journal* we find recorded some interesting cases of epidemic cerebro-spinal meningitis occuring in Montreal. Our readers will remember that some years ago this malady raged in Eastern Prussia, that later it appeared in America, and also in Ireland. Since that time the malady has prevailed more or less extensively in Canada and the United States, especially during the last winter in New York State and City and in Chicago. Early this spring it visited Montreal, and the first cases have come to us very carefully recorded. About the same time small-pox was raging, and the earlier symptoms of the one coincided in considerable measure with those of the other.

One of the earliest cases is well recorded by Dr. Howard, of the McGill University. The patient was a boy. The premonitory symptoms were vomiting, with restlessness and a dull, heavy, stupid look. Early, too, a number of petechiæ of a purpuric character appeared, and later, purple-looking weals on various parts of the body, which were tender, but not itching. The head was fixed, the arms and legs flexed and rigid. The joints, too, were swollen and painful. In this case the malady gradually wore itself out, but in others death took place.

In one of these fatal cases the boy was suddenly taken ill during the night. He had been quite well the previous evening, but in the night time vomiting and convulsions set in. The head and trunk were hot; the extremities were cold. The muscles twitched a good deal, and the extremities jerked. There was great restlessness, and the pupils were contracted. The least touch brought on an attack of restlessness or twitching. Later this increased for a time and the head was retracted, but by-and-by muscular relaxation took its place. In his sleep he began to perspire freely, and a full crop of petechiæ made their appearance; but he awoke in convulsions. Treatment for a time soothed these, but after that collapse set in and he died.

There can, we think, be no doubt as to the nature of these cases. The symptoms and the eruption are all tolerably

characteristic. In former epidemics it was frequently observed that young people were more prone to be affected than older ones, and in this outbreak the same rule has prevailed.

Dr. Howard remarks that up to the time when this malady made its appearance purpuric spots generally portended an attack of small-pox, which, as we have already said, prevailed at the same period. This is an interesting fact, and tends to place cerebro-spinal meningitis in the same category as small-pox, typhus, and other malignant zymotic diseases.

Another interesting fact observed was the tendency to form these painful weals of a red colour. The whole skin in certain cases was of a reddish tint, and a scratch with any sharp-pointed body, which did not penetrate the skin, was soon followed by a line of deep red, indicating local relaxation in the vessels as the result of this slight irritation.

The treatment pursued by our brethren in Canada seems to have been somewhat haphazard; but, indeed, no general rules for treatment can be laid down. In East Prussia, bleeding was adopted in the early stage; later in the disease opium was given. As the pain in the head and nape of the neck is one of the most marked symptoms, local depletion might be used; but we confess, bearing in mind the purpuric character of the malady, we should greatly prefer some other remedy. For the pain in the head and neck we should certainly employ ice, and keep it constantly applied. In some of the cases here recorded ice was used in this way, greatly to the patients' comfort.

The remedies mainly used by our Canadian brethren seem to have been bromide of potassium, with iodide of potassium, and some counter-irritation, if such it could be called, to the spine. Chloral hydrate, too, was tolerably freely given. Aconite was also used. It is useless laying down any general rule of treatment in such a malady. Symptoms must be treated as they arise. If anything, in this epidemic the treatment was too complicated; it would have been better to trust more to local cold—if we may venture to say so at this distance.

One of the great peculiarities in the malady is these purpuric spots; and the fact indicated by Dr. Howard, that similar spots prevailed among patients the subject of small-pox at the same time, is full of interest. Sydenham would have put it down to the medical constitution of the time.

THE WEEK.

TOPICS OF THE DAY.

We hear that our distinguished *confrère*, Dr. Fayrer, who has been staying as a guest with the Duke of Sutherland at Dunrobin Castle, has had the honour, during his visit, of being presented to her Majesty. It will be gratifying to our readers to know that the Queen received the distinguished Indian surgeon and physician with marked favour, entering into conversation with him, and honouring him by accepting a copy of the magnificent work on the poisonous snakes of India which Dr. Fayrer has lately published. Her Majesty acknowledged the presentation in a letter written by Colonel Ponsonby, and has further honoured Dr. Fayrer by presenting him with a portrait of herself, to which her signature is appended.

The address delivered by Dr. Acland, as President of the Public Health Section at the Social Science Congress at Plymouth, has been commented on in a somewhat hypercritical spirit, we think, by the *Times* newspaper. The learned Oxford Professor recommended the storage of rain-water in villages for their ordinary water-supply, on which the *Times* remarks that stored rain-water in villages is particularly exposed to some of the most dangerous forms of pollution. No doubt of it; but not because it is rain-water. All water is exposed to some of the most dangerous forms of pollution, if care be not taken to exclude them. And for this care the local authorities, officers of health, and inspectors are appointed. We are not expressing any opinion on the abstract question of whether a population should look to rainfall for water-supply, but we say that if they do it is quite possible by proper precautions to keep stored rain-water free from deleterious impurities; and this is more than can be said—in the present state of the drainage of towns and houses throughout the kingdom—of either river- or well-water. In some country houses round London the inhabitants are supplied with nothing but rain-water, and it supplies them well.

Two or three more outbreaks of cattle plague have occurred in the immediate vicinity of the infected district. The Hull cattle market is to be closed for twenty-one days. The nearest outbreak to Hull has been at Patrington, about fifteen miles distant.

The question of the acceptance of bail in criminal cases has lately come before Mr. Justice Quain. The case was that of a man charged with shooting at his wife with intent to murder her. An application was made, supported by an affidavit from a surgeon, on the ground that the prisoner was subject to epileptic fits, and that confinement would endanger his life. The committing magistrates had previously refused bail in the case. His Lordship read the deposition, and, finding that the prisoner appeared to be addicted to drink, directed that if necessary the prisoner should be placed in the gaol infirmary. He refused the application.

LITERATURE *v.* SCIENCE.

If in times gone by language and literature occupied too large a share in education, to the neglect of observation on the facts of nature as they are (which is the essence of physical and natural science), it must be confessed that some of the present advocates of science display similar intolerance with regard to the claims of language and literature. *Nature* of September 12 quotes from the *School Laboratory of Natural Science* of Iowa, U.S., the following passage. It is fair to add that *Nature* quotes without endorsing it:—

"One of the principal drawbacks to the perfect success of the laboratory has been the admission of some students of advanced standing in the dead languages. We find these students almost invariably less careful in their work, and more hasty and illogical in their conclusions, than the regular beginners; they also have made the greatest blunders in calculation. As a result, such juniors have failed in competition with common sub-freshmen. I should not refer to these facts if it were not so frequently asserted that the study of the dead languages constituted an auxiliary to the study of science."

We need not say that experience on this side of the Atlantic tells a different tale, and that it is found that the study of anatomy and physiology, and those parts of medical training which are based on observation, are attended with far more success in the case of students who have had a sound classical training than of others who have not that advantage. For our own part, we think it a scandal to a learned profession that any member of it should not be able to read or write a bit of Latin, or that members of a higher grade should stumble at easy Greek; for, in truth, the much-despised dead languages (as they are ignorantly called) are the key to the highest branch of science—the knowledge of the human mind and its development. We cannot have a better example than was afforded by a paper on "Atoms and Molecules," published in the number of our ably-conducted contemporary for June 27, by Dr. Samuel D. Tillman. This very interesting paper contains not only a disquisition on the nature of the ultimate constitution of matter, but a history of the traditionary atomic doctrines held from the earliest times to the present. Ecphantus, Leucippus, and Democritus are first brought on the stage; next Lucretius, then Newton, and so on to the philosophers who now survive. In a note, still further elucidating the doctrines held by the most ancient philosophers, Dr. Tillman says—

"And as evidence of the belief prevalent among wise men several centuries later, Berzelius, in his paper on 'Proportions, determinate,' quotes from Philo, who, in his collection of the

choicest philosophical ideas of his time ('Libri Sapientiæ,' cap. xi., v. 22) says:—Πάντα Θεὸς μέτρῳ καὶ ἀρίθμῳ καὶ στάθμῳ διέταξε ('God made all things by measure, number, and weight'). This remarkable statement, as far as it relates to things terrestrial, modern chemical investigations have fully confirmed."

This extract may show that the despised dead languages and ancient literature are essential to the knowledge of the development of human thought; and we may add that a very slight acquaintance with ancient literature would have saved the author from an absurd mistake, for he might have known that the "'Libri Sapientiæ,' cap. xi., v. 22," in which Philo is described as collecting the choicest philosophical ideas of his time, is nothing more than the Book of the "Wisdom of Solomon" in the Apocryphal part of the English Bible, where the passage quoted will be found at the 20th, and not the 22nd verse. He might have known, too, that this passage has been quoted times without number by writers on statistics, as an ancient and sacred testimony to the Reign of Law and the penalties of transgression, and that it immediately follows the statement that "Wherewithal a man sinneth, by the same shall he be punished."

THE VALUE OF CARBOLIC ACID AS A DISINFECTANT.

A HIGHLY interesting and exceedingly valuable memoir on this topic has appeared from the pen of P. C. Plugge (Pflüger's *Archiv für Physiologie*, vol. v., page 538), and is well worthy of perusal by health officers. Impressed with the ideas that the field of action of disinfectants has of late been greatly extended, and that our views as to their actions are somewhat unstable, Plugge deemed the action of carbolic acid on the lower forms of animal and vegetable life a subject well worthy of further experimental study. In his opinion, that disinfectant, spite of recent statements as to its want of efficacy, is not likely to be displaced by other and much vaunted agents.

Starting from the fact that fermentative and putrefactive processes are, at least under ordinary conditions, invariably accompanied if not caused by the presence of living organisms, Plugge rightly apprehends that it is of the utmost importance in disinfection to render these organisms innocuous; and he states that this may be done in one of two ways:—First, the conditions under which putrefaction or fermentation occurs may be so modified, that harmless organisms are alone developed—*e.g.*, by acidifying the liquid innocuous forms of fungi are developed, and oxidation sets in; secondly, the organisms may be killed outright. In the author's opinion the latter is the better and safer method, and carbolic acid is the most efficient agent for achieving the end in view. Seeing that fermentation, putrefaction, and perhaps the onset of infectious diseases, if not actually caused by living organisms, yet have their respective intensities in direct proportion to the abundance of these, it becomes important to inquire—How do the lower organisms comport themselves towards carbolic acid? The infusoria from infusion of hay, stagnant water, and frogs' intestines were first operated on; but since the larger of these organisms—paramecium, euplotes, opalina, etc.—are not known in any way to cause fermentation or putrefaction, conclusions drawn from the action of the acid on the larger infusoria can only be extended to the smaller—vibriones, monads—on the supposition that the actions on the larger and smaller organisms are analogous. Of the smaller infusoria—vibriones, bacteria, monads—Plugge thinks it may with reason be asserted that they are the essential causes of putrefaction. His surmise as to the similarity of action of carbolic acid on the larger and smaller infusoria was abundantly confirmed by experiment, the smaller organisms presenting, however, a greater resistance to the action of the acid. One or one and a half per cent. of this was, nevertheless, sufficient to destroy all life in a putrefying liquid; and when the agent was used in a form too dilute to destroy all life, the further development of organisms was prevented. The development of fungi was also prevented by carbolic acid. Infusions of meat and of bread and milk were kept for considerable periods free from putrefactive taint, with little or no development of living organisms, by 1-250th to 1-1000th of carbolic acid.

The acid was found to be as effective in arresting and preventing various forms of fermentation as in arresting putrefaction. Alcoholic fermentation was stopped by 4 per cent. of carbolic acid; the butyric fermentation by 1-230th; the peptonification of albumen by 1-500th. The conversion of starch into sugar by saliva was prevented only by the use of large quantities of the acid, or by a long-continued digestion of saliva with the agent. The action of emulsine on amygdaline was uninfluenced by the addition of carbolic acid.

In many points the experiments alluded to above do but confirm the results of previous observers. It is, nevertheless, satisfactory to learn that the recent outcry against the employment of carbolic acid as inoperative is in some respects without foundation. Plugge compares carbolic acid as a disinfectant with green vitriol, acids, the permanganates, chloride of lime, etc., much to the disadvantage of these, on the score both of efficiency and cheapness.

Some experiments were made to test the action of carbolic acid on frogs and dogs. In the former the effects were very like those produced by strychnia. Six grains in one dose were fatal to a dog, whilst repeated doses of one grain and a half each produced no apparent ill effects. The acid was excreted in the urine, which smelt strongly of the drug.

CHOLERA.

CHOLERA, through Government negligence, goes on roving about in the East. It has lately manifested itself in the Russian port of Taganrog, in the Sea of Azov, where the Italian Consul, Mr. Rossi, has fallen victim to it. Lately the Norwegian authorities have declared Odessa and all other Russian harbours in the Black Sea and the Sea of Azov to be considered cholera-smitten, until further notice. Vessels having cholera patients on board are to be conducted by the pilots either to the quarantine-station at Christiansund or Frederiksvaern. The Constantinople Sanitary Board has sent its secretary, Aali Bey (?) to organise an improved quarantine service along the southern part of the Danube, at Roustchouc, Toultcha, and Soulina. The latest official report of the Roumanian authorities, issued for the first week of September, shows that at that time there were in the whole province but 139 cases of cholera, out of which number 67 died, 19 recovered, the rest of 53 remaining under treatment. Whether quite correct or not, the only value of the statement lies in allowing us to gather that the visitations of the epidemic are getting milder.

THE STATISTICAL CONGRESS AT ST. PETERSBURG ON CHOLERA.

THE report of the section of the Statistical Congress appointed for medical statistics was read before that assembly on its sitting, August 30, by Signor Castiglioni. The paper was entirely devoted to cholera and syphilis. It proposed to invite investigations into the conditions of the ground water, chiefly with regard to the Pettenkofer theory on the propagation of cholera, especially in localities exhibiting hydrological conditions similar to those visited by cholera where such observations have not yet been instituted. Next to that, tables have been laid before the assembly showing how to register the observations respecting the said diseases, to be recommended for adoption to the authorities concerned and to doctors. Although warmly supported by Drs. Mouat (India), Farr, and others, the proposals did not meet with the approbation of the Congress, who considered a greater number of medical men necessary for a thorough discussion of the questions. At the instance of Professor Cyon, from St. Petersburg, a

resolution was carried, inviting a large attendance of the medical profession to the next assembly, and requesting the Russian surgeons to lay before the same a detailed report of their experiences and observations made during this year's epidemic.

CORONERS AND THE POLICE OF LANCASHIRE.

A CORONER'S COURT had better not exist at all than be hampered or trammelled by restrictions or regulations which would defeat the object of its inquiries. It appears from a report of an inquest in the *Sheffield Times* of last week that the constabulary of Lancashire have issued a regulation which, if acted upon, would seriously affect the power of the coroner, and prevent the detection of crime. In the event of a death occurring in the absence of a medical attendant, the police have instructions to call in a medical gentleman to view the body, and to state to the best of his opinion the cause of death. The certificate so obtained is forwarded to the coroner, no doubt with the view of preventing him holding "unnecessary inquests." Mr. Price, the coroner for Salford and district, refers to these certificates with contemptuous indifference, and characterises them "as waste paper, and useless." The certificates would not prevent him holding inquests if he thought they were necessary, and if he wanted medical testimony he should call a medical gentleman before him. Mr. Robert Rodger, a surgeon, asked if he would have been justified in refusing to give the certificate in the case just considered. The coroner said "Certainly," and added that he would have been very glad if Mr. Rodger had refused. To show the uselessness of these certificates, he stated that he was going to another inquest upon a child that had been drowned. A medical gentleman had seen the child, and had certified that the probable cause of death was drowning. It was most absurd—in fact, it was illegal. A juryman wished to know the object of the certificates mentioned. The coroner answered that they were to try to dissuade him and others from holding inquests, chiefly in cases of natural death; but how could a medical gentleman tell how a person had come to his death when he had not seen the symptoms during life? Several jurymen expressed agreement with the coroner.

INADEQUATE PAY OF UNION MEDICAL OFFICERS.

STRIKES are the order of the day. There is no class of working men who earn their bread so laboriously and are so ill-paid as the medical officers of our unions. If they were to combine they could, no doubt, better their condition; but, alas! there is little union or cohesion amongst them. We perceive, however, by the local papers, that the Yeovil Board of Guardians have had laid before them a memorial from the district medical officers for an increase of salary, in consequence of the augmented cost of things. A report by the clerk to the Board showed that the annual average salaries of the medical officers for the past seven years, including vaccination and midwifery fees, had been—Dr. Aldridge, £89 2s. 8d.; Mr. Parsons, £80 6s.; Mr. Francis, £75 3s. 6d.; Mr. Adams, £63 7s. 4d.; Dr. Harvey, £69 8s. 7d.; Mr. Walter, £61 14s. 5d.; Mr. Wells, £84 17s. 8d. It was proposed by Mr. C. Trask that the salaries be increased 20 per cent. Mr. Male moved as an amendment that no increase be made, which was carried. Let our brethren not be disheartened by this, we believe, merely temporary defeat. Let them persevere and their end will be attained.

SMALL-POX AND CHOLERA IN ST. PETERSBURG.

ACCORDING to the sanitary return of the city of St. Petersburg, there were between April 13 and August 24, 2217 cases of small-pox, 721 of which were fatal. From June 23 to August 24, 2544 persons were attacked with cholera, and 1213 deaths occurred from that epidemic.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A GENERAL MEETING of this Association will be held at the Medical Club, 9, Spring-gardens, on Tuesday, October 1, at 7.30 p.m. precisely, for the purpose of considering what will be the best plan to secure in the next session of Parliament legislative sanction to those clauses of the Public Health Bill, and notably to those relating to the extension of the dispensary system to the rural districts, which, having originally formed a distinctive feature of the Bill, were subsequently abandoned by the Government. The bearing of the Public Health Act on the Poor-law Service, and the recent appointment of lay or legal inspectors only to carry out its provisions, will be also dealt with. As many Poor-law Medical Officers will be attracted to the metropolis by the opening of the winter session, it is to be hoped they will find time to attend a meeting where so many matters materially affecting their interests will come up for discussion.

A PREVENTABLE NUISANCE.

THERE are some nuisances that are not only quite unnecessary, but easy of removal. It is certainly disgraceful to the authorities of Clerkenwell that the mortuary of that parish is in so disgusting a state, when at the expense of a shilling or two the nuisance could be abated or removed. It appears that the jury, at an inquest held in Clerkenwell on Tuesday, complained that the mortuary was not sufficiently disinfected, and that they were exposed to great danger in visiting it. The coroner quite agreed with the jury in their remarks, and said medical gentlemen had complained to him that the mortuary was not supplied with disinfectants necessary to render post-mortem examinations free from danger to themselves and the jury. The coroner promised to forward their complaints to the Clerkenwell Vestry.

HEALTH OF INDIA.

ACCORDING to the *Times of India* of August 23, the dengue fever was raging at Deesa. Tents have been pitched to increase the inadequate hospital accommodation. Cholera is causing excessive mortality in the Punjaub and the North-west Provinces. Other divisions of the country are tolerably free from the scourge. Cholera has broken out in cantonments at Shahjehanpore.

HEALTH OF POST-OFFICE OFFICIALS.

THE report of the Medical Officer to the Post-office shows that the health of the men during the past year had been very satisfactory, that systematic vaccination was resorted to amongst the *employés*, and that one death only from small-pox occurred amongst upwards of 5000 persons—a striking illustration of the powers of revaccination when that is properly performed.

WEST LONDON HOSPITAL.

WE are sorry to learn that Dr. Frederick Simms is about to resign the office of Junior Physician to the West London Hospital, in consequence of ill-health.

IRELAND.—SURGICAL DEGREES IN THE UNIVERSITY OF DUBLIN—THE VACANT PHYSICIANSHIP OF THE NORTH DUBLIN UNION.

OUR Dublin correspondent writes:—

"I find I have led you into error about the existence of a Bachelor of Surgery degree in the University of Dublin. A short time ago the institution of such a degree was talked of, and, I thought, settled upon; but a compromise has since been made, by which the old M.Ch. degree is to be given—after 1874—only to Masters of Arts or to graduates of M.A. standing.

"The medical event of last week in Dublin was the inquiry, before Mr. O'Brien, Poor-law Inspector, as to the validity or otherwise of the election to the vacant Physicianship of the North Dublin Union of Mr. Wm. Dudley White. Mr. Purdon, another candidate, claimed to have been properly elected by a majority

of one—a majority which was changed into a minority on the final round of voting, in consequence of one of the electors, a Mr. Kane, changing his opinion. The whole matter is still *sub judice*."

SMALL-POX IN NEW ZEALAND.

THE Correspondent of the *Times*, writing from Wellington, New Zealand, July 5, says—

"The introduction of the small-pox, first by the *England*, from London, and now by the *Nebraska*, from San Francisco, has shown us pretty plainly what we have to expect and provide against; and the good sense of the people is leading to a very general adoption of the one precautionary measure of vaccination. Go where you may just now the doctor is inevitable, lancet in hand, and healthy babies for a limited time are objects of the most anxious solicitude and devoted attention, for the supply of lymph is quite unequal to the demand. As yet only four cases of disease have appeared, all directly traceable to the *Nebraska*. It is to be hoped that, as was the case with the *England*, the precautions adopted will prevent its further spread; but the warning is a wholesome one, and in view of the large immigration going on it is well that it should not be disregarded now. The report of the Committee of Inquiries *re* the vessel *England* has been published at Wellington. It censures the shipowners for insufficient light and ventilation, and states that the medical comforts were insufficient, and the medical inspection loosely conducted. The evidence shows that the small-pox originated early on the voyage. Captain Harrington is praised for his generosity to the passengers. The doctor was subject to epileptic fits and defective memory, even forgetting the previous day's treatment and the sex of the patients, and on January 15 the passengers declined the doctor's treatment."

FROM ABROAD.—PRESENTATION TO M. CHEVREUL—M. LEGOUEST ON THE DETECTION OF BULLETS—M. DEMARQUAY ON THE COMBINATION OF CHLOROFORM AND MORPHIA—THE FRENCH MEDICAL AND SCIENTIFIC FACULTIES.

THE Académie des Sciences was on September 2 the scene of a touching ceremony, on the occasion of its President presenting a medal to M. Chevreul. It was not exactly the jubilee of his membership, since, having been elected in 1826, a few years are still wanting to complete the fifty years which would have secured the recognition. His cool and admirable conduct, however, as Director of the Muséum d'Histoire Naturelle in the Jardin des Plantes, during the two sieges of Paris, by which much of the peril that menaced the establishment was averted, excited great admiration, and his colleagues deemed this the most appropriate time for the presentation in question. The statement of the services which this veteran has rendered and is still rendering science was delivered by M. Dumas, alike so competent and so eloquent. He also adverted to the public duties which he fulfilled, not only at his post at the Jardin des Plantes, but also at the Gobelins, at the Consulting Committee of Arts and Manufacture, and at the Agricultural Society. It is sometimes a delicate task to praise a man to his own face, and yet keep free from the use of the language of hyperbole, but M. Dumas managed this with considerable tact. He naturally dwelt upon the erudite and scientific spirit in which Chevreul's labours have always been conducted from the time he published his first memoir on the analysis of fossil bones, remarkable even then for its precision, now sixty-six years ago, until even the present day, when he, the father of living chemists, is about bringing to a conclusion a series of complicated researches which no other chemist would have had the courage to approach. His investigations into the nature of the fatty acids, of which stearic acid is the type, has resulted in the creation of the now gigantic manufacture of composite candles, bringing down this convenient form of light "from the palace or the drawing-room to the humblest abode;" and at the same time "throwing down by the exact study of the details of pure analysis that wall of separation between substances of an organic origin and matters of a mineral origin, raised by the old chemists and consolidated by Berzelius."

After adverting to his laborious researches on colours, which have likewise led to most important results, and to his numerous communications, M. Dumas observes, "In this spot, where your writings are so well known, it is useless to present any detailed account of them, but it is not so to characterise their general features. A laborious life pursued without lassitude during two-thirds of a century, and an ardour which, so far from exhausting it, each year seems only to freshen, presents so rare an example that one would be but too glad to seize and divulge its secret."

M. Legouest, on the occasion of a report on a procedure proposed by M. Deneux for ascertaining the nature of metallic bodies detained in gunshot wounds, which he read at the Académie de Médecine at its meeting on the 10th inst., made some interesting observations on the general subjects of detecting and removing such foreign bodies. Among these was one relating to the importance of attending to an old rule of placing the patient as nearly as possible in the position which he occupied when he received the injury.

"This may reveal the track which the projectile has pursued, inform us of its degree of incidence, and reproduce the relaxation or contraction of the muscles, the tension of aponeuroses, and the situation of the articulations. Frequently it will suffice to rectify a sinuous wound. But the position having been thus re-established, it is not sufficient to touch and probe the wound, but the surrounding parts, and sometimes to a great distance, must likewise be carefully examined."

M. Legouest referred to a recent and memorable exemplification which occurred in the case of Marshal MacMahon, grievously wounded at Sedan by the fragments of a shell. There was a wound as large as the hand at the posterior and left lateral part of the pelvis, which was carefully explored with the finger and a female catheter. Nothing being detected, the patient was made to take as near as possible the position he held on horseback when wounded, and, on carrying his hand in the direction which the projectile ought to have pursued, M. Legouest felt in the substance of the parts, about three centimetres below the anterior superior iliac spine, a roundish tumour. A counter-opening was made, and a large fragment of lead was removed, together with the portions of clothing it had carried in with it.

Having adverted to the various instruments—such as Nélaton's and other probes—which have been devised for the detection of the nature of the foreign body when deeply placed, he demonstrated before the Academy his own simple mode of procedure for detecting this when composed of lead. For this he uses the stem of the common clay pipe which every soldier has about him, and, passing it down to the bullet by turning it round and rubbing it on this, colours it black, and even brings out particles of the metal. He is then able to make with it traces on paper, as with a pencil, and, having damped these first with vinegar, and then with a solution of iodide of potassium, he produces the fine yellow characterising the iodide of lead.

At a recent meeting of the Académie des Sciences, M. Demarquay read a paper on the practice of combining the subcutaneous injection of morphia with the administration of chloroform, which has on several occasions been put into force in consequence of M. Claude Bernard's experiments having shown that in this way the anæsthetic condition can be kept up by the employment of a much less quantity of chloroform. According to M. Demarquay's own clinical observation, as well as the results of his experiments on animals, this practice, so far from diminishing, may add to the dangers of chloroform, especially when the patient is already in a depressed condition from hæmorrhage, shock, etc. He observes that either of these agents administered separately produces a depression of temperature; and by using the two together he has lowered this

by 2½° C. He is of opinion that the combination should be entirely renounced, and that all our efforts should be directed towards perfecting the administration of chloroform. He thinks that flannel is the best material through which it can be given, and has devised a mask made of it upon which the chloroform is allowed to flow from a bottle drop by drop. The evaporation is continuous, and the patient breathes without any effort, frequently falling quietly asleep without prior agitation. This apparatus, he says, has been employed by a great number of practitioners with excellent effect. He has stated his views upon the subject at length in the *Gazette des Hôpitaux* for August and September.

M. Revillout has recently published, in the *Gazette des Hôpitaux*, some interesting extracts of those portions of the Statistical Report of the Minister of Public Instruction which relate to the medical profession. This furnishes a far more exact account of the number and titles of those in practice than could be obtained from any other source. Unfortunately, it does not come down to very recent times, the year 1866 being the last indicated. In that year there were 11,643 Doctors of Medicine and 5697 Officiers de Santé; and, comparing these figures with the returns for 1847, it is found that, while the number of Doctors had increased by 1000, that of the Officiers de Santé had decreased by 2145, so that within this lapse of time there was a decrease of practitioners by 1145, although the population had increased from 34,529,073 to 37,998,306.

But it is not to this part of the Report that M. Revillout so much wishes to draw attention as to that which refers to the figures produced relating to the establishments for medical and scientific education. These are of an important and even of an alarming character, unless an alteration in the policy that has regulated them is likely to take place. While Germany is lavishing large sums on her universities, and promoting the utmost emulation among their professors, the French Budget is in the receipt of money from several of the educational establishments, and has adopted a system which necessarily reduces the professional body to a dead level, devoid of hopes of advancement or of stimulus for exertion. These establishments, taken altogether, are 75 in number—viz., 3 Faculties of Medicine, 16 of Science, 16 of Letters, 11 of Law, 7 of Theology, and 22 Schools of Medicine and Pharmacy. For the whole of these the State frequently does not contribute more than 200,000 francs per annum, the rest being derived from the receipts of the establishments themselves. Some of the Faculties contribute considerable sums to the National Budget. Thus the Faculté de Droit of Paris contributed 539,432 francs in 1865, and in 1868 this sum had increased to 583,433 francs. In the year 1868, while the Faculty of Medicine of Paris received about 30,000 francs, that of Strasburg paid 6000 francs into the national coffers. As to the Ecoles de Médecine, although they are dependent on municipal allocations and foundations, the State exacted from them in 1868 a contribution of 79,922 francs, being more than two and a half times the sum which the Paris Faculty of Medicine cost it in that year. If the various Faculties of Paris were organised into an independent University, as in Germany, its budget would show a balance in its favour of a greater amount than is now contributed by the State to the whole of the seventy-five Establishments for High Instruction. Thus, in 1868, their total receipts amounted to 3,860,459 francs, and their expenses to 3,340,508 francs. A considerable sum out of these latter is also expended in maintaining seven Theological Faculties in an artificial state of existence. The four Faculties of Droit, Medicine, Letters, and Science of Paris in the year 1868 expended 1,230,038 francs, while their receipts amounted to 1,708,310 francs, leaving a handsome sum to hand over to the State.

It is said that on the reopening of the Assembly the Government will propose the creation of several new Faculties of Medicine, and it is heartily to be desired that it will take the opportunity of placing the whole system on a more satisfactory footing.

THE AUTUMN MANŒUVRES.

One great use of the camps of exercise, which are now probably domesticated among us, is to enlighten the nation as to its reserves of fighting men who may be relied on in case of difficulty. No one doubts that the material of the British army is excellent, nor that its regimental officers are, on the whole, capable; but then it is unfortunately patent to all that if an enemy once landed in force the numbers of our standing army would be ridiculously insufficient, and that disaster could only be averted by the mass of the population being able to bear arms; while at the same time it is equally certain that the intelligent part of the armed citizens would have no confidence in the managers of the standing army. It is therefore of the first importance to observe what the reserve forces now in existence are made of, and what is the physical and mental condition of the people in the annually invaded districts.

The experiences of the First Provisional Battalion—or as somebody christened it, "First Professional Battalion"—of Voluntcers were probably not unlike those of the few other corps that were allowed to join the camp this year. The battalion was composed of detachments from seven different corps, and was commanded by a colonel whom nine-tenths of the men had never seen, assisted by a staff who had scarcely met one another before; while the company officers were in most cases comparative strangers to the men and to one another. The corps were represented as follows:—Inns of Court (two companies), senior major, adjutant, and medical officer in charge; Oxford University (one company), lieutenant-colonel commanding and quartermaster; Cambridge University (one company); Artists (one company), junior major; London Scottish (one company and piper); Oxford City (one company); 4th Hants Administrative Battalion (one company)—total, 29 officers, 419 men. There were two other Provisional Battalions, composed of detachments from three and five different corps respectively; and these, with three local battalions which stayed only a week, made up the whole force of volunteers present.

The journey to Blandford by rail, past Wimborne, where Mr. Sturt, the hospitable entertainer of so many notables, was waiting at the station for the Prince of Wales, was accomplished without hindrance, and the battalion marched up to a fine camping-ground on the racecourse down, where it was received by the band of the 16th Regiment, and greeted with cheers by some of the Guards and other battalions whose camps it passed. Happily the kindly feeling with which the volunteers were received by the regulars was maintained on both sides and in all ranks throughout the period of their association, and the cheers at parting were more hearty than those on arrival. Indeed, the battalion reached the height of being spoken of in the most condescending terms of approval by two non-commissioned officers of the 10th Hussars, who, on paying a neighbourly visit to the canteen one evening, were pleased to say that the trouble taken by the men in coming out was "really very creditable."

There is not much water in the chalk down country, but what there is cannot be surpassed. So with a steam-engine pumping up a sufficient, though not abundant, supply from the little river Tarrant, with the purest air to breathe, and the close soft turf that covers the chalk under their feet, the town-bred men improved rapidly in condition from day to day, and there was little or no diarrhœa. The Control, too—whose outward existence is manifested to the men by the occurrence of gentlemen in gold lace and blue-and-white plumes, who gracefully converse and slap their well-cleaned boots with their riding-whips at halting-places, as if they had nothing in the world to do—was equal, after months of preparation, to the Herculean task of feeding a body of men about equivalent to the crews of a fleet at anchor. The canteen, also, which was managed on behalf of the corps by two devoted members of the Inns of Court, who indeed lived laborious days—was a success, and plenty of wholesome beer was punctually supplied by Mr. Simonds, of Reading. The marches out and sham fights on Launceston Down showed the general in command of the brigade that the battalion could march and skirmish, while

they extended the men's muscles and opened their lungs; so the various elements were soon shaken together into form, everybody was in good humour, and thunderstorms did no harm.

On Wednesday morning (September 4) the *réveillé* sounded at five, and the tents, wet through—as they were at every change of camp except the last—were in the waggons by seven. An hour later Blandford Downs were left to that repose and solitude which has not till now been disturbed by a camp since about 100 years ago. The march was over down and through prettily wooded valley to Fontmell Magna, and the camping-ground in a stubble-field under Ashbury Down. The soil was wet with rain before the tents were pitched, and rain and thunder prevailed during the night. The men were therefore not quite so comfortable as before, and there was some diarrhœa. Those on sentry duty during the night, with a long march before them for the next day, were not altogether to be envied.

The water-supply at this camp was drawn from a mill-pool about 200 yards in length, at the upper end of which, under a solitary large tree, a spring of perfect purity wells up from the chalk. So pure, bright, and cold is the water, that in the upper part of the pool no life exists. Lower down a few weeds and small fish people the shallows, and the bottom shows a light grey incrustation of lime. But here, though the source was abundant and near at hand, the supply at the camps was still insufficient—except from the sky.

The volunteers' wet tents are packed, and the battalion paraded by 7 a.m.; but the more lucky regulars have found out that the hour of marching is changed, and that the chiefs mean to lie in bed an hour and a half longer—so they take things more easily. At length, however, the column moves, and winds through the village of Fontmell Magna—the entire population of which, down to the infants in arms, has set itself out for inspection on both sides of the way—under the smooth green slopes of Melbury Hill, towards the town of Shaftesbury. No halt takes place in or near the town, so the view from both sides of the waterless ridge on which Shaftesbury stands has to be guessed at—it can scarcely be otherwise than fine, and must command a great extent of country. An old parish church, of no great pretension, stands in the main street; but no remains of the once famous Abbey are visible. A halt is ordered a mile or two farther on, and then it is discovered that someone has conceived the brilliant idea of "massing" the water-carts in the rear of the baggage of the division, with the reserve ambulances—a place where, it is needless to say, they cannot be of the slightest use. But there is time to remark on the population of the district being passed through. They appear undersized, and not quite up to the average standard of intelligence of the British labourer. Many have brown or neutral-coloured eyes; but there is not enough of the Celt in their appearance to make one refer their descent to the Durotriges, some of whose stock are said still to linger in Dorsetshire. Cripples are not more numerous than usual; too many women, however, are disfigured by goître. The cottages seem on the whole good; here and there many pairs of model dwellings have been set up by good landlords, but there is no time to inquire their names.

Through East Knoyle, where the owner of a house which had fame thrust upon it in the monster law-suit stands hospitably before his door with refreshment for the thirsty (the General, however, sternly, but no doubt rightly, refused to allow them to stop for it); and Hindon, with its straight street, lined with young trees, like that of a Dutch village; past too many of her Majesty's regulars, and notably of her Majesty's Foot-guards, for whom the pace had been too severe, the wood-crested down called Chilfinch Hill is reached, after a rapid march of about sixteen miles. In comparing the marching powers of the volunteers and regulars, it must be remembered that, while on the one hand the former had their packs carried for them, on the other hand the regulars had had a month's previous training in the field, whereas the volunteers came direct from their ordinary occupations. This latter circumstance also accounted for the large number of sore feet which required patching up in the Provisional Battalion after the long marches. Many inexperienced men had come in cotton socks and ill-fitting boots, and suffered accordingly; but the older soldiers nearly all escaped, because they knew how to protect their feet.

Next morning the war commenced by the passage of the wooded ridge in front, and a circuitous advance, partly through woods, into the village of Codford, the Wiley having been passed at a ford. On emerging from the village, a smart infantry engagement was at once plunged into, which would have filled all the barns and sheds for miles round with wounded, and have blunted all the amputating knives in the district, if there had been anything besides powder in the guns. It is a pity that some harmless substitute for the whistle of the bullet cannot be devised, for to take no notice of men who are shooting at you at 200 yards range is too absurd, and to use the real projectile—the only infallible teacher—is too expensive. Assuming the sum total of the two armies engaged on this occasion to have been about 30,000, perhaps it would not be an excessive estimate to say that 40,000 of them were killed or wounded during the campaign.

As the battalion, which was on the extreme right of the attacking force, kept on advancing until the order to stop was given by the umpires, it naturally considered itself to be on the winning side, and acquiesced with difficulty in the policy of falling back across a river to its last night's camp immediately after having forced the passage; but the prospect of getting dinner at a reasonable hour, and avoiding the trouble of pitching a fresh camp, soon wiped out the theoretical sense of distress, as well as the recollection of the carnage that had been witnessed. Here, however, the feeding arrangements broke down. The meat arrived late, and when cooked some of it was found unfit for food. The camp stories about the quantity of meat condemned by other regiments, and of the tons which were said to have been lying in the sun for three days at a neighbouring railway station, may have been exaggerated; but there must have been, at all events, some cause for the failure. Henceforth salt pork, suitable for victualling ships going to the Antipodes, took the place of fresh meat; though why the pork, which required two or three hours' boiling—a matter of no small importance when the camping-ground is not reached till nearly dark—should have been used instead of the Australian meat, which succeeded so well last year, is not apparent. Ration biscuit also replaced the fresh bread which had hitherto been supplied from Perkins's steam ovens; but nobody complained of this, because, though the bread was a great improvement upon last year's, the biscuit was also excellent, and the battalion being young had good teeth. At length each man, dinnerless or dined, lay down on his waterproof sheet in the company of his greatcoat and blanket, expecting a short march on the morrow; for the orders were to start at 8 a.m.

(*To be continued.*)

REPORT ON THE

TEACHING OF PRACTICAL PHYSIOLOGY IN THE LONDON SCHOOLS.—V.

9. The London Hospital.

The teaching of theoretical and practical physiology at the London Hospital is carried on by means of systematic lectures and personal instruction to the individual students at the same time, but the two courses are most intimately combined so as to be mutually dependent and illustrative.

The class of physiology meets altogether four times a week during the winter months, and this for two successive sessions, being composed of both first and second year's students.

Twice a week lectures are delivered in the theatre by Dr. Fenwick and Dr. Woodman; these lectures are made as practical as possible by the class demonstrations of microscopical and chemical facts. On the third day the students assemble in the physiological laboratory, where they are taught to repeat practically for themselves what they have learned immediately before, whether it be histological or chemical. At first it is chiefly histological, as the microscopical anatomy of the tissues is lectured upon at an early part of the course. The pupils are directed in their work by the lecturers and the demonstrator. On the fourth day of the week the students are under the care of the demonstrator only, who perfects their training in manipulation and specimen mounting.

The physiological laboratory at the London Hospital is a good-sized upper room, leading off from the anatomical museum. It is lighted partly from the roof and partly by an end window, but the microscopists seem to be almost independent of the sunlight for illumination, in being provided with gas lamps. These stand each between a couple of students, who face each other at long fixed tables. Every worker has a drawer of his own before him for holding his small instruments, slides, etc., while on the table are the necessary reagents, etc., in small

stands. As a rule, fresh tissues are used for studying animal histology, but there is also an abundant stock of injected and hardened preparations.

When animal chemistry has to be studied in place of histology the same tables are fitted up with the necessary reagents and apparatus; and the same arrangements as to time, etc., are observed.

By the end of the fifth month the greater part of physiology has been doubly studied—theoretically and practically—*i.e.*, by lectures and laboratory working. During the last month there is a thorough revision of the practical portion.

The second year's course is a repetition of the first, and Dr. Fenwick believes that both the raw first year's students and the second year's men who are going up for their examination profit by this arrangement.

No experiments on animals are ever performed in the class-room.

The instruments in the laboratory are abundant, especially microscopes. These are English, by Crouch, Baker, and Powell and Lealand. They are provided with 1-inch, $\frac{1}{4}$-inch, $\frac{1}{5}$-inch, and a few with $\frac{1}{8}$-inch objectives. They are the property of the school, which charges the students 10s. a session for their use; the students are at the same time encouraged to buy instruments of their own.

During the summer any student who is anxious to work in the laboratory may do so under the direction of the demonstrator.

The fee for physiology is £4 4s., or £6 6s. unlimited; for practical histology, £3 3s., or £4 4s. unlimited.

10. Westminster Hospital.

The instruction in practical physiology at the Westminster Hospital during the winter session of 1871-72 consisted of a course of thirty lectures and examinations. Included in the subject was instruction in the use of the microscope, and in the methods of preparing tissues for microscopical examination. The elementary tissues of the body were then described, and at each lecture the individual students were required to make sections and mount specimens of the tissue under examination, to the satisfaction of the teacher.

The physical and chemical properties of the different animal fluids, especially of the blood and urine, were then investigated with the aid of chemical and spectrum analysis. Dr. Maclure concluded his course with an account of the physical and vital properties of the nervous and muscular systems, which was illustrated by experiments on animals.

Up to the present time there is no physiological laboratory at the Westminster Hospital. The students have worked in the lecture theatre, whither the necessary apparatus and reagents were brought for each demonstration from the practical chemistry laboratory. In future, we believe, it is intended to use this chemical laboratory for practical physiology, after some alterations have been made in it, in order to adapt it for both purposes.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, September 17.

Regulations and Expenses of the Paris Medical School.

In reading over your Students' Number, it struck me that an account of the rules and regulations of the Paris School of Medicine, which I extract from the Medical Code, would not be unacceptable to your junior readers:—

"The Faculty of Paris is composed of the *doyen* or senior professor, twenty-eight professors appointed by the Government, and twenty-nine *agrégés* appointed by competition, and who lecture and examine in the absence of the professors. Foreigners are admitted as students, and to take degrees in the French Schools. To enter for this purpose the student must have attained his 18th year, and produce the certificate of his birth duly legalised, and if a minor, the consent of his father or guardian for the step he is taking. He must likewise be furnished with a certificate of his personal respectability (*bonne vie et mœurs*), and if he is a minor, and his father or guardian does not live in town, he must find a surety. A course of study of four years is prescribed before the student can be admitted to examination for the degree of Doctor of Medicine, or of Medicine and Surgery. The student must enter in November, when the scholastic year begins. On lodging the above papers with the Secretary of the Faculty, together with a diploma of *Bachelier ès Lettres*, he enters his name, etc., in a register kept for that purpose, and is given a '*carte d'inscription*.' He renews his inscription every quarter until he has taken out sixteen inscriptions.

"When this last inscription expires—viz., at the end of the fourth year, he can go in for the final examinations (*examens de réception*). By the end of the third year (if he has not done so before) the foreign as well as the French student must produce the diploma of *Bachelier ès Sciences* in the French University, for which he is examined in Physics, Chemistry, and Natural History. The cost of this diploma is fifty francs. He has likewise to pass an examination in July of the first, second, and third scholastic years, on the subjects of study of those years; failing in any of which, and in another trial in November, he cannot present himself again for examination, nor take out another inscription till after the lapse of a year. From the eighth inscription to the sixteenth the student must attend a hospital. There are five examinations, and after them the thesis. The subjects of examination will be found detailed in my letter of May 4, 1872. The last is practical. Two cases in the hospitals are selected, on which the diagnosis, prognosis, and treatment are expected to be given. The candidates are examined in French, *vivâ voce*, and one after the other in the alphabetical order of their names, for three-quarters of an hour at each examination. The thesis is a printed dissertation on a subject selected by the student, and a discussion, *vivâ voce*, in support of it follows; also on fourteen questions drawn by lot, corresponding to the fourteen branches of medical science taught in the French schools. For the degree of Doctor in Surgery a farther examination is undergone. In case of rejection another trial is generally allowed at the end of three months.

"The fees paid in the French Faculty are as follows:—Sixteen inscriptions, 488 fr.; three annual examinations, 91 fr. 50 c.; five final examinations, 252 fr. 50 c.; five *certificats d'aptitude*, 200 fr.; thesis, 100 fr. 50 c.; another *certificat d'aptitude*, 40 fr.; diploma, 100 fr.—total, 1272 fr. 50 c. The expense of a medical education in Paris is thus trifling compared with that of the British schools. All the lectures at the Ecole de Médecine, and most of those at the Ecole Pratique, are public and gratuitous: nor is any payment made for hospital attendance.

"The summer session begins in March, and the winter session about the middle of October."

GENERAL CORRESPONDENCE.

NEW MICROSCOPIC SOCIETY.

Letter from Mr. T. C. White.

[To the Editor of the Medical Times and Gazette.]

Sir,—I see in your last number an announcement of the contemplated formation of a medical microscopical society, and, while fully concurring with its promoters in the desirability of a rallying-point round which medical microscopists could gather their forces, I cannot help feeling that the formation of fresh microscopical societies is to be regretted as a source of weakness instead of strength that would arise from union with those already existing. While, therefore, I would not say a word in opposition to those who might think otherwise, I would suggest that could a medical section be grafted on to either the Royal Microscopical Society or the Quekett Microscopical Club it would be attended by many advantages. It might be contended that the high subscription and entrance fee of the Royal Microscopical Society would prove a barrier to many, and especially to students; but the same objection could not be urged against union with the Quekett Microscopical Club, whose subscription, with no entrance fee, is only 10s. per annum. If, now, a medical section, open to the members generally at their option, could be instituted in connexion with this Club, it would offer these advantages to all who joined:—The Club meets, by the kind permission of the Council of University College, twice in each month during the year, rent free. The attendance of members at these meetings averages about 100. The number of members of the Club has been more than 500 for the last three years, about one-eighth of these being medical men. The Club comprises many careful and accurate observers, whose practical minds are ever ready to carry out any suggestions for the furtherance of microscopical study.

I conceive, therefore, that the union of the medical histo-

logists of London with such men might be productive of many good results, and that without difficulty, as it would only be necessary to institute a special evening each month for the meeting of the medical section, and the thing is done, the machinery being already in existence; thus strength would be gained instead of that weakness the multiplication of such societies must engender. Dr. Beale, our late President, entirely concurs in the views I have expressed, and has long hoped that a medical section might be added to our Club, in which physiological and medical microscopical questions might be considered. As the preliminary meeting of the proposed society is announced for about the middle of October, it would be as well that the subject should be fairly considered by those especially interested, and, therefore, may I ask your kind insertion of this suggestion as a contribution towards the thorough ventilation of a most valuable proposition.

I am, &c.,

T. Charters White,
Hon. Sec. of the Quekett Microscopical Club.

FOREIGN DEGREES IN THE "MEDICAL DIRECTORY."

[To the Editor of the Medical Times and Gazette.]

Sir,—In the autumn of last year the traffic in foreign degrees had attained proportions which demanded from us a prompt effort for its discouragement. It was obviously our duty not to admit into the "Directory" degrees procured solely by purchase, and we had to discover what means we possessed of distinguishing degrees of that character from those obtained after due examination. Our resources in this respect were found to be inadequate, and we were compelled to have recourse to the regulation adopted by the Medical Council. This regulation falls harshly on those whose foreign degrees have been honourably gained, and, with a view to its modification, we have this year communicated with several foreign universities; but as we have received responses from a few only, our power of detecting the "bogus" degree still remains imperfect. We are, however, desirous of giving insertion to foreign degrees in Medicine and Surgery fairly obtained, and they will in future be inserted in the "Directory" under *any one* of the three following conditions:—

1. That the degree *is registered* under the Medical Act; or
2. That the possessor has qualified in Great Britain or Ireland and *is practising abroad;* or
3. That the holder of the degree has also a British qualification, and that his possession of the foreign diploma and its attainment by examination have been certified to the Editors of the "Medical Directory" by two registered practitioners not themselves possessing foreign degrees.

Forms of certificate for Condition 3 will be supplied on application.

FORM OF CERTIFICATE.

To the Editors of the Medical Directory.

Gentlemen,—We hereby certify that we have seen the diploma of .....
obtained by ..... of .....
at the University of ..... in the year .....
and that our knowledge of Dr. .....
induces us to give full credence to the statement that he obtained the diploma after presenting himself at the above-named University, and there passing an examination as stringent as that of British Licensing Bodies.

(Signed) { Name .....
Address .....
Registered Qualifications* .....
.....
Name .....
Address .....
Registered Qualifications* .....
.....

Dated the of 18

* The qualifications of the signataries as they appear on the Medical Register must be stated for the purpose of identification.

Requesting your insertion of the above,

We are, &c.,

The Editors of the "Medical Directory."

The Port Sanitary Committee of the City Corporation have decided to have a floating hospital moored off Gravesend, for the reception of any infectious diseases that may arrive at the mouth of the port.

OBITUARY.

ALFRED POLAND, F.R.C.S., SURGEON TO GUY'S HOSPITAL.

This able surgeon and successful teacher, whose death occurred on the 21st ult., was born in London in August, 1822, and was early destined by his friends for the medical profession. He was educated at the grammar school at Highgate, and showing more than usual talent he was sent to Paris and afterwards to Frankfort, to complete his preliminary education and to perfect his acquaintance with the French and German languages. On his return from the Continent, at the urgent solicitation of Sir Astley Cooper he became the articled pupil of Mr. Aston Key, his friends paying the customary fee of £500 for the privilege. As dresser to Mr. Key, Mr. Poland had of course excellent opportunities of observing the practice of his preceptor and of his illustrious coadjutors at Guy's Hospital; and his success as a teacher and as a surgeon in after life were no doubt due in great part to the zeal and ardour with which he pursued his early practical studies. He finished the period of his dressership in 1843, and became a Member of the College of Surgeons. A vacancy occurring in the dissecting-room of Guy's Hospital in 1845, Mr. Poland was appointed to the office of Demonstrator of Anatomy, and two years afterwards he obtained the Fellowship of the College by examination. While actively engaged with the work of the dissecting-room he found time for other pursuits, and entered heart and soul on the study of surgical science. The first production of his pen was a dissertation "On the Nerves of the Orbit in Mammalia and Man," for which a prize of fifty guineas was awarded him by the Council of the College of Surgeons. With the zeal which distinguished him in everything he undertook he set out for Paris immediately after the sanguinary revolution of 1848, to acquaint himself with the surgery of gunshot wounds and their treatment, and to familiarise himself also with the opinions of the great French surgeons of the day. This visit, undertaken at a time when he was actively engaged as a teacher of anatomy, proved of valuable service to him in after life. Among its results were his able and discriminating essay "On Gunshot Wounds and their Treatment," which carried off the Jacksonian Prize of the College of Surgeons, and probably also his exhaustive description of "Injuries and Wounds of the Abdomen," for which he was awarded the Fothergillian Medal of the Medical Society of London. The amount of labour and research expended upon these and similar productions was immense, and is but faintly reflected in his published writings.

Mr. Poland was early appointed on the staff of Guy's Hospital, becoming Assistant-Surgeon in 1849, and after an interval of twelve years he was appointed full Surgeon. During this time he was constantly engaged in the tutorial work of the Medical School, delivering courses of lectures at various times on anatomy and surgery. Among other pursuits he devoted great attention to ophthalmic surgery, and for many years was attached as Surgeon to the Royal Ophthalmic Hospital in Moorfields. For some years, and in fact up to the period of his death, he held the office of Ophthalmic Surgeon to Guy's, and occasionally delivered lectures on ophthalmic surgery; but finding the work too much for him, he gradually relegated all the more active duties of the office to his assistant and successor, Mr. Bader.

As a lecturer, Mr. Poland was noted for his conciseness and clearness, and his extensive surgical experience furnished him with great aptitude of illustration. He was a master of method, and in this peculiarity consisted the success of his published as well as of his unpublished writings. The printed syllabus or sketch of his lectures on Surgery gives an excellent example of the facility with which he could arrange and systematise, and this publication is still highly valued by the student. As editor, first with Dr. Birkett and afterwards with Dr. Wilks, of Guy's Hospital Reports, he introduced new manner of arrangement in the serial, and compiled with great care and system the index volume, embracing the first and second series of the Reports. Among his numerous contributions to the same publication were articles on hernia, stricture, injuries of the chest, etc. Nor must we omit specially to notice the very elaborate monograph on subclavian aneurism which has appeared in successive numbers of the Reports, and which is not yet completed. We sincerely trust that the remainder of this valuable treatise may be in manuscript, and that it will appear in due course of publication. To Holmes's "System of Surgery" Mr. Poland contributed the able articles on Tetanus,

Animal Poisons, and Urinary Calculi, and he was also a frequent contributor to the weekly medical journals. He will, however, probably be remembered best, and by Guy's men especially, for his skill, expertness, and dexterity in operative surgery. Although the introduction of anæsthesia has robbed the operating-room of its horrors, it has not deprived the onlookers of the satisfaction which an important operation deftly performed never fails to convey. It was a treat to see Poland operate. His hands appeared to have been made for the work, and the precision and calmness which marked every step of the operation conveyed a confidence in his powers not likely to be forgotten by those who had the good fortune to witness him in his best days.

Unfortunately for his worldly success, Mr. Poland was a martyr to ill-health, which incapacitated him, at repeated intervals, from pursuing the more active duties of his profession. While he was Assistant-Surgeon to the Hospital he suffered from the effects of purulent absorption, contracted in his work in the venereal wards. The poison appeared to have affected him constitutionally, and to have produced at one time symptoms not unlike those of diphtheria; and possibly the bronchial affection from which he afterwards suffered, and to which he at last succumbed, may be traced to this cause. He was induced by his friends to try an entire change of scene, and made a voyage to Madeira with, for a time, the best results; but, seeing no prospects of permanent amendment, he was reluctantly compelled about five years ago to give up his lectures on Surgery, and to confine himself entirely to his duties as Visiting Surgeon, which he continued to fulfil till the period of his death. Later still, he gave up his consulting-rooms in Finsbury, and retired to the residence of his father at Blackheath. Here, for a time, his health improved; and, having happily adjusted some family matters which had weighed heavily upon him, he appeared to take a new lease of life, and entered on his duties with renewed cheerfulness and energy. The fair prospect, however, was not destined to continue long. The bronchial affection, which he never entirely got rid of, returned with increased severity during the past winter, and did not moderate on the approach of the summer months, but continued to attack him at intervals, although not to the extent of entirely disabling him from work. Many thought it would have been wiser for him to have left England entirely, and to have taken a voyage to a more genial climate; but he was averse to idleness, and remained stedfastly at his post till within three days of his death, which occurred on August 21.

While greatly in advance of his fellows in his extensive acquirements in operative skill and in sound and prescient powers of diagnosis, Mr. Poland was sadly deficient in those amenities of appearance and manner which go to make up the successful man of the world. He sacrificed little to the graces, and his failing health made him prematurely old. There was much truth in Aston Key's remark about his pupil, that he would never succeed for want of two essentials, which he was not born to possess—"dress and address"—and till the end of his career he made no ambitious attempt to improve upon either. The truth was that his mind was so thoroughly absorbed at all times with some subject or other on which, as was usually the case, he was concentrating all his energies, that he gave little heed to the æsthetics of everyday life, and probably suffered in consequence. But to those who knew him best these minor peculiarities were lost sight of in the accomplished surgeon and in the man of laborious work, and they were more than redeemed by the knowledge of his integrity and honourable dealings in all the affairs of life. He was particularly reticent in his manner to strangers, and even to his friends, and unostentatious to a fault. He never made an enemy, and by his kindness and consideration he secured the goodwill and respect of his pupils, and was always ready to assist them in after life. Mr. Poland leaves behind him two children, the eldest of whom—a youth of great promise, and who has already distinguished himself by a public examination—intends entering at Guy's during the ensuing session.

CHARLES HINGSTON, M.D.,

The son of a Plymouth banker, was born in that town in 1805. At 17 years of age he became a pupil at Guy's and St. Thomas's, from which, at the end of twelve months, he removed to Edinburgh. He studied there under Dr. Alison, and completed his medical education by taking his degree in 1827. Soon afterwards he commenced practice as a physician in his native town, and in 1831 was appointed Physician to the Dispensary, at that time the sole medical charity in the town. This appointment he retained for ten years.

In 1840, the South Devon and East Cornwall Hospital was built and established, and he and the late Dr. Yonge were elected the first Physicians to the institution. On resigning that position in 1866, he was appointed Consulting Physician.

In 1865, when his son commenced to practise, he partially retired, entirely withdrawing from his profession in 1868. From that time he became a confirmed invalid, and though his gradually increasing weakness rendered it impossible for him latterly to take much exercise, or enjoy the society of his friends, he retained his intellectual faculties and his interest in all matters relating to his profession up to the last.

He died September 5, 1872, aged 67 years.

He was married twice—first to the daughter of George Braithwaite, Esq., of Kendal, who died three years after her marriage; secondly, to the daughter of Sir William Parker, Bart., by whom he had two sons and five daughters, five of whom survive him.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 5, 1872:—

Barron, Frederick William, Peterborough.
Giffard, Douglas William, Guernsey.
Rutherford, William, Ballinasloe, Ireland.
Staines, John Francis, Southampton-row, W.C.

Also, on September 12:—

Cæsar, Charles Augustus, Bow-road, E.

As an Assistant in Compounding and Dispensing Medicines:—

Burgess, Wallett James, Duke-street, Portland-place.

Also, on September 12:—

Bisson, Philip Nicholas, Jersey.

The following gentlemen passed their Primary Professional Examination on September 5:—

Evans, Henry, Guy's Hospital.
Jackson, Henry, Middlesex Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Briggs, Geo. C., M.R.C.S., L.S.A.—Resident Medical Officer to the St. Pancras and Northern Dispensary, *vice* Lewis Lewis, M.R.C.S., L.R.C.P., resigned.

Dyas, William, L.A.H. Dub.—Medical Officer for the Templeudigan Dispensary District of the New Ross Union, county Wexford.

Gowing, Benjamin Chaston, M.R.C.S. Eng., L.S.A.—Medical Officer for District No. 5 of Daventry Union, Northamptonshire.

Jackson, George, M.R.C.S.—Surgeon to the "Pride of Devon" Lodge of Oddfellows, Plymouth.

James, James Rowland, M.B. Edin., M.R.C.S. Lond.—Medical Officer for the Llansaintfraid District of the Aberayon Union.

Keys, Robert Atchison, M.D. Ire., L.R.C.S. Edin., L.R.C.P. Ed., L.M.R.C.S.&P. Ed.—Medical Officer for the Cloghan Dispensary District, Stranorlar, co. Donegal.

Rill, D., L.R.C.S.I., L.R.C.P. Edin., L.M.—Medical Officer for the Ballylongford Dispensary District of Listowel Union.

Williams, Evan, L.K. & Q.C.P.I., L.M., M.R.C.S. Eng.—Medical Officer for the Llangefni District of Anglesey Union.

Young, A., L.R.C.P., M.R.C.S. Eng.—House-Surgeon to the Great Northern Hospital.

NAVAL APPOINTMENTS.

Admiralty.—William J. Eames, Surgeon to the *Pembroke*, for Sheerness Dockyard; Thomas Kipling, Assistant-Surgeon to the *Pembroke*, for service with the Reserve; and James Wilson, Assistant-Surgeon to the *Terror*.

BIRTHS.

Bantock.—On September 15, at 44, Cornwall-road, Westbourne-park, W., the wife of George Granville Bantock, M.D., of a son.

Barraclough.—On September 6, at Dulwich-road, the wife of R. W. S. Barraclough, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., of a daughter.

Bellew.—On July 26, at Thundiani, Punjaub, the wife of Henry W. Bellew, Civil Surgeon, Peshawur, of a son.

Blenkinsop.—On September 15, at Bournemouth, the wife of W. H. Blenkinsop, B.A., M.B., L.K.Q.C.P.I., L.R.C.P. Lond., M.R.C.S. Eng., of a son.

Elliott.—On September 9, at Chichester, the wife of George H. Elliott, M.R.C.S. Eng., of a daughter.

Etheridge.—On August 28, at Bromyard, Herefordshire, the wife of G. E. F. Etheridge, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., of a son.

Fitzgerald.—At Jounpore, N.-W. P., East India, the wife of E. Ambrose Fitzgerald, Surgeon Bengal Medical Service, of a son.

HULKE.—On September 10, at Admiralty House, Deal, the wife of Frederick T. Hulke, M.B., M.R.C.S. Eng., L.S.A., of a son.

HUSSEY.—On September 16, at St. Aldate's, Oxford, the wife of E. L. Hussey, M.R.C.P. Edin., F.R.C.S. Eng., of a daughter.

MAURICE.—On September 5, at Marlborough, the wife of James Blake Maurice, M.D., F.R.C.S., of a son.

NEATBY.—On September 12, at 29, Thurlow-road, Hampstead, N.W., the wife of Thomas Neatby, M.D., of a daughter.

WATERWORTH.—On September 13, at 221, New Kent-road, the wife of T. H. Waterworth, M.D., M.R.C.S. Eng., L.S.A., of a daughter.

WRIGHT.—On September 15, at 95, Maison Dieu-road, Dover, the wife of Dr. J. Hornsby Wright, 17th Regiment, of a son.

MARRIAGES.

ATKINSON—BEVERIDGE.—On September 17, at Dublin, Frederick Walton Atkinson, Esq., of Canonbury-square, London, to Marguerite Mary, daughter of the late John Beveridge, M.D., and granddaughter of the late Captain John Beveridge, of the Royal Horse Artillery.

BODLEY—REAVELY.—On September 5, at St. James's Church, Kinnersley, Herefordshire, George Frederick Bodley, Esq., of Harley-street, youngest son of the late William Hulme Bodley, M.D., of Merton House, Hove, Sussex, to Minna Frances Henrietta, eldest daughter of Thomas Reavely, Esq., of Kinnersley Castle.

BRISBANE—NESS.—On September 17, at the English Presbyterian Church, St. John's-wood, James Brisbane, M.D., of Lisson-grove, to Helen Sharp, eldest daughter of the late Alexander Ness, Esq., of Sinclair Town, Kirkcaldy, N.B.

D'ALBUQUERQUE—POWER.—On September 4, at St. James's Church, Spanish-place, le Chevalier J. C. L. D'Albuquerque, of Pernambuco, to to Helen Frances Mary, only daughter of Robert F. Power, M.D., M.R.C.P. Lond., F.R.C.S.I., Gloucester-place, Portman-square.

DE MIERRE—HARVEY.—On September 16, at St. John's, Hackney, Ferdinaud, son of Albert De Mierre, M.D., Ben Venue, Torquay, to Caroline Jane, daughter of John Coles Harvey, Esq., Downs-road, Clapton, E.

HALE—ROWSWELL.—On September 12, at St. Mary's, Bathwick, Bath, Dr. Thomas Egerton Hale, B.A., V.C., Surgeon 94th Regiment, eldest son of the late George Peter Hale, Esq., Faddiley Lodge, Nantwich, Cheshire, to Emily Harriet, fourth daughter of the late George Rowswell, Esq., of Bath, and formerly of Gibraltar.

HARGREAVES—EAMES.—On September 14, at the parish church of Farnworth-with-Kearsley, John Henry, second son of William Hargreaves, Esq., J.P., Darley Hall, near Bolton, to Martha Sophia Louisa, seveuth daughter of the late W. J. Eames, M.D., Londonderry.

HOGG—NEWMAN.—On September 10, at the parish church, Isleworth, W., B. Gordon Hogg, M.B., C.M., Turnham-green, London, W., to Lavinia Frances, only daughter of C. H. Newman, Esq., The Retreat, Brentford-end, Isleworth.

HUGGINS—PENROSE.—On September 14, at St. Peter's, De Beauvoir-square, S. Tillcott Huggins, M.R.C.S., of Church-road, De Beauvoir Town, to Emily Jane, youngest daughter of Arthur Wellesley Penrose, Esq., of Amwell-street, Pentonville.

HUNTER—RISK.—On September 5, at Christ Church, Blackpool, Alexander John Hunter, Esq., Fairleigh Hope, Manchester, to Constance Caroline Field, daughter of Keats R. Risk, M.D., R.N., Blackpool.

KILPATRICK—STUART.—On September 10, at 22, Royal-crescent, Glasgow, D. R. Kilpatrick, Esq., jun., to Elizabeth Stuart, only surviving daughter of Thomas D. Buchanan, M.D.

MAUNSELL—LANE.—On September 4, at Exeter, Thomas Maunsell, M.D., Royal Horse Artillery, to Mary Eleanor, daughter of Captain Lane, late 67th Regiment, and granddaughter of the late Major H. Bowyer Lane, Royal Artillery, of Greenhill, Staffordshire.

PURCHES—TRENERRY.—On September 7, at St. Mary's, Putney, James Henry Purches, Esq., R.N., eldest son of the Rev. George C. Purches, B.A., R.N., of Ludwell, Wilts, to Eleanor Mardon, only daughter of Charles Trenerry, Surgeon to the Civil Hospital, Gibraltar.

RAY—BICKNELL.—On September 14, at St. Giles's, Camberwell, Charles Clayton Pemell Ray, Esq., of 44, Palace-gardens-terrace, Kensington, second son of the late Edward Ray, M.D., F.R.C.S. Eng., of Dulwich, to Laura Mary, third daughter of Henry Sanford Bicknell, Esq., of Cavendish House, Clapham-common, S.E.

REID—WILLIAMS.—On September 5, at Holy Trinity Church, Penrhyn Deudraeth, Augustus Henry Reid, of Gresford, Denbighshire, youngest son of the late James Reid, M.D., of Brook-street, Grosvenor-square, London, to Angharad (Annie), eldest daughter of the late D. Williams, Esq., M.P., of Castle Dendraeth, Merionethshire.

SHEPHERD—STAINES.—On September 7, at the parish church of St. Leonard's-on-Sea, Augustus Burke Shepherd, M.B., to Amelia, only child of Francis W. Staines, Esq., of St. Leonard's-on-Sea.

WILLIAMS—TURNER.—On September 7, at the parish church of St. Paul, Deptford, Henry, eldest son of Henry Williams, Esq., of the Manor-road, Upper Lewisham-road, to Louisa Elizabeth, second surviving daughter of the late J. S. Turner, M.R.C.S.E., of Woolwich.

WOOD—STYLES.—On September 5, at St. Paul's, Chippenham, Richard B. Wood, Esq., of Chippenham, solicitor, to Mary Eleanor, third daughter of George Shield Styles, M.R.C.S., of Chippenham.

DEATHS.

BROWN, JAMES CARNAC, eldest son of R. Brown, M.D., of Kivernells House, Lymington, Hants, and grandson of the late Sir James Rivett-Carnac, Bart., at St. Helier's, Jersey, suddenly, of disease of the heart, on September 5, aged 27.

BURROWS, CARTERET HASTINGS, second surviving son of George Burrows, M.D., F.R.S., of Cavendish-square, at Cape Town, Cape of Good Hope, on July 31, aged 24.

DUFF, WALTER JOHN (PRESTO), son of Dr. Duff, Royal Artillery, at Poona, India, of diphtheria, on August 21, aged 4 years and 5 months.

EASTON, JOHN HENRY, son of John Easton, M.D., of 20, Connaught-square, Bayswater, London, at St. Margaret's Bay, near Dover, on September 16, aged 4½ years.

EWING, FANNY ARBUTHNOT, eldest surviving child of John Ewing, Deputy Inspector-General of Hospitals, at Llanfairfechan, North Wales, on September 6, in her 13th year.

HINGSTON, CHARLES, M.D., at Seventrees, Plymouth, on September 5, aged 67.

MARSH, MARGARET BABETTA, wife of Major W. D. Marsh, Royal Engineers, and daughter of the late Stephen Carmichael, M.D., of Trinidad, West Indies, at Walmer, on September 5, aged 37.

PROPERT, WILFRID HANBURY, infant son of John Lumsden Propert, M.B. Lond., M.R.C.S. Eng., L.S.A., of 100, Gloucester-place, Portman-square, at Margate, aged 3 months.

SPENCER, FRANCES, relict of the late William Spencer, Surgeon in the Hon. E. I. Co.'s Service, Bengal Presidency, at Woodridings, Pinner, on September 8.

TYERMAN, DANIEL FLETCHER, M.R.C.S., formerly Medical Officer at Middlesex County Lunatic Asylum, Colney Hatch, at Marton, Wellington, New Zealand, on June 29, aged 62.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

PARISH OF ST. GEORGE'S, HANOVER-SQUARE.—Medical Officer of Health. Candidates will be required to strictly carry out the duties as laid down in the 132nd Section of the Metropolis Local Management Act, from time to time to test the gas, and to analyse the water supplied to the parish, to carry out the duties of Analyst under the Adulteration of Food Acts, and to superintend the Inspector of Nuisances in the exercise of his duties. Applications, with testimonials, to the Vestry Clerk, at the Board-room, Mount-street, W., on or before October 16.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the Universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Crediton Union.—The Coldridge District is vacant; area 5160; population 724; salary £11 2s. 9d. per annum.

Henley Union.—M. James C. Pritchard has resigned the Nettlebed District; area 8084; population 1976; salary £80 per annum.

Penzance Union.—Mr. George B. Rosewall has resigned the Third District; area 12,656; population 11,195; salary £26 per annum.

Rugby Union.—The Crick District is vacant; area 3275; population 999; salary £15 per annum. The Kilsby District is vacant; area 6600; population 1184; salary £25 per annum.

St. Pancras Parish.—Mr. W. E. Cant has resigned the School at Leavesden; salary £125 per annum, and allowances.

Toxteth-park Township.—Dr. Robert A. Keys, Assistant Medical Officer at the Workhouse, has resigned; salary £100 per annum, with allowances.

APPOINTMENTS.

Barnstaple Union.—Edgar Cox, M.R.C.S. Eng., L.S.A., to the Fifth District.

Battle Union.—Alfred H. Hackney, M.R.C.S. Eng., L.S.A., to the Fourth District.

Bridgwater Union.—William J. Todd, M.R.C.S., L.R.C.P., L.S.A., to the North Petherton District.

East Preston Union.—Charles L. Evershed, M.R.C.S. Eng., L.S.A., to the First District.

Hailsham Union.—Alfred H. Hackney, M.R.C.S. Eng., L.S.A., to the Third A District.

Martley Union.—Samuel Lloyd, M.R.C.S. Eng., L.S.A., to the Leigh District.

Settle Union.—Robert McPherson, M.B. and C.M. Univ. Aberd., to the Arncliffe District.

Tewkesbury Union.—John H. Boughton, M.R.C.S. Eng., to the Deerhurst District.

Uxbridge Union.—Edward J. Parrott, M.R.C.S., L.R.C.P., to the Hayes District.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The library was re-opened on Friday, September 13.

THE health of London continues very satisfactory, the death-rate having been during the last three weeks stationary at a very low point—namely, 19 per 1000 of the population. The whole number of deaths registered in the week was 1203.

THE Guardians of the Cambridge Union are about to erect an infectious disease hospital on an isolated spot on the borders of the town.

THE South Yorkshire Lunatic Asylum in Wadsley-park, near Sheffield, was opened on the 7th inst. It will accommodate 750 patients.

GLASGOW is about to appoint a Medical Officer of Health at a salary of £600 a year. Forty-five candidates have sent in applications for the office.

AN order has been issued by the Local Government Board assigning to the Corporation of the City of London all the duties connected with the sanitary inspection of the Port of London, and especially that of appointing a legally qualified medical practitioner to be the Medical Officer of Health, and also a competent person to be an Inspector of Nuisances.

THE *Warrington Guardian* announces the entire destruction by fire, on Wednesday morning, of Haydock Lunatic Asylum. The patients were rescued, and the outbuildings were saved.

SHEFFIELD may now be said to enjoy (says the *Sheffield Times*) comparative immunity from small-pox. It is no longer under treatment at the workhouse, and for two consecutive weeks there have been no fatal cases within the borough.

WE notice with extreme regret that a member of our profession, Dr. Vance, of Plaistow, has been sentenced by the Shalford magistrates to fourteen days' imprisonment for the alleged offence of tampering with voting papers. If all the real offenees against person and property were so severely punished in this country we should hear less of brutal assaults, wife-beating, etc., than we do.

DR. FRANKLAND speaks highly of the water supplied by the London water companies during August, with the exception of that by the New River, which contained on the 1st of the month a number of white suspended particles. The Lambeth Company have now removed their intake from Ditton to a point above Mouseley Lock, thus avoiding the objeetionable outflow of the rivers Mole and Rye.

FOWEY COTTAGE HOSPITAL.—The bazaar held in aid of the funds of the above admirably managed institution produced nearly £100; and Sir Morton Peto, now engaged in extensive railway operations in the neighbourhood, has generously promised to make up the deficiency to complete the Hospital, which it is expected will be ready in a few weeks for the reception of patients.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—At the last meeting of this Society the following gentlemen were elected office-bearers for the session 1872-3, viz.:—*President:* Dr. Robert Scott Orr. *Vice-Presidents:* Dr. Geo. Buchanan and Dr. Andrew Fergus. *Council:* Dr. James Gray, Mr. Robert Grieve, Mr. J. Polloek (Mearns), Dr. R. Renfrew, Dr. George Miller, Dr. T. D. Buchanan, Dr. R. Stewart (Coatburg), and Dr. James Scanlan. *Secretaries:* Dr. Robert Perry and Dr. Alex. Robertson. *Treasurer:* Dr. H. R. Howatt.

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—Our readers will be glad to learn that the first meeting of this body, held at Bordeaux from September 5 to the 12th, has proved in every way suecessful. The number of members amounted to between 700 and 800, and the city received them in the most hospitable manner. The Medical Seetion constituted a much more important portion of the Association than it does in our own, many important papers having been read, of some of which we hope to give an aceount. The treasurer reported the financial condition to be all that can be desired; and it was resolved to hold the meeting next year at Lyons, with M. Quatrefages as president.

ROYAL COLLEGE OF SURGEONS.—From the annual report of the Council of this institution for the collegiate year ending July last it appears that there had been fourteen meetings of the Council. The Court of Examiners had held six meetings for the examination for the Fellowship, and fifty-one for the Primary and Pass examinations for the Membership. At the first examination for the Fellowship there were 79 candidates, of which number 47 passed and 32 were referred for six months. At the seeond, or final, examination there were 29 eandidates, 19 of whom passed and 10 were referred for twelve-months. For the Primary, or anatomical and physiologieal, examination for the diploma of Membership there were 649 candidates, of which number 429 passed and 220 were referred for three months. At the Pass, on surgieal anatomy and the principles and praetice of Surgery and Medieine, there were 442 candidates, of which number 57 were approved in Surgery but required to qualify in Medicine, 63 were approved in Surgery and afterwards qualified in Medicine, 286 passed, 99 were referred for six months, and the total number of diplomas granted was 349. The Board of Examiners in Midwifery met three times, and examined 21 candidates for the licence, when 9 passed, 4 were referred for a written examination, and 8 for three months. During the year twelve candidates were examined for the diploma in dental surgery, all of whom passed to the satisfaction of the Board. The "Calendar" (in which the above report appears) has just been published, and contains a large amount of valuable information for the Members, and espeeially for the students, as here will be found eopies of the examination papers for Fellowship and Membership, as well as the regulations for the various diplomas. In analysing the new edition we find there are 1313 Fellows in whom the eleetion to seats in the Council is vested; of this number there are 181 honorary Fellows, of whom Mr. Joseph Swan is the senior and Professor Humphry the junior, 449 who have obtained the distinction by examination, and 683 by election. The Members of the College are represented by a small army of about 15,000. There is only a slight increase in the number of Licentiates of Midwifery, now amounting to 1014. The Licentiates in Dental Surgery are 326 in number. The receipts during the past year amounted to £12,627 17s. 8d., and the expenditure to £12,038 7s. 7d., showing a balanee of £589 10s. 1d.

CHOLERA IN INDIA.—The *United Service Gazette* says:—"At Meean Meer the disease broke out in the quarters of the 37th Regiment, and within a very few hours as nearly as possible 10 per cent. of the men had been handed over to the undertaker. Meean Meer is a station which had already achieved an unenviable notoriety as a nursery of relapsing fever. The causes whieh had created relapsing fever were aseertained, and having been ascertained were allowed to remain until the advent of the cholera. At Lahore there had been 200 cases—'more than half of them fatal.' Here the outbreak was not confined to the soldiers, but no doubt the ratio of mortality was as great, if not greater, than the ratio amongst civilians; and if that has been the case we find the 10 per cent. death-rate of Meean Meer rising to beyond 50 per eent. at the capital of the Sikhs. This is pretty well for a beginning, and, with 60,000 English soldiers stationed in India, ought to cause our Imperial authorities some alarm."

HEALTH OF SCOTLAND.—The deaths of 2236 persons were registered in the eight prineipal towns during August, 1872, of whom 1127 were males and 1109 females. This number, allowing for increase of population, is 135 under the August average for the last ten years. A comparison of the deaths recorded in the eight principal towns shows that during August the annual rate of mortality was 18 deaths per 1000 persons in Aberdeen, 20 in Edinburgh, 23 in Perth, 25 in Dundee, 26 in Greenock, 27 in Leith, 28 in Glasgow, and 29 in Paisley. Of the 2236 deaths, 990, or 44 per cent., were of children under 5 years of age. In Perth, 32 per cent. of the persons who died were under 5 years of age; in Aberdeen, 33 per cent.; in Edinburgh, 34 per cent.; in Paisley, 43 per cent.; in Leith, 44 per eent.; in Glasgow, 48 per cent.; and in Greenock and in Dundee, 49 per cent. The zymotic (epidemic and contagious) class of diseases proved fatal to 548 persons in the eight towns, eonstituting 24·5 per cent. of the mortality. This rate was exeeeded in Leith from the prevalence of scarlatina, and in Dundee from that of measles and diarrhœa.

Dr. SHORTT, of Madras (says the *Indian Daily News*), writes as follows:—"Allow me to record a most interesting occurrenee that took place in my house on the night of the 30th ult. A Russell's viper (*Daboia elegans*) that I have had for some seven weeks, being the same that I exhibited at the recent lectures at the Medical College on June 24 last and following days, measuring three and a half feet in length, has produced thirty-nine young. Eaeh little one measures eight and a half inches in length, and one out of these, about six hours old, in an experiment killed a young partridge weighing 9½ tolah in ten seconds. This proves how very prolific these deadly snakes are, and when the young are put together they will exeeed the mother nearly eight times in length. I am glad to add that mamma and babies are doing nieely."

AN IRISH NUISANCE.—At the Southern Divisional Court, on September 7, five or six persons were summoned by the sanitary officers for ereating a nuisanee injurious to public health by collecting a quantity of manure in the vicinity of the Coombe, one of the most squalid localities in the eity. Mr. Ennis proseeuted. Poliee-sergeant 22 A deposed that the defendants kept manure yards at M'Clane's-lane, which adjoins the Coombe, and that the effluvium emitted was most offensive. Dr. Mapother eertified that the existence of the nuisanee was very injurious to public health, and that if cholera unfortunately visited Dublin this locality would probably be the first infected. The defendants, who appeared to be intelligent men, wanted to know why the Corporation of the city were allowed to collect manure-heaps of a much more offensive and injurious deseription in and about the streets. Mr. Barton said that was a most pertinent question. Dr. Mapother admitted that there was unfortunately too mueh truth in the defendants' statement, but the Corporation yards were not situate in very populous distriets. The defendants denied that the effluvium was injurious to health, and they ealled on Dr. Mapother to produce evidenee in support of his statement. Dr. Mapother said the defendants themselves appeared to be in bad health. One

of them, however, replied that he could eat all he got. Dr. Mapother said about two years ago he saw an old woman from the neighbourhood of the Coombe, whose face had become white as paper, owing to the poisoned air of the place. One of the defendants said that woman was still alive and well, and was now nearly 90 years of age. Mr. Barton hoped that if the Corporation were in any way responsible, as he thought they very frequently were, they would be rigorously dealt with. The defendants were ordered to abate the nuisance within seven days, but they said they would not do so.—*Dublin Daily Express*, September 9.

Sick and Poor.—A Blue-book has lately been issued, showing the number and ages of the paupers on the medical officers' relief books in the several unions in England and Wales on a given day—viz., the last day of the twelfth week of the half-year ended at Lady-day, 1870, being December 18, 1869, and showing also the several diseases of these patients. Taking the number of paupers in England and Wales at one million, we find that the proportion of the sick is between a seventh and a sixth—nearly a third among the indoor paupers and about an eighth among the outdoor. The returns show striking local contrasts traceable to drainage, climate, low wages, and other causes.

Treatment of Poisoning with Atropine by Morphia.—M. Abeille communicated a case to the Academy of Medicine, in which symptoms of poisoning induced by the hypodermic injection of nine milligrammes of atropine were treated and cured by the injection of thirty-seven milligrammes of the hydrochlorate of morphia, without any other means (not even sinapisms) being had recourse to. It was a case of sciatica, which during four months had resisted all means of treatment, including morphia injections. Having in similar cases obtained successful results from atropine, M. Abeille resolved on its use, notwithstanding its well-known danger, being satisfied that he could meet this by means of morphia. This conviction was the result of its use in a case of very dangerous poisoning related to the Academy in 1868. In the present case the cure was complete, for it has continued during two years, and the symptoms of poisoning were dissipated within three-quarters of an hour by one injection of morphia. —*Bullet. de l'Acad.*, August 27.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Chundar Coomar Dey.—Communication with enclosure received with thanks.

Glanders.—Mr. Sidney Coupland's valuable paper, with engravings, shall be published very shortly.

W. M.—Apply to Mr. Hancock, President of the Royal College of Surgeons, Harley-street.

Myopia.—The best is a pair of properly selected spectacles.

W. W. C., Boston.—Dr. Gregory used to state the proportion as 1 in 50 in England, 1 in 100 in Scotland.

D. R.—The annual Report of the Local Government Board may be obtained at the office for the sale of Parliamentary papers, 1, Abingdon-street, Westminster.

Dr. Huxley, Maidstone.—Thanks for your very complimentary letter to ourselves. A great many people agree with you as to the Medical Council and the British Medical Association; but the Students' Number is an institution. We know that the students like it; we know that the advertisers like it; we know that the publishers like it; we know that the editors like it. And how do we know that our readers don't like it?

We are requested, to prevent inconvenience, to contradict a report which has been extensively circulated, that Sir Alexander Taylor, M.D., of Pau, Pyrénées, has retired, or is about to retire, from medical practice there. He intends to be at his post early in October; and, during his stay in England, for the next three weeks, will be ready to receive any communications connected with Pau through his publishers, Messrs. J. and A. Churchill, New Burlington-street.

Gas.—There is no doubt that the manager of a gas factory would allow the experiment to be made; but there are two sources of vapour, either of which may act upon a mucous membrane affected with hooping-cough. One is the *Blue Billy—i.e.*, sulphuretted hydrogen; the other is the naphtha and other volatile hydrocarbons, with which the very ground of a gas factory that we went over was impregnated. Now, it would not be difficult to expose a child to either of these two influences at home. A good friction of the spine with compound camphor liniment, to which a drachm of naphthaline has been added, would, we think, answer the purpose.

The New Sanitary Act and Boards of Guardians.

To the Editor of the Medical Times and Gazette.

Sir,—I wish through you to ask a few questions and make a few remarks as applicable to the above subjects. Regarding vaccination: had the law been carried to the extent it is at present—and at present it is very much neglected by the authorities—is it not reasonable many hundreds, nay thousands, of lives would have been saved, and now, if children were vaccinated in succession, according to the Act, and the notices sent out by the Registrar of Births, should we not all be supplied with fresh vaccine lymph at our doors, instead of having to get dried lymph, and lymph how and when we can? There is an observation I should like to make, as it concerns an important therapeutic and pathological fact. After the wretchedly painful and inflamed arms I see upon secondary, and even primary, vaccination nowadays, I go back to the time when the Vaccine Board considered—and, I believe, Dr. Jenner—that once vaccinated properly was equivalent to its predecessor, once inoculated, as protective; also, I believe, the Board held that one well-formed vesicle, with its appropriate residuum mark, was a guarantee. Now a broad mark, and more than one, is required. I observe Dr. Bakewell, in a very scientific and reflective communication to the *Medical Times and Gazette*, speaks of the cells or leucocytes of small-pox being found in the eruption and the blood—multiplied, of course, greatly in the latter, and cast out, perhaps, presumingly as surface eruption. Now, I would beg to ask, since cow-pox has been proved to be a mitigated form of small-pox, why may we not presume that the vascular action necessary to set up one regularly formed vaccine vesicle may not be connected with the same series of effects as noticed by Dr. Bakewell? The same examination does not appear to have been made, but if it be necessary for a true vaccine vesicle to be the result of a constitutional, as well as a local, condition, then the multiple of embryonic corpuscular cells may exist as well from the presence of one local vesicle? Why not? say several.

There is one special object many of us will be glad if an inspector can interfere with in the country and villages: the shameful neglect of privies, drains, and dwellings of some of the poor—not fit for stables, much more human beings above the state of savages. Some proprietors, to their disgrace, are indifferent so they can get rent; and this applies to the grinding rich and the covetous little landlord. These nuisances and degrading circumstances, all will admit, stand in the way of the health and tone of manners and improvement of the working classes.

Nailsworth, Sept. 16. I am, &c., Thos. Stokes.

Vanson.—We cannot advise in such a matter. Consult a solicitor.

Jas. Leyton.—1. In 1868. 2. See *London Medical and Surgical Journal*, vol. v.

Obesity.—Mr. Lambert weighed 52 stone 11 lbs.

A Subscriber.—*Medical Times and Gazette*, November 24, 1855.

J. W., Whitby.—The population of London within the limits of the Metropolis Local Management Act at the last Census was 3,264,530; within the Registrar-General's tables of mortality, 3,251,804.

Antidotes to Opium.

To the Editor of the Medical Times and Gazette.

Sir,—In your issue of September 7 I was surprised to see atropine stated to be an antidote to opium. Now, atropine is the last drug that anyone acquainted with its physiological action would choose in such cases—in fact, a worse could not be chosen, for in Dr. Harley's admirable work on "The Old Vegetable Neurotics" we have the following remarks at page 300:—"Atropine increases the cerebral and anæsthetic effects of opium, and the influence of belladonna in removing the respiratory difficulty is slight and ineffectual, since it extends only to the release of the bronchial tubes, without affecting the diaphragm or external muscles of respiration." Again, at pp. 303-9, Dr. Harley criticises several cases in which atropine was used as an antidote to opium, either alone or in conjunction with other remedies, and observes that some died, in some there was an increase of the poisonous symptoms after belladonna was given, whilst in others, after free evacuation of the poison, the recovery was not more rapid than might have been expected. I could quote much more on the subject, but must content myself with giving Dr. Harley's conclusions, which I consider apply very forcibly to all of Dr. Johnston's cases; viz.:—

1. That the evidence of antagonism in any given case is inconclusive.
2. Taken individually or collectively, the cases show that belladonna has no influence whatever in accelerating the recovery from the poisonous effects of opium.
3. That somnolency, stupor, narcotism, and coma—the essential effects of the action of opium—are both intensified and prolonged by the concurrent action of belladonna.
4. That belladonna is powerless to obviate the chief danger in opium poisoning—viz., the depression of the respiratory function.

I am inclined to think that all Dr. Johnston's cases go rather to prove the above conclusions than to show the value of atropine in opium poisoning. In his first case we have a large dose of extract of opium taken and evacuated almost immediately by stomach-pump. When one would expect an immediate recovery with no other treatment than coffee and brandy, we have recovery delayed till next day by the injection of three-quarters of a grain of atropine. Again, in Case 2 we see shortly after injection of half a grain of atropine the respiration becoming so embarrassed that it was necessary to keep up artificial respiration. All the other cases serve to illustrate the same thing—viz., the inutility of atropine as an antidote; and I am inclined to believe as rapid, if not a more rapid, recovery would have resulted by merely keeping the patient moving and (having first used the stomach-pump) giving brandy and coffee as required, or, still better, injecting strychnine.

Mr. F. J. Mavor, veterinary surgeon, Park-street, W., has clearly proved by repeated experiments on horses and dogs that opium is a certain antidote to strychnine, and he is convinced that strychnino would be found to be an antidote to opium. Several letters have at various times appeared in medical journals bearing testimony to the efficacy of opium in strychnine poisoning, and there is little doubt that strychnine will be a successful antidote to opium if tried.

I cannot conclude without remarking that Dr. Johnston's dose of atropine is very large—viz., half a grain, and in one case three-quarters of a grain. Now, in the horse a quarter of a grain is sufficient to produce its full physiological effects. One would expect more powerful effects from half a grain of atropine, if pure.

Hoping that the above remarks may call attention to the value of strychnine as an antidote to opium, I am, &c.,

91, Park-street, Grosvenor-square, Sept. 10. Alex. Geo. Burness.

Small-pox in Devonport.—Dr. John Wilson has just published an elaborate report of the small-pox epidemic—1871-72—in the borough of Devonport. The epidemic was of a very severe character. During the twenty-four weeks that the hospital was open, 364 patients were admitted—the number of deaths 73, or 20·1 per cent., this large mortality being due to the malignant form of the disease. Dr. Wilson gives a series of very elaborate tables bearing on the subject in all its aspects. We must refer our readers to the report itself, which, we may say, bears out fully the following statements come to by the author :—

"Firstly. That the causes of the epidemic were local and general. Local, in so far as the lowest lying, worst ventilated, and poorest places of the town were first and most severely affected. General, in so far as the epidemic extended, and perhaps even commenced, by some unknown epidemic influence apart from the known means of contagion.

"Secondly. That primary vaccination, well performed, is all important; but that revaccination is as important if small-pox is to be stamped out. It is scarcely saying too much to aver that the lives of the 188 who succumbed to the disease might have been saved by a judicious system of compulsory revaccination.

"Thirdly. That sufficient hospital accommodation must be provided very early in an epidemic to prevent the spread of the disease.

"Fourthly. That in Devonport this was done with wonderful rapidity, still not early enough; the town proper suffering severely before means were taken to prevent the spread of disease by contagion.

"Fifthly. That Morice Town and Stoke suffered less from the epidemic than Devonport proper, owing to—firstly, the existence of the hospital before they were much affected; secondly, the wider streets and their better arrangement.

"Sixthly. That there ought to be a permanent building for the treatment of contagious disease."

Balmforth *v.* Buckley and Fletcher.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The letter of Mr. William Cobbett, inserted in your journal of August 31, calls for some remarks, which I trust you will allow me to make through the medium of your journal. I have called Dr. Fletcher's attention to such letter, and, in reply, he says that Mr. Southam, on meeting him in the street one day, did certainly say that he (Mr. Southam) had received a letter from Messrs. Cobbett and Wheeler (which letter he produced, but did not hand to Dr. Fletcher), and that Dr. Fletcher must advise Mr. Buckley to refer the matter; but Dr. Fletcher said he should not interfere to dictate to Mr. Buckley what course he should pursue. No mention whatever was made of any action against Dr. Fletcher, nor any suggestion that he should consent to a reference. The conversation on that occasion related exclusively to Mr. Buckley.

Now for the facts within my own knowledge. On July 3 Mr. Whitworth and myself waited upon Mr. Cobbett to obtain his consent to an examination of the plaintiff on behalf of the defendants; but that was not, as stated by Mr. Cobbett, the only object of our visit, nor is he correct in stating that he was the one to introduce the subject of the reference. Upon our arrival at Mr. Cobbett's office he was engaged, and thereupon we saw Mr. Pratt, who had the management of the cases, and mentioned to him our wish to have an examination of the plaintiff, and that we also wished to know if they were still prepared to refer the cases. Mr. Pratt replied that as their offer of a reference had been declined in the first instance, he did not think their client would be willing to adhere to it now. Mr. Whitworth thereupon stated that, although there had been some mention of a reference, it had been made in such an informal manner that he did not consider himself entitled to entertain it; while I stated that, so far as my client was concerned, no offer whatever had been made to refer. This statement I have, during the continuance of the action, repeated on several occasions, and it never received any contradiction until the matter was noticed in your journal. After waiting some time we saw Mr. Cobbett. He promised at once to arrange for an examination of the plaintiff; but with respect to a reference, which was mentioned by Mr. Whitworth, he expressed similar views to those expressed by Mr. Pratt. He certainly then did express surprise that the offer had not been accepted in the first instance. My reply was that no offer had been made to my client, and Mr. Whitworth repeated that he had not considered the offer an official one. It is not true that both Mr. Whitworth and myself intimated that we were not authorised to accept a reference. On the contrary, Mr. Whitworth pressed for it very warmly; while all that I said was, that as the offer had not been made to my client I had not yet ascertained his views upon the subject. It was arranged that Mr. Cobbett should see his client, and let us know at once whether he was willing to refer. In writing to Messrs. Cobbett and Wheeler, on the evening of July 4, with reference to an appointment for the proposed examination, I said—"I shall also be glad to know your client's views with reference to the arbitration suggested yesterday." To this paragraph of my letter I never received any answer. I afterwards saw Mr. Pratt, and pressed him for an answer as to the plaintiff's views with respect to a reference, but received for reply that Mr. Cobbett himself had seen the plaintiff, and he (Mr. Pratt) could not tell me with what result. As neither Mr. Whitworth nor myself received any communication from Mr. Cobbett, we waited upon him together, for the express purpose of learning the result of his interview with his client. He was not in, and, after waiting for him some twenty minutes or so, we left a message for him, requesting him to let us know whether the plaintiff would refer. We learned where he had gone to, and walked along the road by which he must return, in the hope that we might meet him, which hope was realised. This is the "accidental" meeting in the street referred to by Mr. Cobbett. We told him distinctly that we had been waiting for him some time, and that we thought it possible we might meet him, and that we wished to know his client's decision as to a reference; and it was upon that occasion that Mr. Cobbett told us that his client objected to a reference, and that Mr. Southam had suggested that if there was arbitration at all it should be upon the principle that the defendants should admit their liability; but I distinctly and emphatically deny that the proposal to refer on our part was made at that interview, or that Mr. Cobbett said that we had hitherto declined to listen to such a proposition, or that he alluded to the strong pressure put upon him by Mr. Southam to refer. That the proposition to refer was not made then is proved by my letter of July 4, which mentions it as having been made the previous day, which was considerably before the "accidental" meeting.

Mr. Cobbett has fallen into an error, also, with respect to my letter of July 19. Such letter had no reference to the first examination of the plaintiff, which took place on July 6. When the first examination took place Mr. Pratt mentioned to me that they intended to be present at it; but as I thought that it would be decidedly better that the solicitors of the respective parties should not be present, it was arranged between us that we should not attend. A second examination was arranged for July 19, and on the morning of that day I received a note from Messrs. Cobbett and Wheeler, stating simply that they intended to be present. To this note mine of July 19 (of which Mr. Cobbett sends you copy) was written in answer. The letter of Messrs. Cobbett and Wheeler made no mention of a reference, and it was only upon perusing Mr. Cobbett's letter to your journal that I learnt that Mr. Southam had invited his attendance, and with what object. If there had been the slightest intimation given to Mr. Whitworth and myself that our attendance at the examination would tend to bring about a reference, we should most certainly have been present. It is evident that we could not know what private communications were passing between Mr. Cobbett and Mr. Southam, and I think it will be admitted that my letter of July 19, written in absolute ignorance of Mr. Southam's alleged object, by no means warrants Messrs. Cobbett and Wheeler's note of the same date to Mr. Southam.

The report from Mr. Beever (of which Mr. Cobbett has sent you a copy) is not the one which was produced in court upon the trial. I was not aware of the existence of such report, as it never saw daylight until you published the copy; but it in nowise contradicts my statement as to Mr. Beever's report.

I regret that I should have to trespass upon your space to such an extent, but the last paragraph of Mr. Cobbett's letter entitles me to ask you to give me the opportunity of a full explanation of the facts.

I am, &c., Wm. H. Hewitt.

8, Marsden-street, Manchester, September 4.

*** We hope this correspondence is at an end.

W. S. Layton.—Yes. See Marsh in "Dublin Hospital Reports," vol. iii.

T. S., Haggerston.—The subject is one of importance, but requires to be treated in a different manner.

S. Bunton.—"Andral's Pathological Anatomy," translated by Townsend and West, vol. i.

Wm. Cocking.—The earliest recorded outbreak of the disease occurred in Ireland in 1846. It broke out in the Rathdown Union, South Dublin, and Belfast Workhouses. Two cases were admitted into the Hardwicke Hospital, Dublin.

G. S. G.—Yes.

"Man is all symmetric—
Full of proportion one limb to another,
And all to all the world besides.
Each part calls the furthest brother;
For head with foot hath private amity,
And both with moon and tides."—*George Herbert.*

Alimentary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you kindly allow a busy practitioner *currente calamo* to write a line in your valued journal, Aladdin fashion, to exchange old lamps for new ones, and to ask those young gentlemen fresh from the schools about the treatment of diarrhœa. Now, my ideas—having like Saul, slain thousands and ten thousands—culminate in depending on underdone mutton minced into minute shreds, dilute nitro-hydrochloric acid, bismuth, ipecacuanha, and nux vomica, astringent injections invariably containing opium,—the inunction of the body with olive oil amongst the most valuable remedies. Everybody knows that diarrhœa may be acute, inflammatory, bilious, chylous, mucous, lienteric, or chronic; and unless infantile excreta resemble mustard we must ever be on the look-out for intestinal mischief—a miserable child, a revolting, disgusting object, nothing but skin and bone, the right eye destroyed, the bedsores offensive, the diarrhœa constant; another in convulsions, one eye closed, the other ever open, and the condition of anæmic prostration alarming, the diarrhœa unyielding. Both these cases pulled through, especially as they happened to be the children of poor people, and not of pampered "Diafoiruses" who wear diamond rings and inhabit princely houses, or of army surgeons who out of their pay have saved handsome fortunes. Not to forget the mutton, which really is a splendid remedy: how it acts, what it does, what the chemical and physiological explanations are, I neither know nor care, so long as patients recover; you must ask scientific investigators—those noble men (not in practice) who toil so hard to discover vital elixirs, but never participate in the recompense;—resembling the pig with a ring in his nose, they grub up the truffles for others to enjoy. It is all very well to say, Let every man find pleasure in practising the profession he has learnt; to the hungry, preaching contentment is to irritate the wound. "Crying and sickly children, and teething children carefully avoid," said Hawthorne, and privately having a great respect for Herod, consider squalling, dirty, neglected infants simply as horrible nuisances. When one is comatose through diarrhœa, it can be roused by the application of hot mustard to the occiput; beef-tea, brandy, and quinine, valuable at certain stages, appear sometimes only to add fuel to the fire; and cod-liver oil often breeds worms. Rum, claret, and gin are valuable remedies given judiciously, but are powerful poisons in inexperienced hands. Even milk, whether from the mother, the cow, the goat, or the ass, is sometimes injurious; and as for bread, certain kinds keep up hooping-cough. On the other hand, stout is not merely a tonic, but a capital narcotic; and the indigestible strawberry a safe aperient—just as asparagus keeps off dropsy after scarlet fever. Condensed milk, after considerable varied experience, has been found to be of the greatest service in health and disease. My patients are the wives and children of soldiers, "whose personal vigour and inborn native courage have added unsullied glory to our gracious Sovereign's crown, solid union to her people, and unrivalled honour to themselves, and whose valour has saved and defended their country in war, and extended its commerce in peace." This very fine passage, which would bring down any gallery, and make one's hair stand on end at perusal, is cribbed from a certain Hospital Report. Well, Sir, just as a certain medical officer once brewed claret-cup so good that, fired with enthusiasm and this delicious nectar, the British army triumphantly captured the Taku Forts, so the soldiers' wives swear by the condensed milk, specially on board ship or the line of march, and many a miserable little wretch has turned into a fine lusty boy on this food. Some people abuse the essence of beef, and there never was a medical man yet who had not some special recipe for making beef-tea.

All I, as an old practitioner whose sands of life have nearly run, can say is, that essence of beef, Swiss milk, and Australian meat are amongst the great blessings of the age, both to rich and poor. Throwing down the gauntlet to Dr. Edward Smith—begging him, although a stranger, to accept the assurance of distinguished consideration and to write more books on diet—allow me to ask Dr. Eustace Smith for personal experience respecting injection of nitrate of silver, as recommended by that daring brilliant genius, the immortal Trousseau; also about the value of bichloride of mercury in diarrhœa. Gallic and tannic acids very often do no good. Last night a married barren woman had frightful choleraic diarrhœa. After taking castor oil and opium, the application of turpentine fomentations and sinapisms to the cramped extremities, a fair amount of milk and soda-water, iced soda-water and brandy by way of support, the patient became rapidly worse: no pulse, dark rings round the eyes, constant diarrhœa, alarming vomiting, the tongue brown and dry as a bone. I felt rather in a hole, and, though such practice is wrong and risky, she was put under chloroform and eventually rallied. Having, as usual, wandered from the text, let me conclude with an observation about metaphor. Said Lord Castlereagh—"The right honourable gentleman came down to the House like a crocodile with his hand in his breeches pocket;" and an Irish member thus addressed Mr. Speaker: "I smell a rat; I see him floating in the air, but, mark me, I shall yet nip him in the bud." In course of time, and by constant practice, I hope to improve style, following the advice of Ben Jonson, to read the best authors, to observe the best speakers, as well as to profit by criticism. In the meantime, thanking you very much for many escapes from the waste-paper basket,

I am, &c., A General Practitioner.

COMMUNICATIONS have been received from—

Hospital Physician, Dunedin; Mr. Grindrod; Mr. Sydney Jones; Dr. Jago; Dr. Hogg; Dr. Alexander Robertson; Dr. Neild; Dr. Bakewell; Mr. J. Wickham Barnes; Mr. Groves; Dr. Whyte; Mr. Mead; Myopia; Mr. T. Charters White; Mr. A. G. Burness; Mr. F. B. Dudley; Mr. Wheatley; Dr. Steele; Mr. J. Chatto; Mr. Holthouse; Dr. W. Strange; Dr. J. W. Ogle; Mr. T. M. Stone; Professor Flower; Dr. Barnes; Mr. F. A. Mahomed; Mr. Vincent Jackson; Dr. Pearse; Dr. J. E. Huxley; Dr. Neale; Mr. Bevan Lewis; Mr. T. Stevenson; Mr. T. Stokes; Dr. Rogers; Mr. T. J. E. Brown; Mr. Monson.

BOOKS RECEIVED—

Invalid Cookery, suitable to the Cottage or the Kitchen, by Metcalfe Johnson, M.R.C.S., L.S.A.—A Study of some points in the Pathology of Cerebral Hæmorrhage, by Ch. Bouchard, M.D., translated from the French, with notes by T. J. Maclagan, M.D. Edin.—Leçons de Clinique Médicale, par T. Gallard, Médecin de la Pitié—Some Observations on Fireplaces, Stoves, and Ventilation, by Messrs. Frederick Edwards and Son—The Royal Guide to the London Charities for 1872-73, by Herbert Fry—Annual Report on the Health of the Parish of St. Marylebone for 1871, by Dr. John Whitmore—The Public Health Act, 1872, with special reference to Plymouth, Stonehouse, and Devonport, by Christopher Bulteel, F.R.C.S.—Sixteenth Annual Report of the Medical Officer of Health for St. James's, Westminster.

PERIODICALS AND NEWSPAPERS RECEIVED—

New York Medical Journal, July and August—New York Journal of Psychological Medicine, July—Nature—Aberdeen Daily Free Press—Pharmaceutical Journal—West Riding Lunatic Asylum Reports, vol. 2—Philadelphia Medical Times—Canada Medical and Surgical Journal, No. 3—The Physician and Surgeon, vol. i., No. 1—Journal of the Scottish Meteorological Society, July.

APPOINTMENTS FOR THE WEEK.

September 21. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

23. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

24. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

25. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2.30 p.m.; King's College Hospital (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College Hospital, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

27. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Quekett Microscopical Club, 8 p.m. Mr. John E. Ingpen, F.R.M.S., "Description of a Standard Dynamometer for determining the Power of Microscopic Objectives." Mr. D. E. Goddard, "On Comparative Study."

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 14, 1872.

BIRTHS.

Births of Boys, 1069; Girls, 1001; Total, 2070.
Average of 10 corresponding weeks, 1862-71, 1998·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	639	564	1203
Average of the ten years 1862-71	651·5	622·7	1274·2
Average corrected to increased population	...	...	1402
Deaths of people aged 80 and upwards	...	...	35

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	5	...	8	...	...	2	19
North ...	751668	3	...	4	1	7	...	6	1	22
Central ...	333887	...	1	2	...	2	1	...	1	16
East	638928	4	4	6	...	3	...	4	1	21
South	966132	5	3	5	1	6	2	8	3	41
Total	3251804	12	9	22	2	26	3	18	8	119

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·897 in.
Mean temperature	62·7°
Highest point of thermometer	80·9°
Lowest point of thermometer	50·3°
Mean dew-point temperature	56·9°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·07 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 14, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Sept. 14.	Deaths Registered during the week ending Sept. 14.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2070	1203	80·9	50·3	62·7	17·06	0·07	0·18
Portsmouth ...	115455	12·1	71	61	78·2	48·8	61·0	16·11	0·11	0·28
Norwich	81105	10·9	41	46	75·0	50·0	60·7	15·94	0·16	0·41
Bristol	186428	39·6	145	90	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	41	34	73·1	46·2	60·3	15·72	0·19	0·48
Birmingham ...	350164	44·7	277	153	73·7	49·3	61·4	16·33	0·20	0·51
Leicester	99143	31·0	68	72	76·7	47·5	61·5	16·39	0·22	0·56
Nottingham ...	88225	44·2	51	41	77·4	48·4	62·1	16·72	0·20	0·51
Liverpool	499897	97·9	368	321	73·0	53·3	60·9	16·06	0·63	1·60
Manchester ...	352759	78·6	257	208	76·0	50·0	61·3	16·28	0·97	2·46
Salford	127923	24·7	102	83	73·4	47·8	60·1	15·61	0·99	2·51
Oldham	84004	20·2	56	71	...	...	...	...	...	...
Bradford	151720	23·0	105	72	73·3	52·3	62·3	16·83	0·68	1·73
Leeds	266564	12·4	194	190	75·0	51·0	61·9	16·61	0·55	1·40
Sheffield	247847	10·9	171	136	76·0	49·5	62·2	16·78	0·18	0·46
Hull	124976	35·1	89	81	73·0	48·0	59·7	15·39	0·53	1·35
Sunderland ...	100665	30·4	58	55	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	102	54	70·0	51·0	59·3	15·16	0·82	2·08
Edinburgh	205146	46·3	108	72	64·0	46·7	56·3	13·50	1·60	4·06
Glasgow	489136	94·8	373	236	65·5	48·2	57·4	14·11	1·86	4·72
Dublin	310565	31·9	154	154	77·4	48·0	62·7	17·06	0·90	2·29
Total of 21 Towns in United Kingd'm	7393052	34·0	4901	3433	80·9	46·2	60·8	16·00	0·60	1·52

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·90 in. The highest was 30·15 in. on Friday morning, and the lowest 29·59 in. on Monday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D.,
Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

Lecture II.

Gentlemen,—It cannot be necessary for me to say much to you, I am sure, about the anatomy and physiology of the nervous system, for you are fresh from the class of my distinguished colleague Professor Rutherford. You have learned from him the general structure of nervous tissue, its division into grey and white matter, vesicular and tubular neurine. He has told you of afferent and efferent nerves; of nerves of motion and nerves of sensation; of the telegraphic system by which the behests of the will are initiated and executed; of the important fact that in the convolutions of the brain consisting of grey or cineritious matter lies the intellectual power by which man is distinguished from other animals; that the optic thalami and corpora striata —also groupings of grey matter—are the central points, "subservient to the conversion of sensational impressions and volitions into combined movements adapted to the preservation and welfare of the individual, without the intervention of judgment or the proper functions of mind."

I shall merely supplement this teaching by telling you that through a physiological channel only can you approach with any chance of successful apprehension the science of psychology. Discarding all ideas of "inner consciousness," of a "spiritual essence," and the common metaphysical conception of mind, you must accept at once, in its broadest and fullest, and not in its narrow and conventional sense, the materialistic view of this question. The brain is the organ of the mind, and we have no knowledge of the mind but through the cerebral convolutions.

You may take it for granted that no thought, however feeble, can be originated—no idea, however simple, can germinate—which does not involve an expenditure of somatic force. Every manifestation implies and represents the "change or destruction of nervous element." To be mad is to have this central nervine battery at fault. Its faultiness is the secret and foundation of insane pathology.

Dr. Bucknill puts it well, thus:—"The brain, like every other organ of the body, for the perfect performance of its functions requires the perfect condition of its organisation, and its freedom from all pathological states whatever. Consequently, the existence of any pathological state in the organ of the mind will interrupt the functions of that organ, and produce a greater or less amount of disease of mind—that is, of insanity."

You see, then, how important it is that you should be "well thatched," and have your "intellectual tenements in good repair." You see how essential it is that we should not expose the supreme centres of life to any of those influences which are so fertile in the causation of disease. You cannot poison the blood with alcohol, or syphilis, or carbonic acid gas, or impure and mephitic exhalations, without damaging those delicate nerve-cells which, disarranged so easily, are only rearranged by slow and measured processes. You cannot exhaust nervous power, you cannot eliminate all your "pith and availability" by undue study or immoderate sexual indulgence, or any inordinate sensuality, without inviting pathological changes which once initiated may permanently impair that complexity of functions whose harmonious correlation and co-ordination may be regarded as the perfection of mental integrity.

The morbid changes found to exist in the brains of those who die insane are very varied and uncertain. In some cases there is evidence of extensive lesion; in others there is little or no appreciable change. You will not draw from this fact the conclusion that there *is* no change of minute structure, but rather coincide with Dr. Maudsley in thinking that the subtlety of nature may exceed the subtlety of human investigation. The same physician says that "the broad result established by pathological observation undoubtedly is that the morbid changes most constantly met with after insanity are such as affect the surface of the brain and the membranes immediately covering it. Of these changes there is no need of discussion to prove that those in the layers of the cortical substance are the principal and essential."

There is no doubt that in all cases of acute mania there is great hyperæmia of the entire cerebrum. The cineritious substance is intensified in colour, and frequently softened; the pia mater is injected and ecchymosed in patches; on cutting into the hemispheres we find them studded with oozing puncta vasculosa. Precisely the same lesions are not infrequently observed in acute melancholia. But in some of the forms of chronic insanity there is, as I said before, scarcely any evidence of disease. Dr. Bucknill says—"A large number of brains of the insane we have diligently investigated with a first-rate microscope. The results appear to us to have afforded no distinction between the sane and the insane brain." He has found fatty degeneration to exist in the coats of the small arteries in "inflammatory and softened parts of the brain-substance," but not when the pathological changes peculiar to insanity alone existed. The experiences, however, of Schroeder Van der Kolk are different. After more than thirty years' experience he says—"I do not remember to have performed during the last twenty-five years the dissection of an insane person who did not afford a satisfactory explanation of the phenomena observed during life. On many occasions I was able accurately to foretell what we should find."

Unquestionably you can predict in many cases, notably in general paralysis, exactly what you will discover; but certainly there are many cases of chronic insanity in which, the symptoms being identical, the post-mortem appearances are very different. At one time you will find the brain-substance atrophied and singularly hard; at another you will find it soft and sticky, and hyperæmic. I have been particularly struck with this difference in epileptics. In general paralysis, and in certain forms of chronic mania, there is thickening of the membranes, a milky opacity of the arachnoid, and occasional adhesion of the pia mater to the cortical substance of the hemispheres. Atheromatous degeneration of the vessels at the base of the brain is common. It is clear, I think, from the careful investigations of Drs. Bucknill and Sankey that pathological changes are more marked and uniform in general paralysis than in any other brain disease. To the adhesion of the pia mater before spoken of may be added sub-arachnoid effusion, patulosity of the convolutions, dilatation of the lateral ventricles, with a rough granular appearance of their lining membrane, and general œdema of the cerebro-spinal mass. Dr. Sankey has minutely described a tortuous condition ("kinking and twisting") of the capillaries of the cortical substance of the brain, and an increase of connective tissue, previously noticed by Rokitansky and other observers. There seems to be little doubt that in general paralysis there is degeneration of nerve-element, both in the brain and spinal column.

The two forms of *ramollissement*—grey and white softening—so commonly alluded to, and thought to be so general, are really infrequent, and are equally met with amongst the sane and the insane. Hydatids and tubercular deposits are very rare.

It will be necessary, before we proceed to the consideration of the special forms of insanity, to suggest some classification under which you may arrange with something approaching to simplicity the different varieties of disease which have engaged the attention of alienistic physicians. And this, indeed, is a very difficult matter. Scarcely a writer upon this subject but has propounded a new nosology; and each novelty seems to be more embarrassing than its predecessor. No classification that I am acquainted with is sufficiently satisfactory to meet all the requirements of completeness and exactitude. Nor is it likely that any one ever will do this. Of one thing, however, I am quite certain, and that is that your nosological arrangement cannot be too simple and concise. It is impossible, therefore, that I can recommend to you a modern and much-vaunted pathological classification, embodying twenty-five varieties, by Dr. Skae, of Edinburgh; still less can I present to you, except for purposes of confusion, a modification of Dr. Skae's nosology by a young Scotch physician, containing seven classes and twenty-nine subdivisions, one of which is named "starvation madness" (*limopositos*), and another "post-connubial madness"! This sort of thing looks very learned upon paper, but it is very preposterous and unnecessary in fact; for, as Dr. Sankey has pointed out in his lectures, it exalts varieties into species, and multiplies simple conditions which are alike in progress into complicated conditions, merely because there is a slight difference in their causation. You may learn more about madness by reading *Hamlet* than by puzzling your brains over this laboured and elaborate literature.

Perhaps I cannot give you a better idea of an absurdly intricate classification than by placing one before you which

was propounded by a writer on insanity named Arnold at the close of the last century :—

I.—*Ideal Insanity.*

1. Phrenitic Insanity.
2. Incoherent Insanity.
3. Maniacal Insanity.
4. Sensitive Insanity.

II.—*Notional Insanity.*

5. Delusional Insanity.
6. Whimsical Insanity.
7. Fanciful Insanity.
8. Impulsive Insanity.
9. Scheming Insanity.
10. Vain or Self-important Insanity.
11. Hypochondriacal Insanity.
12. Appetitive Insanity.
13. Pathetic Insanity, including—

Sixteen varieties :—(*a*) amorous, (*b*) jealous, (*c*) avaricious, (*d*) misanthropic, (*e*) arrogant, (*f*) irascible, (*g*) abhorrent, (*h*) suspicious, (*i*) bashful, (*j*) timid, (*k*) sorrowful, (*l*) distressful, (*m*) nostalgic, (*n*) superstitious, (*o*) fanatical, (*p*) desponding. To this legion of varieties I should like to add yet another, of which Dr. Arnold himself must have been the subject, and term it "classifying insanity."

I confess I am old-fashioned enough to prefer to any other the simple classification of the great Pinel into four grand divisions —mania, melancholia, dementia, idiocy. It the more recommends itself because it was that adopted by Dr. Conolly in his lectures at Hanwell, who regarded all other forms of insanity as "mere varieties, or complications, or results." To these I shall merely add general paralysis, which is certainly a distinct and very remarkable disease, although its various phases involve maniacal excitement, melancholic depression, and that fatuity which we term dementia.

I shall begin by giving you a description of melancholia, because some amount of mental depression is said by many authors to be premonitory of mental exaltation. In other words (according to Dr. Sankey), if you carefully investigate the history of every case of primary mania, you will find that its early stage was characterised by evidence of melancholia. The melancholic symptoms may only be slight, and there is a subsequent "evolution of mania." As far as my observation goes, I have reason to think that there is much truth in this opinion. Here, then, is a description of a typical form of melancholia :—A person of previously cheerful temper, either suddenly, from some obvious, or gradually, from no appreciable, cause, manifests a change in his habits and demeanour. He is indifferent to what is going on about him—has a general feeling of lassitude and depression ; he shuns his neighbours and family, and takes no pleasure in society which he has heretofore enjoyed. His natural sleep is disturbed, and he awakes in the morning unrefreshed, burdened with the oppressive thought of another day, and with a growing incapacity both for pleasure and for work. His taciturnity is accompanied by emotional disturbance. He bursts into tears, appears to be absorbed in a gloomy reverie, from which he is roused only to tell you that his mind is going, that there is no remedy, that he is "lost," that he has no hope, that his wife and family are starving, that everybody is against him. He may have a good balance at his banker's, but he will not believe it, and no favourable calculations and demonstrations on the *plus* side will make him do so. His credit is gone, he is absolutely penniless. All the acts, he says, of his previous life should have been different. He has refused chances, neglected opportunities, done deeds which in their terrible influence are not to be cancelled. The future has no hope, the past has no consolation. His prospect and his retrospect are alike dark and clouded. It is useless to attempt to reason with persons in this state. Self-feeling is so intensified and exaggerated that you cannot divest them of its painful and absorbing reality. You may tell the religious melancholic that there is hope and comfort for all, and assure him of the same by Scriptural passages with which he is already familiar, and which were once balm to his wounded spirit ; but it will not do. There is hope and comfort for all *except himself*. He only is consigned to that outer darkness which can never be illumined —"Which way I fly is hell ; myself am hell."

With this state of things, involving so completely, though not exclusively, the affective life, you may have hallucinations of sight and hearing. Delusions you perceive already exist ; and a very common one is that food can be of no service, that life can be equally sustained, or death equally met, without it. Or there may be a suspicion that the food is poisoned ; and under these circumstances there is often great difficulty in getting the patient to take it. It may be absolutely refused altogether. This refusal is often a negative attempt at suicide. More alarming than delusions are the hallucinations—notably those of hearing—to which I just now referred. Voices whisper or loudly dictate. They may be struggled against for a while and successfully resisted, but at length, perhaps, they are overpowering. Homicidal impulses (rarely), suicidal impulses (frequently), destroy the autocracy of the *will*, and some act of violence is the result.

In all cases of melancholia you must be on your guard against suicide. You are never really safe, for the determined suicide is so cunning and crafty that he will often succeed in baffling the most vigilant precaution and in eluding the most rigid surveillance.

The common physical symptoms associated with the above are, in addition to sleeplessness, a languid pulse, a preternaturally red (though at times an extremely foul and coated) tongue, costiveness, dryness of skin and hair, with that "peculiar odour" so commonly noted in insane persons. In women the uterine functions are often disturbed. Frequently there is pain in the head, epigastric uneasiness—a fluttering or burning sensation. This is specially to be noted in that form of melancholia termed hypochondriacal, where the apprehensions are more commonly limited to the patient's own bodily infirmities, upon which he dilates with minute exaggeration. Nosologists, including the great Cullen (whose masterly description of hypochondriasis is well known), have always drawn a distinct line between the last-named disease and melancholia proper. But I am persuaded that they so frequently run into each other, that it is perfectly and pathologically accurate to speak of hypochondriacal melancholia. Guislain supports this view, and Esquirol remarks—"How numerous are the cases of melancholy which have succeeded hypochondriasis. How many instances of melancholy arise from chronic disease, and especially from lesion of the abdominal viscera. Hence we give to these affections the term of hypochondriacal melancholia."

The expression of anxiety in the countenance of the melancholic, the knitted brows, the motionless eyes, the worn and affrighted look, tell a tale of mental suffering which may well awaken our sympathy.

And to such an extent are intensified all the symptoms which I have above described in what has been termed acute melancholia, that the entire affective life is completely paralysed and panic-stricken. Dr. Blandford well and thus depicts the malady :—

"This form of acute melancholia demands as much as any the care of an asylum. It is hardly possible to keep a patient in safety in any ordinary house, or to treat him with any but the large staff of officers which an asylum supplies. He is not in a state of mere depression or mild melancholy, nor in silent stupor, but he is panic-stricken. In violent terror and frenzy he paces the room, dashes at the doors or windows, eager to escape from the doom that awaits him, from the police who are on his track. He will not sit on a chair or lie still on his bed, but is incessantly running about, exclaiming that he is going to be burnt or tortured, that the room is on fire, the floor undermined, and everything ruined and lost. He is suicidal in an extreme degree, and may try not only to put an end to himself, but also to harm himself in every way he can—to gouge out his eyes, cram things down his throat, swallow nails or bits of glass, or break his legs or arms in the furniture. Though he will not attack others like a dangerous paralytic, he nevertheless resists with the utmost violence all that is done for him. He will take no food, will wear no clothes, will not be washed, neither will he remain in bed."

This state of things is very alarming, and full of anxiety to everyone about the miserable patient. It is associated with great depression, is commonly fatal, and runs its course with rapidity, death frequently resulting from pneumonia and gangrene of lungs.

(*To be continued.*)

SANITARY REPORT ON SOUTHWARK.—Dr. H. Bateson, Medical Officer of Health for Southwark, in his annual report just issued, states—"The death-rate for the parish for the past year has been twenty-five in 1000 persons living, and the parish, which has been far away beyond the remembrance of the present generation a byword and reproach, remains no longer so. It may no more take its rank as the lowest amongst the low and wretched parishes of London, in which disease and death hold high and continued carnival."

ORIGINAL COMMUNICATIONS.

NOTES ON

SMALL-POX IN THE VAUXHALL-STREET HOSPITAL, PLYMOUTH.

By WILLIAM H. PEARSE, M.D. Edin.

Ninety-five cases have been admitted; twenty have died. Of the twenty deaths, nine were unvaccinated, two unknown. The ages of the fatal cases were 3, 5, 6, 7, 9, 11, 14, 16, 16, 20, 20, 21, 23, 23, and 27 years; and five infants. The five infants were unvaccinated. Of the remaining fifteen deaths eight were hæmorrhagic or purpuric cases, aged respectively 6, 11, 14, 16, 20, 21, 23, 27 years; the remainder of the fatal non-hæmorrhagic cases were of varying type and duration, and aged 3, 7, 5, 9, 16, 20, 23 years; of these three were unvaccinated, aged 3, 7, 20 years. The two children of 3 and 7 years died while convalescent of sudden croup.

Of the total ninety-five admissions, thirty-three had never been vaccinated, three were doubtful. Of the eight fatal hæmorrhagic cases six were vaccinated, one not, and two doubtful; one of the fatal purpuric cases had five good vaccine marks.

Sixteen cases of hæmorrhagic and purpuric small-pox have been admitted.

A great variety of type was seen. The old well-recognised distinction of *modified* and *unmodified* was not regular. The duration, both in a comparison of mild and of the severe cases, was very varied. The amount of eruption was often small in the worst cases. A considerable proportion of the hæmorrhagic cases occurred towards the end of the epidemic. This marked variation in type from earlier epidemics may perhaps be taken as an expression in part of the influence which vaccination, during two or three generations, has had in modifying the capacity of the human system to show the symptoms and course known as small-pox.

Much variety existed in the periods between the first ailing (generally headache) and the appearance of eruption. A reliable accuracy is obtainable on this point. Servants, etc., can generally date their first departure from health. Of fifty cases, twenty ailed two days prior to the appearance of the eruption; fourteen, one day; ten, three days; two, four days; and four, six days. There was no connexion between the length of the stage which preceded the eruption and the subsequent length of the illness; many of the fatal cases having the pre-eruptive stage of one or two days' duration only, whilst mild cases, as well as some severe, had this stage lasting four or six days.

The length of the illness from first ailing, in the fatal hæmorrhagic cases, was respectively 4, 4, 7, 7, 8, 8, 8, 9 days. This rapid termination of the hæmorrhagic type I saw in many other cases, whom I attended at their homes. The duration of the twelve fatal non-hæmorrhagic cases was 7, 8, 8, 8, 12, 12, 12, 13, 14, 23, 28, 35 days. The last two died from croup in convalescence.

The tendency to death early in a certain class of cases, and in a longer period in another class, must be carefully remembered in our efforts to estimate the value or otherwise of many of the semi-chemical treatments now in course of trial.

I place below a short account of treatment and results, with notes on symptoms. Wine, milk, or soup, etc., were given to all. Milk was the basis of the diet in acute stages.

M. E., female, aged 10. Profuse blood from nose, mouth, bladder, etc.; patchy red eruption on face; very few vesicles on body, but purpuric spots; great restlessness. Died a day or two after admission.

Another similar but more rapid case, in a girl of 16, died a few hours after admission. She was blanched by the profuse loss of blood.

I add the record of some purpuric and hæmorrhagic cases, treated with chlorate of potass and compound tincture of cinchona:—

J. B., male, aged 27, healthy fisherman; ailed March 23; eruption out April 1. The eruption was slow to appear; at length it showed in patchy masses of small vesicles; the skin was deep purple. As the vesicles increased in size, they in large numbers contained blood. The eruption at last was confluent, leaving large vesicles containing blood and serum. He had much delirium; twitching of hands and feet; labial respiration. Took eighteen ounces of wine daily, chlorate of potass, bark, etc. Temperature and pulse—March 1, 104°; 2nd, 103·9°; 3rd, 102·4°, 96; 4th, 101·7°, 96; 5th, 100·8°, 100 (8 p.m., 102°, 90); 6th, 102·1°, 106; 7th, 101·3°, 84; 8th, 101·2°; 9th, 97°, 69; 10th, 98·4°. Recovered.

T. K., male, aged 21, not vaccinated; fine man, fisherman; ailed March 19; eruption 21st; died 25th. March 23: Eruption thick; blood in the vesicles; skin deep purple; blood from mouth, nose, and bladder. 24th: Passes blood from bladder, rectum, nose, etc.; bloody patches in conjunctivæ. 25th: Surface livid purple; breathing oppressed; no effusion in lungs or dulness on percussion two hours before death. No stupor; breathing harder and harder; died. Temperature and pulse—22nd, 100·1°, 120; 23rd, 102·8°, 102; 24th, 102·4°, 102; 25th, 101°. Took wine, chlorate of potass, bark, ferri perchlor., etc.

M. J. M., female, aged 32, vaccinated; ailed March 24; eruption April 2; large masses of purpuric eruption in groins, axillæ, popliteal spaces, etc. Temperature low, never over 99·2°. The purpuric masses disappeared in about four days, leaving fringes of pustules; was well at end of seven days. Took wine, beer, cinchona, and chlorate of potass.

E. V., female, aged 16, not vaccinated; ailed April 1; eruption on 2nd; ran the usual course of unmodified small-pox. Very confluent; numerous pustules showed dark bloody colour about the seventh day; skin purple. She took food heartily, tincture of bark, chlorate of potass, wine. Recovered. Temperature—4th, 101·4°; 5th, 101·8°; 6th, 99·1°; 7th, 99·3°; 9th, 102·4°; 10th, 103°; 11th, 102·8°; 13th, 101°.

W. K., male, aged 23, healthy fisherman; ailed April 7; eruption on 8th; confluent on face and hands; skin dark purple; pustules on legs and feet contained blood. Appetite good throughout; took wine, chlorate of potass, bark. Recovered. Temperature and pulse—9th, 100·3°, 80; 10th, 99·4°, 82; 11th, 99°, 84; 12th, 99°, 76; 13th, 99·8°, 106; 14th, 98·2°, 90.

Below are records of hæmorrhagic and purpuric cases treated with hyposulphite of soda:—

A. C. A., male, aged 14, vaccinated; ailed April 4; eruption on 6th. The eruption was of small reddish vesicles in patches, very few on the body, but deep purpuric colour of the skin; blood escaped from mouth, bladder, and bowels; violent delirium throughout. Died on the 12th. Took wine, hyposulphite of soda, astringents, bark, etc. Temperature and pulse—7th, 104°, 116; 8th, 100·6°; 9th, 100·5°, 108; 10th, 101°.

W. M., male, aged 30, not vaccinated; ailed about April 4; eruption on 6th. Had purpuric masses in groins, axillæ, etc.; large numbers of vesicles contained blood; skin deep purple during several days; delirium. Took wine, bark, and hyposulphite of soda. Temperature and pulse—10th, 102·8°, 96; 11th, 98·8°, 78 (9 p.m., 102·1, 92); 12th, 99°, 76; 13th, 99°, 72; 14th, 98·2°, 70. Recovered.

S. T., female, aged 6; ailed April 4; eruption on 9th; admitted on 11th with copious expectoration of blood; spat blood prior to the appearance of the eruption; patch of dark red eruption on each cheek; very few vesicles on body; great restlessness and distress. Died on the 14th. Temperature—11th, 101·8°. Took wine, bark, gallic acid, and hyposulphite of soda.

A. L., female, aged 19; fine country girl, vaccinated; ailed April 4; eruption 5th. On 7th showed deep purple masses in groins, axillæ, hands and feet, etc.; copious eruption over body, face, etc.; the skin between eruption deep purple; delirium. Eruption full on 11th. Recovered. Took wine, bark, hyposulphite of soda. Temperature and pulse—7th, 103°; 8th, 100·7°; 9th, 98·4°, 94 (9 p.m., 100·7°); 10th, 98·8°, 90; 11th, 99·4°.

I add temperature and other notes of three fatal hæmorrhagic cases, members of one family, and all unvaccinated; these were not in the Hospital:—

A. B., female, aged 20, not vaccinated; ailed April 18; eruption 20th; died 26th. Eruption small, but very dense on face and limbs, much also on body; quite sensible to last; no stupor. Profuse vaginal discharge of blood, also from mouth and bladder and rectum. Temperature and pulse—24th, 101°, 116; 25th, 100·8°, 120. Took wine, astringents, and hyposulphite of soda.

E. A., female, aged 9, not vaccinated; ailed April 21; eruption 23rd; died 28th. 24th: No eruption out, but seen in the skin; temperature 102·4°. 25th: Eruption appearing more; temperature 103°. 26th: Eruption in small, dry, hard-feeling patches on cheeks; skin purple; temperature 100°, pulse 120. 27th: 100°; began to spit blood. 28th: Died. Great restlessness throughout, but little delirium. Wine, hyposulphite of soda, and bark.

J. A., male, aged 18, not vaccinated; ailed April 4;

eruption 7th. 5th: Much vomiting, temperature 102·3°. 6th: Vomiting; small dose of castor oil given; wine, hyposulphite of soda. 7th: Reddish, dry, hard-feeling patchy eruption on face; temperature 104·2°; pulse 100. Temperature—8th, 103·2° (9 p.m., 104·6°); 9th, 102·6°, and conjunctivæ show spots of blood. 10th: Great restlessness; passing blood from bladder, mouth, and rectum. Died on the 12th. Took wine, bark, gallic acid, hyposulphite of soda. I need hardly say that milk, wine, etc., were given from the beginning.

I add some cases treated with zylol:—

E. C., female, aged 19, a fine country girl, lately come to town, not vaccinated; ailed April 14; eruption 17th; died 23rd. April 18: Patchy, dry, hard-feeling eruption of small vesicles on face, very few on body; front of chest has many purpuric stains in the skin; a few fully formed vesicles or pustules on front of thorax. Mind quite collected when spoken to; replies with a smile. Countenance dusky looking; expression anxious. Bowels not opened for three days. Temperature 104·4°. Castor oil ʒvj. Wine and milk to be given freely. 19th: Temperature 102°; pulse 105; zylol. 20th: Temperature 102·2°; pulse 108; loose, weak occasional cough; mind confused; purpuric blotches in skin; tongue thickly coated, dirty yellow, with dark streaks; spits blood; cinchona wine, chlorate of potass, zylol continued (9 p.m., temperature 101·2°; pulse 105). 21st: Temperature 101°; pulse 106; no blood passing; breathes easily; eruption receded, dry and small. 22nd: Temperature 101·2°; pulse 120; dirty colour of face; no stupor; answers at once; says shall die; zylol, bark, wine continued. 23rd: Breathing easy till three hours before death, when tracheal râles came on. This patient had the peculiar anxiety and expression very characteristic of this fatal type of small-pox.

M. H., female, aged 42, not vaccinated; ailed April 16; eruption on 18th. The eruption at first was of small vesicles and patchy, slow to develope into pustules. When formed, the pustules in the legs very generally contained blood; skin was deep purple. Constant delirium during three days prior to the filling up of the pustules. Recovered. Temperature and pulse—19th, 102°, 120; 20th, 100·8°; 21st, 98·4°, 104; 22nd, 97·5°, 96; 23rd, 98·4°, 110; 24th, 99·4°, 112; 25th, 100·8°, 120; 26th, 101·4°, 126; 29th, 99·8°; 30th, 99·3°. Took wine, bark, zylol.

M. W., female, aged 23, five good vaccination marks; ailed April 14; eruption on 15th. On 16th very dense eruption. 23rd: Skin deep purple; much appearance of blood in the pustules. Died on 25th; was quite sensible up to two hours of death. Took wine, cinchona, chlorate of potass, zylol.

Temperature and pulse—19th, 100·4°, 94; 20th, 100·5°, 108; 21st, 100·8°, 106; 22nd, 102·6°, 108; 23rd, 103·2°, 124; 24th, 105·5°, 130; 25th, 102·4°, 126.

W. D., male, aged 27, sailor, admitted April 26; ailed 21st; eruption on 23rd. He had dull expression; patchy, small, dryish eruption. The skin became dingy, then purple; the eruption came out fuller, and very generally containing blood; skin dark purple. He was perfectly rational when spoken to; slept more than usual, with occasional mental wandering. Stupor came on the last eighteen hours of life, with oppressed breathing. Died May 1. The bad symptoms came on most gradually; the final oppression of breathing was not from inflammation or other affection of the lungs, but from paralysis of nervous function. He took wine, zylol, bark, chlorate of potass. Temperature and pulse—26th, 102·8°, 94; 28th, 100·8°, 94; 29th, 100·1°, 106; 30th, 100°, 112 (9 p.m., 101·2°, 132, breathing 44); May 1, 100·4°, 104. Died.

I add the cases of two children treated with sulpho-carbolate of soda:—

N. B., female, aged 8, vaccinated, admitted May 3; ailed 1st; eruption on 2nd. High delirium for four days. Eruption became full on 6th; confluent on face. Skin deep purple, many of the pustules on body containing blood. The eruption at first was in red, hard, dry-feeling patches. Temperature and pulse—3rd, 104·4°, 136; 4th, 102°, 120; 5th, 100°, 106; 6th, 101·1°, 120; 7th, 100°, 100; 8th, 100·2°, 112 (9 p.m., 102·7°, 123); 9th, 101·4°, 118; 10th, 99·7°, 98; 11th, 100°, 100; 12th, 99·2°, 99.

E. W., female, aged 7, not vaccinated; ailed April 27; eruption on 28th of small vesicles, in hard, dry-feeling clusters. Great restlessness and delirium lasted for four days; relieved when the eruption came out full on the 4th. From the first blood came from mouth and nose; the pustules very generally contained blood; skin dirty dark colour. The oppression of breathing and restlessness relieved with the appearance of full eruption, which set in on the face on the 7th. Temperature and pulse—30th, 104°, 150; May 1, 103°, 138; 2nd, 102°, 140; 3rd, 99·3°, 120; 4th, 100·8°, 140; 5th, 100·8°, 126; 6th, 100·4°, 120; 7th, 100·8°, 120; 8th, 101°, 120; 9th, 101°, 124; 10th, 99°, 134; 11th, 99·8°, 120; 12th, 100°, 120. Wine freely from the first; brandy on the 3rd; sulpho-carbolate of soda and bark.

Both these cases, so threatening at first, recovered. The sulpho-carbolate of soda was discontinued on the 12th; the tinct. cinchonæ and wine continued.

Another type of case showed low temperature and pulse in the early stages:—

M. C., fine healthy woman, aged 21, vaccinated; ailed April 3; eruption on 5th; admitted 9th. Temperature and pulse—9th, 97·6°, 66; 10th, 99·4°, 69; 11th, 99·2°, 72; 12th, 98·4°, 75; 13th, 97·8°, 68; 14th, 98·4°, 76. Took wine throughout; chlorate of potass and bark. Recovered.

J. W., male, aged 30, vaccinated; eruption March 21; admitted 22nd. Temperature and pulse—23rd, 100°, 78; 24th, 99°, 64; 25th, 98·2°, 55. Took wine, chlorate of potass, and bark. Recovered.

Excluding the fatal hæmorrhagic and purpuric cases, and excluding the five fatal unvaccinated infant cases, five others died. Three of these died in the advanced stage of the disease. The severity of the eruption had left the extremities in masses of ulceration. The fatal result came at length by oppressed breathing, but not dependent on any pulmonary affection, but from paralysis of nervous and muscular function. The two others were rapid:—

J. C., male, aged 20, not vaccinated; ailed February 6; eruption 8th; died 18th. Eruption confluent; nervous delirium, not unlike that of delirium tremens; always replied when spoken to; no typhoid stupor; dyspnœa came on two days before death, without pulmonary lesion. Took wine, bark, chlorate of potass.

E. D., female, aged 20, vaccinated; ailed April 23; eruption 26th; was confined three weeks ago, suckling; early fever and delirium high, showing semi-epileptical form; body a mass of eruption; profuse vaginal hæmorrhage on the 28th, lasting three days. Died on the 11th day of the eruption; sensible to the last. Temperature and pulse—24th, 103·4°; 25th, 103·4°; 27th, 100·8°; 28th, 98·4°, 80; 29th, 98·6°; March 1, 101·3°; 2nd, 99·7°, 126; 3rd, 100°; 4th, 101°, 130; 5th, 102·3°, 140. Took wine, bark, ammonia, gallic acid.

The eruption in the hæmorrhagic and purpuric cases was generally scanty. It came out in small vesicles, aggregated in masses, and mostly on the face; it was often hard and dry to the touch. In some of the very rapidly fatal cases the face only had extensive eruption, whilst over the chest and back there were a few scattered or clustered spots, and numerous purpuric stains. With the filling up of the eruption the delirium and restlessness and oppressed breathing abated. The delirium was generally light, though active. The patient at once answered questions rationally. The fatal result was very generally from oppressed breathing, this symptom appearing from three or four hours to twenty-four before death. It was not caused by alterations in the lungs, but paralysis of nervo-muscular function. There was no serious trouble from laryngeal or tracheal affection. In some cases an early symptom was weak and husky voice, and with an occasional loose and easy expectoration.

In some of the severe cases which recovered, the appetite never failed. Milk was the basis of the dietary in acute stages; but when the patient wished an ordinary diet, even in the acute stage, it was given. Wine was given throughout. Boils were common sequelæ. Beer, full diet, fruit, and iron were given.

The purpuric and hæmorrhagic cases were by no means confined to low-fed, or weakly, or intemperate classes. Fine young men, sailors, servants from the country, and other healthy adults and children showed the worst hæmorrhagic and purpuric forms. As seen in epidemics of yellow fever in the West Indies, or of cholera here, the systems of those in finest apparent health seem to be in a state of greatest tendency to certain diseases. The system seems to acquire a cumulative capacity to take on certain changes, whose results are these and other fatal diseases. This phenomenon is generally expressed by the statement that new forms of disease, when introduced into a community, are unusually fatal. It may be on a more philosophical method to say that the body, during its normal rate of health, is acquiring a capacity for change which results variously in epidemics such as cholera, yellow fever, and lately small-pox in England. This cumulative tendency to certain febrile changes is seen also in such instances as in the great fatality of measles, when introduced into communities from which that deviation (disease) has been long absent; or nearer home, when typhus, etc., show with great

severity, after a generation of health, in the robust inmates of farm-houses.

Different from what is seen in epidemics of cholera, measles, etc.—where, towards the decline, cases are of a milder type—it seemed that a large proportion of severe cases happened in the later months of the small-pox outbreak.

Another fact of suggestive interest is, that the newest built and best sites of Plymouth suffered far more than the densely-inhabited and ill-built old town.

No deeper impression exists on my mind than that of viewing disease as the natural and necessitous result of accumulated rates of deviation. This view leads to the conviction of the paramount importance of prophylaxis—of which vaccination is the most "pregnant instance"—which correlates the system; so that the occasions of disease, be they germs, poisons, contagia, or depressing influences of any kind, pass harmless by us. Another conviction follows—viz., that the expectation of lessening such phenomena as small-pox, cholera, etc., by the not less important hygienic measures is too great; but the importance of vaccination and other prophylaxis is all the more urgent.

But there arises the great question of treatment. My experience does not give me any definite opinion as to the value of the treatments I pursued. I would desire to avoid being too sceptical. A practitioner who in this age lightly sneers at treatment is no wiser than he of a former age who blindly persisted in drugs. Right treatment is to be found somewhere. There are few things more injurious to medical art than hasty assertion on the value of treatment. The series of cases I have noted, with treatments and temperature, may show the difficulty of judging in so broad and difficult a subject as that of the results of treatment.

In the present state of our knowledge each case must receive its own treatment or management. We cannot lightly cast over the conventional treatments of the day. It seemed imperative to give stimulants. I could not perceive evil from their use; I thought often that they were useful.

It is obviously a duty, also, to superadd any new method of treatment which might be based on a rational theory; hence in different cases I used zylol, chlorate of potass, hyposulphite of soda, sulpho-carbolates of soda, etc. It will not surprise that I cannot give any definite opinion of the value of these various treatments. I had hoped to have been able to do so, not so much from any statistical return, but from a clinical observation of results in one or more cases.

It may perhaps be fairly doubted from *à priori* considerations, as well as from the results of practice, whether we have been yet able to alter the course of symptoms in any case of small-pox—whether, *e.g.*, even any means yet known can modify the series of changes which we know to be in course of appearance, in a case whose dusky skin, anxious face, and patchy eruption show the early symptoms of what will pass to purpuric or hæmorrhagic small-pox, it may be fairly thought that the subsequent symptoms are already contained in, and latent, from the first infection or change; yet not the less is it a duty to make the attempt. It cannot be more beyond the range of remedies to control small-pox than to arrest the recurrence of a paludal fever. That discovery or experience has given us quinine as a remedy for the latter, should give us "confidence of hope" towards our perception of the remedy for the former. We may expect to attain this knowledge from observation and analogy, long before our theories are complete.

Two important practical points have been very obvious—one, the neglect of vaccination; the other, that when a case of small-pox occurred in a house, other individuals of the same or other families, in the course of weeks or months, continued to show the disease. However deeply we may be impressed with the greater fact of the existence of "epidemic influences" or "cumulative tendencies," which are at present beyond our control, yet it is not less true that cases left in houses become new and active centres for the extension of the disease. This result has been frequent here. It is hard to estimate the danger to the community from there existing a large number of unvaccinated; they form a kind of "preserve" for the maintenance of the disease.

The Hospital was a well-adapted building, with thorough means of ventilation and warmth. It had a sunny aspect overlooking the harbour, and open to south and west winds. The Sanitary Board, under whose authority the Hospital was opened, were very liberal in their arrangements, and gave me perfect freedom of action in all that was necessary for the comfort and welfare of the patients.

REMARKS ON THE INFLUENCE OF A PURE SUPPLY OF WATER.

By A. M. BALLOT, M.D.

In the *Indian Medical Gazette* the famous author of "A Treatise on Asiatic Cholera," Mr. C. Macnamara, inserted a paper containing some "remarks on the influence of a pure supply of water as affecting the mortality of the inhabitants of Calcutta from cholera," from which paper I must quote some passages. The Calcutta waterworks were opened to the public in January, 1870, but practically they were only brought into operation during the following April, because the natives refused at first to take the water from the stand-pipes. The water delivered by the Calcutta waterworks has been frequently analysed by the Chemical Examiner to Government, and pronounced by him to be remarkably free from impurities. Now, "there can be no possible doubt," Macnamara says, "that for years past the disease has existed in an endemic form among the people of Calcutta; and as many persons believe that cholera is frequently disseminated by drinking-water becoming contaminated with matter passed from a person suffering from the disease, it necessarily follows, if we are protected from accidents of this kind (our water-supply being religiously guarded from contamination), that cholera should in a great measure disappear from amongst us. I say 'in a great measure,' because it is well known that many of the natives of Calcutta still drink water from wells and tanks situated within the town, and subject to any amount of defilement; and, further, that the milk we consume is too often adulterated with water drawn from the most abominable sources."

The following returns show the diminution of the cases of death from cholera after the introduction of pure drinking-water:—

Statement of Deaths from Cholera, reported by the Municipal Authorities as having occurred in the town of Calcutta(a) *from January*, 1866, *to May*, 1872.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1866... ...	509	826	1193	736	616	885	552	491	371	236	203	208	6826
1867... ...	161	142	292	343	330	257	108	126	92	149	243	140	2268
1868... ...	252	205	694	591	360	174	97	395	188	350	405	352	4178
1869... ...	264	428	760	746	698	331	78	53	41	57	78	58	3592
1870... ...	171	259	257	381	165	118	50	40	30	37	22	30	1560
1871... ...	54	97	50	85	30	24	25	38	70	81	128	108	790
1872... ...	80	81	64	67	65	...	...	...	...	...	...	...	...

Although there is reason to doubt the accuracy of these returns, by the manner in which they are collected, they have a relative value, the number of false returns in one year probably not much exceeding those in another year. In order to neutralise, if possible, errors likely to arise from incorrect returns, Mr. Macnamara applied to the medical officers in charge of the four Calcutta hospitals. As to the accuracy of these figures there can be no doubt, and they evidently confirm the impressions produced by the study of the municipal tables, that cholera has suddenly declined of late in Calcutta, for we find that the following cases of cholera were treated in four hospitals:—

In 1863 . . .	708	In 1868 . .	1044
1864 . . .	1147	1869 . .	894
1865 . . .	943	1870 . .	465
1866 . . .	1628	1871 . .	179
1867 . . .	628		

In treating the question, What else than the distribution of pure water can be the cause of this diminished cholera mortality? Mr. Macnamara observes "that the condition of the inhabitants of the densely populated northern or native portion of Calcutta is the same now as it has been for many years past. The people live in a crowded, filthy, Oriental city; its drainage is most imperfect, and, in fact, its sanitary condition about as bad as it possibly can be. The food, clothing, and general state of the native inhabitants of Calcutta are precisely similar to what they were years ago. There has been nothing

(a) The total for the year 1866 was the highest rate of mortality from cholera reported in Calcutta for thirty years. The average mortality from cholera was 3867 in thirty years. The highest death-rate in those thirty years was in 1842 with 6845, 1845 with 6240, 1846 with 6422, 1860 with 6553, and 1866 with 6826 deaths from cholera. The lowest is 1843 with 3049, 1848 with 2502, 1854 with 3082, 1867 with 2268.

peculiar in the seasons, nor has there been any deviation in the ordinary rise and fall of the subsoil water of the place; and cases of Asiatic cholera have been constantly amongst us. The seeds of the disease, therefore, must have been present, and the soil, both human and terrestrial, in a similar state to receive it, as they have been for many years. The condition of the city and its inhabitants, in a sanitary point of view, is at the present time absolutely identical with what it has been for years past. In May, 1870, the municipal water-supply was introduced simultaneously and almost universally throughout the city, and from that very month up to the present time there has been a continuous and marked decline in the mortality from cholera amongst the inhabitants of the place."

It could be argued that this diminution was due to the disease having been in abeyance throughout the country; but there is ample evidence in the pages of the *Indian Medical Gazette* since the commencement of the present year as to the wide dissemination and the fatal character of cholera throughout Bengal.

"The natives of the place," says Mr. Macnamara, "are fully aware of the fact that Calcutta is now comparatively exempt from cholera. As an instance in point, the son of Nawab Ali Mukie Khan told me only a few days ago that his family had lately removed into Calcutta to escape from the influence of cholera then spreading over the lower part of Garden Reach. Calcutta, the home of cholera, has now become a retreat for those threatened by the disease beyond the confines of the city."

After communicating the principal contents of this interesting article, I wish to add some remarks. That the results of a pure water distribution in the diminishing of cholera are in full accordance with the tenor of Macnamara's treatise "On Asiatic Cholera," is more interesting for all those who are of his opinion than for his antagonists; therefore I omit this point. But there is another. The basis for all physical sciences are good tested proofs—used with criticism. Now, hygiene belongs to the physical sciences; but, generally for the practical hygiene, we cannot make experiments, we can only make observations on what happens in the ordinary human intercourse. We can make observations upon the position of certain classes of society under certain circumstances, or we can make observations on a certain special point—for instance, the influence of certain drinking-water on a community, or the relative susceptibility for cholera by using the water from different water companies. When it happens that these water companies make alterations, as was the case with the Southwark and Lambeth companies in 1848 and 1854, the case becomes much clearer; and really we can say that there we had before us physical experiments taken on a great scale. The results of all these observations must at the end come to us under the form of statistical tables. Now, the tables communicated by Mr. Macnamara are based on pure observations. —First observation: The people in Calcutta used bad water; cholera had its home in Calcutta. Second observation: Pure water was introduced; cholera was declining; still there was cholera; still there were people who did not use this pure water. Thus far the observations; now the critique. Mr. Macnamara shows the inaccuracy of the returns; but then the same inaccuracy did always exist, so that, according to the law of probabilities(b)—the collecting of these returns always taking place in the same manner—the errors of one year will probably not exceed those of another. In collecting further the cases of cholera which occurred in the four hospitals—where the question of inaccuracy cannot be raised—we see that those numbers show a remarkable resemblance with the above-mentioned returns of the deaths from cholera. The observation (or will you call it experiment) has now unquestionable value.

When an observation or experiment is corroborated by other observations of the same kind, its value acquires so much more importance; and that this is the case with the observation communicated by Mr. Macnamara, all the readers of this journal and of the *Lancet* and other journals know. Not to speak of so many cases in England, I will only mention in my country, Amsterdam, where the severity of cholera diminished after the opening of the waterworks which have their water from the downs near Haarlem.(c) That there are yet many cases when cholera is epidemical, is very clear for those who are of opinion that a pure water-supply is the best antidote against cholera, for the greater portion of the population still drink water out of cisterns which are often in communication with the soil. Secondly, I must remember the striking case (observation-experiment) of Haarlem,(d) where cholera prevailed in 1849 and 1866 in the same manner, with the exception of a *certain quarter*. In this quarter, chiefly inhabited by bleachers, and where cholera visited all the houses with the exception of one in 1849, according to the evidence of Dr. Lubach, a man of great veracity (which is much to say in science), *in* 1866 *not one case of cholera occurred*. And what had happened there? All the circumstances remained as of old; but the bleachers of Haarlem have a certain renown for their bleaching, and as soon as the company for supplying Amsterdam with water from the downs had been constituted, *those bleachers contracted for the water, which they not only used for their washing, but also for drinking*. This observation is striking, yet very simple. Let those who are always mocking the so-called water theory produce observations of the same value, in the first place, in reference to society. For all those who believe water contaminated by cholera excretions to be the principal source of the propagation of cholera will do their utmost to procure pure water, whilst those who are of an opposite opinion are more careless in this matter.

I believe that our country is of great value for the study of the propagation of cholera. One thing is certain; one of the principal foundations of Professor Pettenkofer's theories—*Grundwasser* (subsoil-water) theory—is not applicable to the two provinces of Holland—there is no rise and fall of the subsoil water; the water is always artificially maintained on the same level. And here, in Rotterdam, I remember so often to have seen the stones of the pavement, so to say, swimming in the water, whilst cholera raged fearfully in those quarters; the subsoil water in those quarters being always one to three inches below the level of the pavement. What we see in Holland is, that where the drinking-water is most pure the cholera is the lowest; and in the province of Zealand, where the water out of the soil cannot be drunk because it is brackish, there is no cholera, with only very few exceptions, but on examining them you generally find that water, albeit very impure, but without salt, is nevertheless used there out of ditches, etc.

The origin of this my comment lies not only with the above-mentioned paper of Mr. Macnamara, but also with the latest article in the *Zeitschrift für Biologie*, von L. Buhl, M. Pettenkofer, L. Radlkofer, C. Voit (B. viii., h. 2): Dr. Douglas Cunningham's "Untersuchungen über Pettenkofer's Theorie auf Madras angewendet."

That Dr. D. Cunningham was sent out by the British Government to study the cholera in India is universally known; that he visited Pettenkofer for some direction in his studies we have learned, and in the same journal and in the *Vierteljahrschrift für öffentliche Gesundheitspflege;* and that he was very right in doing so I am the first in acknowledging. Now, in perusing the paper mentioned, everywhere you can find proofs of the influence of drinking-water on the propagation of cholera,(e) notwithstanding the writer's prepossession for Pettenkofer's ideas. An example of this prepossession you will find in the last (3) of his conclusions, at the end of his paper, where he (Cunningham) says—"Dass wenn in diesem Bericht auf den Einfluss des Bodens ein Hauptgewicht gelegt wurde, dies nicht auf Rechnung einer voraus angenommenen Ueberlegenheit im Verhältniss zu den anderen Theorien basirt, sondern nur desshalb geschieht, weil dieser Einfluss in Indien bisher nur wenig gewürdigt und mit grossen Vorurtheilen aufgenommen worden ist. Desshalb hat es wünschenswerth geschienen, die zu ihren Gunsten sprechenden Thatsachen zu sammeln, zumal deren genug sich finden, um ein Verwerfen dieser Theorie in Bausch und Bogen zu verbieten, und die Fortführung sorgfältiger Untersuchungen über den gesetzmässigen Zusammenhang der Bodenfeuchtigkeit mit der Verbreitung der Cholera zu rechtfertigen."(f)

If this is not a preconceived idea (*idée préconçue* or *voraus*

(b) *See* Quetelet Physique Sociale, tome i., Introduction, p. 31. Bruxelles, 1869.

(c) *See* my article "On Impure Water, etc.," *Medical Times and Gazette*, 1869, p. 460, vol. i.

(d) *Ibid.*, pp. 460 and 463, vol. i.

(e) Is it not also the case with many of the papers from the hand of Pettenkofer in the *Zeitschrift für Biologie*—"The Immunity of Lyons from Cholera," "Cholera in Gibraltar, in Malta," etc. Do they not prove much more for the water theory than for any other theory?

(f) The above may be roughly rendered thus:—That when in this report much weight is laid on the influence of the soil, this does not depend on any preconceived idea in relation to other theories, but only because this influence has hitherto been but slightly rated in India; and, indeed, received with the utmost prejudice. It has accordingly seemed desirable to collect all facts telling in favour of the theory, especially finding enough of them to forbid a rejection of the theory *in toto*, and to justify the prosecution of careful researches as to the regular connexion of ground water with the spread of cholera.

angenommene Ueberlegenheit) for a certain theory, I do not know what it is; and then Dr. Cunningham does *not* find the theory *weak enough* to reject it altogether, but as it appears *very weak*. Now, as he is a true observer and a man of veracity, his researches can be yet of great value, notwithstanding his preconception; but I would ask, Did he not better inquire after the propagation of cholera without such a decidedly preconceived idea? Would it not be of more use for mankind or public hygiene?

Rotterdam.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

ABSCESS OF HEART AND KIDNEYS, WITH SUPPURATIVE PERIOSTITIS—A DISTINCT KIND OF PYÆMIA.

(Under the care of Dr. MOXON.)

THE following case instances a kind of disease which is of no very infrequent occurrence, and in which the constancy of suppuration in the heart and kidneys is of both pathological and clinical interest. The case is as follows:—

Alice G., aged 9, admitted to Guy's Hospital July 18 desperately ill with a febrile disease. She had had an abscess in the thigh two months before; but this, after opening, had healed up again, its scar now quite sound. Fourteen days before admission complained of headache and hot and cold sweats, the bowels constipated, and the breathing quick. No food had been taken for some days. The mother said there had been no contagion. The child was found to be poorly nourished, and to have some bruise-like marks about its body, and was delirious; secretions suppressed. The temperature was high—104·4°—on admission, rose to 106·8° on day of death (three days after); pulse, 180 on admission, could not from its rapidity be counted on day of death; respirations 70 to 75 per minute.

On inspection, there was over vertex of skull a bruised patch of small size, the pericranium being swollen and charged with pus, and the disease extending through to raise the dura mater at a small point, but the sinuses of the dura mater were free. The middle finger of right hand was suppurating, its bone bare, the pus extending to sheath of tendons, and in this as high as middle of palm of hand. No other disease outside the great cavities. The lungs showed a number of ecchymotic patches on the pleura, and many small pyæmic abscesses in all stages, especially numerous in the lower lobes. The heart frightfully diseased, its ventricle walls having many abscesses, one on the point of bursting into pericardium, which was shaggy with lymph and contained many ounces of a turbid liquid. The alimentary canal and liver healthy; spleen also healthy. Kidneys profusely marked with minute abscesses at tolerably regular intervals, both of them being spotted closely over with little collections of pus.

It is a point of great interest in the pathology of pyæmia that there should be this association of suppuration of the periosteum with suppuration of the kidneys and of the heart. The connexion is so constant that I believe when periostitis with pyæmic symptoms is the cause of death, abscesses in the heart and kidney may be expected to be present. I do not think this fact is recognised, though the collection of cases in which Dr. Bristowe first drew attention to the causation of pyæmia by acute periostitis will, I think, sufficiently show a remarkable frequency of carditis and nephritis.

Now, the heart is very rarely affected in ordinary pyæmia, and the kidneys also are rarely affected unless the source of the pyæmia be lithotomy or some other injury to the urinary passages. The pyæmia from periostitis is grave and severe, and it might be thought that the suppuration of the heart and kidneys are only expressions of its extreme severity; but this idea is negatived by the non-occurrence of abscesses in the liver, spleen, and joints, which usually are much more liable to the secondary abscesses. Anything that will throw light on the pathology of pyæmia is very acceptable. It is as well to agree at once that the commonly offered view, that the secondary abscesses of a pyæmia are explained by mechanical conveyance of clots which excite suppuration, is quite *insufficient* though it may be *true*. Some of the most easily seen characters of pyæmia are unexplained by mere embolism. Thus, the very constant preference of the lower lobes of the lungs (it is common to find sixteen to twenty abscesses in lower, for two or three in upper lobes) requires further explanation. This fact, indeed, proves that stagnation of blood is one favouring element; and as the stagnant and ill-aërated blood of the lower lobes rests longer against the tissues there, we may expect the ill-results of matters of a contaminating kind to exert their worst influence in those parts. Probably the embolic matters the blood carries are favoured in their pernicious action by the stagnation and non-aëration of the blood in the bases, and disfavoured by the opposite state of the blood in the more freely working apices of the lungs. It is certain that in any case of pyæmia embolism of the vessels is only one factor; and such cases as the one specially before us go to point out that besides the embolism which is ready to occur anywhere, and excite abscess, there is a special predisposition of organs to suffer under certain causative variations in the source of the pyæmia. Thus in another instance the pyæmia which follows fevers is prone to attack salivary glands, and that which follows scarlatina and childbed to attack the joints, while gonorrhœal rheumatism, again probably pyæmic, fixes very specially on the joints. In short, it is probable that in what we call pyæmia there are many distinct and distinguishable diseases, among which septicæmic states which kill without abscess will come as allied kinds under the same genus—pyæmia.

Two important corollaries follow from what has been said—(1st) That in any medico-legal inquiry into cases of death from alleged injury, if the heart and kidneys should be found suppurating with pyæmic characters, the case is one of spontaneous disease; and (2nd) That in every case of probable pyæmia every effort should be made to prevent the blood stagnating or circulating unequally in the organs.

ST. THOMAS'S HOSPITAL.

RETROVERSION OF GRAVID UTERUS—RETENTION OF URINE.

(Under the care of Dr. BARNES.)

[Reported by Mr. BOUGHTON ADDY.]

M. M., AGED 42, married, admitted January 8, 1872, having been sent in by a medical man for dropsy. She was married sixteen years ago; no children, but eight miscarriages, at about three months' pregnancy; last one a year and a half ago. Catamenia regular till five months ago. Felt quite well until three weeks since, when, after dancing at a friend's house, she was seized suddenly during the night with very sharp pain in the abdomen, relieved by poultices and fomentations. From this time till admission her abdomen began to enlarge; passed water very frequently and in small quantity at a time; during this period no difficulty in defæcation. She was at first sent to a medical ward, but the nature of the tumour being doubtful, after two or three days Dr. Barnes was asked to see the patient. At this time the condition of the patient was as follows:—

January 12.—Abdomen distended, tense; superficial veins prominent, distinct fluctuation; dulness in the centre and resonance in loins, unaltered by change of position. The catheter was passed with some difficulty, and eleven pints of urine drawn off, after which the abdomen became flaccid. On examining per vaginam, the os uteri was felt high up, behind and close to the symphysis pubis, pointing towards it; and continuous with this, behind, was the firm round fundus of the uterus, about the size of an orange. Dr. Barnes diagnosed retroversion of the pregnant uterus, causing the retention of urine. Ordered a saline mixture, and rest, and catheter.

13th.—Catheter passed, and several pints of water drawn off. Patient feels much easier.

15th.—Passed water more easily; only three-quarters of a pint drawn off by catheter. On examination per vaginam, the os uteri was pointing downwards, and fundus had risen to its proper position. From this date the patient went on well, suffering, however, for a short time from cystitis, and was presented on February 6. There was no return of the displacement, and patient was delivered at her own home on July 25 of a living female child. The labour was natural, but tedious.

Remarks.—This case is interesting from a diagnostic point of view, on account of its resemblance to ovarian dropsy except in its rapid development. The patient gave no history of its coming on after the exertion of dancing at first until questioned more closely; also of interest in the fact of the eight previous miscarriages all at about the third month, while the present pregnancy, after the return of the retroverted uterus, went on

to the full time. No history of syphilis could be made out, nor any cause assigned for the miscarriages. Dr. Barnes pointed out how probably the uterus being retroverted caused the retention of urine, and the distended bladder pressing on the fundus prevented its returning to its normal position, for, by keeping the bladder empty and the patient at rest in recumbent posture, reduction speedily occurred spontaneously.

LEICESTER INFIRMARY.

CASE OF RUPTURE OF THE BLADDER—DEATH ON THE SIXTEENTH DAY FROM URÆMIC INTOXICATION.

(Under the care of Mr. CROSSLEY.)

[Communicated by SAMUEL LEE, M.R.C.S., L.S.A.]

A. O., AGED 24, spinner, was admitted into the Leicester Infirmary under the care of Mr. Crossley on the evening of November 20, 1871.

History.—Whilst engaged in a pugilistic encounter three days previously, received a blow in the hypogastric region from his antagonist's knee. At the time of the accident a sensation of something having given way internally was experienced, which was followed by severe pain in the region of the bladder. These symptoms almost immediately passing off, he started for his home, a distance of two miles, which he reached without any difficulty. About half an hour after his arrival, on endeavouring to pass water found he was unable to do so. He immediately sent for Mr. Robinson, his medical attendant, who introduced a full-sized gum-elastic catheter, drawing off about twenty ounces of bloody urine, which was repeated twice daily up to the day of his admission. Previously to the accident had enjoyed very good health.

On his admission he presented the following signs and symptoms:—Was able to walk from the Infirmary entrance to his bed without assistance. Countenance rather anxious; pulse 80, full; skin cold; complains of a sensation of weight in the hypogastric region, but no tenderness on pressure. On percussion over the abdomen an increased area of dulness was detected, and on palpation a distinct sensation of fluctuation. A silver catheter was immediately introduced, and thirty ounces of clear urine drawn off; the abdominal dulness and fluctuation entirely disappearing. A gum-elastic catheter was subsequently passed night and morning. The patient continued much in the same state up to the evening of December 1, when, without any premonitory symptoms, he was seized with a severe attack of convulsions, rapidly followed by coma. Every effort was made to rouse him, a catheter immediately introduced, and about twenty ounces of urine drawn off, consciousness returning in about an hour. On the following day he was again attacked in a similar way, and on December 3 he was seized with a more violent form of convulsions, and sank in three hours in a comatose state.

Post-mortem Examination Twenty-six Hours after Death.—Body well nourished; slight bruise visible over the lower part of the sacrum. On opening the peritoneal cavity, about four pints of clear urine welled up through the incision. The bladder was found contracted, and a laceration of its posterior surface to the length of two inches was detected extending in an oblique direction. In other respects the organs presented no morbid changes. The peritoneal membrane everywhere presented a healthy appearance; kidneys and brain healthy; lungs slightly congested.

Remarks.—The above case presents the following points of interest:—First, the power of locomotion after so serious an accident, the patient having walked to his home—a distance of two miles—immediately after its occurrence. Secondly, the length of time he survived—sixteen clear days—the average duration of life in these cases being from three to seven days. Professor Erichsen, in his work, alludes to a case which survived ten days; also Mr. Ellis met with one where the person did not die till the fifteenth day. Thirdly, the absence of all signs of peritonitis, as demonstrated by the existence of no morbid changes in the peritoneal membrane after death. An interesting case is recorded by Mr. Bower in which the patient, a man, died on the sixth day from rupture of the bladder, and after death, even though the peritoneal membrane was torn, and the cavity of the abdomen contained dark-coloured urine, yet no signs of peritoneal inflammation were present. Fourthly, Could the death of the patient from uræmia be attributed to peritoneal absorption?

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
,, ,,	*Six* ,,	0 14 0
The Colonies and the United States	*Twelve* ,,	1 10 0
,, ,,	*Six* ,,	0 15 0
India	*Twelve* ,,	1 15 0
,,	*Six* ,,	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, SEPTEMBER 28, 1872.

THE ORIGIN OF SPECIES.(a)

THE belief in evolution and development, aided by natural and sexual selection, together with the assumption of an unlimited period of geological time, as the sole factors concerned in the production of species, has become so widely spread amongst naturalists, and has received the support of so many names distinguished in science, that it has already been raised in some quarters into a canon in biology. The rapid conversion of scientific men to Mr. Darwin's views, or to something like them, which has been the result of the appearance of his work on the "Origin of Species," affords one of the most remarkable instances of the influence of a bold generalisation, and a careful collection and ingenious arrangement of facts in support of it, upon the current of thought of a generation. But it is still a question whether Mr. Darwin's theory, or any derivative from it, will ultimately hold a place in human belief. In the first place, there is a large and increasing array of observed facts which obstinately refuse to be reconciled to it. Of some remarkable ones that have been lately brought to light by the great Transatlantic naturalist, Professor Agassiz, we shall hereafter speak. In the second place, there is no disputing the assertion that any mere evolutionary theory is totally opposed to the instinctive belief and feeling of man. If the common sense of mankind, to which Dr. Carpenter in his recent address at Brighton attributed such high value as a solvent of scientific doubt, is to be heard in the matter, it would strongly assert that no species of higher animal is transmutable. We believe that no savages, even amongst the most degraded of the human race, have ever recognised their near affinity to the ape, and certainly no such belief has commanded the assent of any phase of early or later civilisation until we find it in certain scientific circles of the nineteenth century.

Most of our readers are aware that Professor Agassiz is now engaged in conducting an expedition, known as the "Hassler" Expedition, for the purpose of deep-sea dredging and general

(a) For the letters of Professor Agassiz and the writer in the *New York Tribune*, see *Nature*, August 29 and September 19.

biological and geological observation. The expedition has lately visited the Galapagos Islands—an extensive archipelago of volcanic origin in the Pacific Ocean, lying between 1° N. and 2° S. latitude, and between 89° and 92° W. longitude. These islands, which are thirteen in number, have been described as "enormous masses of lava, rising from a fathomless sea." A writer in the *New York Tribune*, who accompanied the expedition, describes two of the islands, Narborough and Albemarle, as looking so fresh "that you could easily believe that there had been extensive eruptions there within the present century. Immense domes, 4000 to 5000 feet high, stand upon very flat truncated cones, twelve or fifteen miles in diameter. Over the whole surface of such mountains are scattered craters, chimneys, and small truncated cones. From many of these craters streams of lava have flowed towards the sea, some of them spreading out to miles in length and miles in breadth; and this lava is so fresh and black that as you walk over it you scarce find even a lichen adhering to it. It is a rough field of hard black slags or clinkers." The whole archipelago is of most recent origin. Professor Agassiz writes—"The Galapagos are so recent that some of these islands are barely covered with the most scanty vegetation, itself peculiar to these islands. Some parts of their surface are entirely bare, and a great many of the craters and lava-streams are so fresh that the atmospheric agents have not yet made an impression upon them. Their date does not therefore go back to earlier geological periods; they belong to our time, geologically speaking." But the marvellous thing about these newly formed islands is, that they have a fauna and flora peculiar to themselves. The expedition obtained fifty different kinds of fishes, of which three-fourths are peculiar to the Galapagos. Then, also, the islands possess their own reptilian fauna. There are, for instance, two lizards of a genus not found elsewhere—*Amblyrhyncus*, or Blunt-nose—which differ in most important points from the iguanas of Central America. One of them takes to the water, the other is terrestrial in its habits. Then the scanty vegetation, as we have said, differs from that found on the American continent. The recent origin of these islands forms their great point of interest. They have had no time to alter species derived from the mainland or elsewhere. Whence, then, did they obtain their peculiar tribes of animals and plants? Did they bring their seeds from the depths of the ocean, or were they thrown up by volcanic agency? We quote again the letter of Professor Agassiz:—

"It is exceedingly impressive to see an extensive archipelago, of most recent origin, inhabited by creatures so different from any known in other parts of the world. Here we have a positive limit to the length of time that may be granted for the transformation of these animals, if they are in any way derived from others dwelling in different parts of the world."

"Whence, then, do their inhabitants come from—animals as well as plants? If descended from some other type, belonging to some neighbouring land, then it does not require such unspeakably long periods for the transformation of species as the modern advocates of transmutation claim, and the mystery of change, with such marked and characteristic differences between existing species, is only increased and brought to a level with that of creation. If they are autochthones, from what germs did they start into existence? I think that careful observers in view of these facts will have to acknowledge that our science is not yet ripe for a fair discussion of the origin of organised beings."

The value of such facts as those brought to light by Professor Agassiz, from a scientific point of view, is scarcely to be over-estimated. A block of lava emerges from the sea, and within the recent human period becomes covered with a vegetation and inhabited by animal forms elsewhere unknown, and differing generally from those of other lands. No time is at the command of the speculator for the long processes of natural selection and the fortunes of the struggle for existence. Transformation so rapid would have all the marvel of creation, for it would be contrary to all biological experience, and referable to no force in nature of which we have any cognisance.

SEA-SICKNESS AND ITS MANAGEMENT.

Sea-sickness is one of those penalties which we islanders must pay for our insular security when we desire to visit our Continental neighbours. Most people look forward to being sea-sick when crossing the Channel, and are only too glad to be disappointed. The subject of sea-sickness has often been discussed, and many remedies for it have been tried, but all have hitherto failed. One thing only seems an infallible cure—that is, habit: as soon as one gets accustomed to the sea, the nausea and vomiting cease—it may be never to return, though this is not always so.

It is plain, therefore, that sea-sickness must depend on something which alters the condition of daily life, and that it is this alteration which gives rise to the nausea and vomiting. Neither can there be any doubt of the essential element, or at all events the most essential element, of the causation of this nausea. It is most certainly the motion of the vessel. To many delicate individuals the peculiar smell of grease and tar on board a steamer is quite enough to upset the stomach, just as unpleasant sights and smells will do so on shore. But these are minor elements; for if an individual goes to sea in a boat which is devoid of these smells, he will, if the sea be at all rough, be much more likely subjected to the nausea of sea-sickness than if he were on shipboard.

Into ordinary sea-sickness at least two important elements enter, though one is much the more powerful. Say a person on board ship hangs over the bulwarks and looks at the sea apparently rushing past—this in a susceptible individual will soon give rise to giddiness, and so to nausea. Let him seat himself inboard, so that the ordinary motionless deck fittings are alone observable: he will no longer be giddy, but will nevertheless be sick. Many delicate ladies cannot sit in a closed carriage with their back to the horses without having faintness brought on. This is due to giddiness, but seldom ends in nausea.

Going to sea in a boat, those sitting highest in the boat are much more likely to suffer from early sickness than those sitting lower down or reclining in the bottom of the boat, and those whose attention is directed to rowing rather than to the motion of the boat on or in the sea are more likely to escape than those who look at the water close at hand. So, too, we have sometimes noticed in a fishing-boat at anchor, that when sea-sickness was threatening a steady look fixed on the immobile land at a distance sufficed to bring the individual round. From all this it is quite clear that it is the motion of the boat or vessel communicated to the individual, and the impossibility he experiences of fairly balancing himself, which induces the nausea. When the same individual has had his body habituated to the motion of the ship, and can keep his balance without discomfort, his evil days are past—the sea-sickness leaves him.

If we inquire into the immediate causation of the sickness we find that the unusual motion is the origin of the evil, but not ordinarily the sole cause. The question is—How does this motion act? We have frequently found that shaking and jolting not nearly so violent as that of a vessel in a rough sea have given rise to a considerable amount of griping pain, and probably something of the same kind of exaggerated motion may occur in sea-sickness. But most probably the motion of the vessel, communicated by a series of unexpected shocks to the stomach and liver, causes these to impinge against the cœliac plexus. This would give rise to interference with the heart's action, one of the most prominent symptoms in sickness, and also to an imperfect supply of blood to the brain, whence faintness results. From all of these commingled causes we may account for the terrible prostration of sea-sickness. The more violent the motion the greater will be its effects on the stomach and bowels, both directly and indirectly. But as soon as the individual begins to be able to retain his balance comfortably there is no longer a series of shocks of the intestines against each other and against the walls of the abdomen; moreover,

there has been time to become habituated to some degree of motion, and so the sickness does not continue. Of course, at the onset, any quantity of food or its remains must greatly aggravate matters, and it frequently happens that one who is soon and easily sick recovers long before a stronger individual with greater powers of resistance.

Analysing all these facts, and then attempting to come to a right conclusion by synthesis, we must conclude that the right way of going about the prevention of sea-sickness is to diminish the influence of this motion as much as possible, and to avoid all accessory means of producing nausea as far as possible.

To this end we must be careful before embarking that the bowels have been well moved—say the day before; for it is not advisable to go to sea with the prospect of being sick whilst the bowels are loose. The stomach, too, should not contain a load of food; neither should it be empty. A load of food is almost certain to bring on speedy sickness; but retching with nothing to vomit is, if possible, worse. It is therefore advisable that a light meal be taken about a couple of hours before going to sea. As the sights and sounds, to say nothing of the smells, of a close cabin are in themselves powerful means of inducing nausea, the deck should be kept if possible. That portion of the deck should be selected where the motion is least—viz., near its centre—and, that the body may give no leverage to the motion of the vessel, it is better to sit than stand, to lie than sit; that is to say, providing the voyage is only across the Channel, for if the voyage is to be one of some duration, the sooner the necessity of getting accustomed to move about is faced the better.

And now, is there any remedy for sea-sickness? It is hardly worth while to talk of a remedy for a thing which may not occur, and which only at worst lasts a short time. We ought to prevent it if possible. Many means have been tried, but that seems best suited which gives a fillip to the stomach and neighbouring organs, and enables them to receive these buffetings with the least inconvenience, or renders them less sensitive to their effects. Experience points to one remedy, and one only, as at all satisfactory: that is, spirits of chloroform—what used to be called chloric ether. This is better than chloroform itself, which is not readily absorbed, and a drachm or more of it taken on going on board, together with the precautions just enumerated, will, we hope, enable some of our unfortunate birds of passage to mitigate the horrors of their inevitable sea journey when on the wing for winter quarters under more favoured skies.

THE WEEK.

TOPICS OF THE DAY.

The recent trial in the Central Criminal Court for illegally signing a certificate of lunacy furnishes proof of the determination on the part of the Judges to maintain the observance of the law on the subject with the utmost strictness. There can be no doubt that the judgment was a righteous one, and that the defendant, who admitted his guilt, but urged extenuating circumstances—which indeed seem to have been allowed by Baron Lush,—was rightly condemned. The defendant (Alexander Ogilvie) had undoubtedly been practising illegally for many years as a general practitioner, not merely unregistered, but, as far as appears from the details of the trial, without any diploma or licence. His counsel, indeed, Mr. Besley, asserted that he had been professionally educated, and was recommended by the late Sir B. Brodie for a surgical appointment in the Navy. He added that he did actually serve on board the *Britannia* in 1828, but was not rated as Surgeon, and therefore no trace was left of that service at the Admiralty. One of the worst points in the defendant's case was the fact that he had falsely stated in the certificate that he was an M.D. of St. Andrews, and that in an old edition of the "London and Provincial Medical Directory" his name had appeared with the licence appended of the Royal College of Surgeons of Edinburgh. These facts, no doubt, had their weight, and were duly considered by the Commissioners in Lunacy in pressing the case against Ogilvie. That a man has arrived at an old age and appears to have the respect of the inhabitants of the place amongst whom he has lived does not excuse him from the consequences of forty-two years of unqualified practice, the wrongful assumption of medical titles, and the infraction of the law. It was allowed by the Judge that in the case of lunacy in which the certificate was given Ogilvie was actuated by no improper motive. The patient undoubtedly required to be confined, and he signed the certificate at the request of the patient's friends. Had it been otherwise,—had there been any doubt as to the propriety of the patient's removal to a lunatic asylum, and had Ogilvie signed the certificate without the consent of the friends,—imprisonment without the alternative of fine would have been the punishment. As it was, the Judge inflicted the large fine of £50, and ordered the defendant to be imprisoned until it was paid. As we have said, we think the sentence a most righteous one. But why does the law deal differently with the lives and the liberties of the people—in the case of the lives, allowing them to be practised on by the most ignorant quack, as long as he does not assume a medical title; but in the case of the liberty, punishing most severely any unqualified person who acts as a medical practitioner in sending a lunatic to a safe asylum? The chief wrongs which Mr. Ogilvie has committed are, in our opinion, the assumption and use of medical titles to which he had no claim, and the fact that he practised without any legal qualification for nearly half a century. If he had not been attending the patient—who, it is said, was suffering from some form of acute brain affection, the result of sunstroke—in a capacity which he had no right to assume, he would not have been called on to sign the certificate. He is punished, not for practising without a qualification, but because he signed a certificate of lunacy without one. Is the one wrong more dangerous to society than the other?

We notice that the *Graphic* illustrated newspaper purposes to publish the portraits of the gentlemen appointed to deliver the Introductory Lectures in the London Medical Schools. We have no doubt that the portraits will be executed with all that artistic skill which has won the *Graphic* such a rapid success, and has made it such a formidable rival to other illustrated newspapers; but how far our colleagues will like the honour in store for them is a question we will not try to solve. Some might say that it was rather too much of a good thing to be exhibited twice in one week.

Dr. Alfred Carpenter, of Croydon, has lately written a sensible letter to the *Times* on the prevention of the potato disease. Three things are necessary to be attended to—1. The choice of seed; 2. The removal of mycelium and "resting spores" from the seed chosen, to be accomplished by drying in the sunlight and by dipping the seed potatoes in a solution of lime with a little carbolic acid; and 3. The preservation of the seed in a temperature which will prevent the growth of mycelium. It will not grow in a temperature below forty-eight degrees.

Mr. Rose, the British Vice-Consul at San Remo, has called attention to the great want of nurses for the invalids who flock to the Riviera in the winter months. We should think there would be no difficulty in establishing a good nursing institute at Nice, and from it supplying the different health resorts in the neighbourhood. The undertaking would prove both useful and profitable.

CHOLERA.

Cholera is still hanging over the provinces on the south-western boundaries of the Russian empire, mild, but yet

undiminished, no measure whatever being taken to stop it. We believe that the season is approaching for the pilgrimages of the Russian Orthodox Catholics to Kiev. At that period immense crowds—sometimes about a score of thousands—of devotees throng into that Christian Mecca, and large heaps of human dirt and refuse are allowed for weeks to cover its crooked, narrow streets, converting the whole town into one large dust-bin. This, of course, makes the place the hot-bed of cholera, and already more than once it has poured forth terror and death over the south. The epidemic not having disappeared completely as yet, who can foretell what features it is likely to assume at Kiev? Will it, we may ask, continue mild as it has hitherto been? Will it spare any longer the rest of Europe? By the simplest means of ordinary cleanliness, the lives of hundreds may be saved. Why do not the Powers unite to induce the Russian Government to keep a watchful eye over the proceedings; not to let them be turned into a source of pestilence for the rest of mankind? The Greek Church does not object to cleanliness. Let the local authorities and the clergy, who get their good share out of these meetings, be made responsible for the maintenance of general good order, and a great danger for us will be averted or mitigated.

The *Times* Calcutta correspondent writes, on August 27—"Public attention is becoming still more painfully directed to the cholera reports. At Mecan Meer 140 Europeans, chiefly, I believe, of the 37th Regiment, have been admitted to hospital, and more than half of that number have died. At Lahore 198 cases have been reported, and 100 deaths. Still there is no reason, I find, to believe that we are on the eve of having another great cholera wave over the land. The outbreaks, distressing as they are, seem partial merely. Dengue fever, which has abated greatly here, has broken out severely up country at Allahabad and elsewhere, over a wide district. But, as 'no one dies of dengue,' very little attention is paid to it when once it has left a district. Calcutta, for instance, would not be particularly distressed if it knew all Allahabad was down in dengue, dreadful as the pain is while it lasts. With cholera it is very different, and there are few intelligent persons who are not now watching the returns."

The *Levant Herald* announces that "the latest advices from Taganrog are, that the outbreak of cholera with which the port was visited is gradually dying away, very few cases being now reported, all of which are of a mild type of the disease, and scarcely any fatal."

The *Bombay Gazette* of August 30 says—"A doctor writes to a contemporary that he believes he has come upon a remedy—chloral hydrate—which controls the collapse of cholera, and recommending an extensive trial of the medicine."

The Egyptian journals publish a communication from M. Collucci-Bey, chief of the sanitary administration, announcing that the cholera has appeared in the provinces of Berber and Taka, belonging to the Government of the Soudour. The most energetic measures have been taken to combat the malady.

DISEASE AND MORTALITY IN RUSSIA.

The *Morning Post* correspondent at St. Petersburg writes, on September 20, that—"The sanitary reports of the past summer have just been published, showing the progress of the two great epidemics which have hung over Russia since the beginning of April. Compared with the wide and long-continued destruction of 1871, the sum total of loss may appear small, but the deaths bear a formidable proportion to the whole number. From April 1 to August 31 there have been in St. Petersburg 2648 cases of small-pox (1698 men and 950 women), of whom 912 (548 men and 364 women) died. From June 11 to August 31 there have been 3117 cases of cholera (2166 men and 951 women), of which no fewer than 1405 (999 men and 406 women) proved fatal. Both epidemics are now abating in consequence of the change of weather, but stray cases continue to occur every now and then."

SANITARY MATTERS IN DUBLIN.

Should our Irish brethren ever obtain that which many are agitating for—"home rule"—it is to be hoped that the attention of the Legislature will be directed to sanitary reforms. The sanitary condition of Dublin is unquestionably a disgrace to the Corporation, and such as could not exist under a wholesome supervision. In Dublin there are three scavenger depôts, situate at North Brunswick-street, Marrowbone-lane, and Blackpitts. In the first of these a portion of the deposit in the depôt drains itself in the open street, and a diseased meat-house close by adds to the offence. In Marrowbone-lane a great heap has been steadily increasing, though offers are made to anyone to remove it free of charge. At Blackpitts the depôt, which has not been cleared for two years, is most offensive to the neighbourhood, and the deposit rises to the level of the first-floor windows in the adjacent street. Each of the districts named are densely populated, the inhabitants are poor, ill-fed, ill-housed, and unacquainted with sanitary law—such subjects, in fact, as would speedily succumb to an epidemic. Some explanation is required for the negligence of the Corporation in reference to these depôts, and why a station for diseased meat should exist in close contiguity to any human habitation. A sub-committee appointed to inspect these scavenging depôts of the Corporation denounce in strong language their condition. In an able leading article in the *Freeman's Journal* the writer finishes with the following observations, with which we cordially agree:—

"No consideration should induce a publicist to shrink from giving the utmost prominence to such serious statements as those advanced by the Dublin Sanitary Association. If they are well founded, they demand instant change; if ill-founded, let the public mind be set at rest. We shall be only too happy to publish the defence, if defence be necessary; or refutation, if refutation be possible. But with a street converted into a drain, a diseased meat depôt in the centre of a densely populated district, a refuse heap on a level with first-floor windows, surely there is time for apprehension, and scope for action."

PURE WATER AND CHOLERA.

The communication from Dr. Ballot, which we print in another page, shows the great interest taken by the best sanitary inquirers in Europe as to the origin of cholera in India. Two letters on the water-origin of cholera at Meean Meer appeared in the *Times* recently—one from Dr. De Renzy, the other from "A Chaplain"; the one pointing to the absolute necessity of a pure water-supply, the other palliating dirty water by asserting that cholera sometimes breaks out where its origin cannot be traced to this source. Common sense says—Let us have pure water first, and if we are not free from cholera then, we will try further afield for other causes. But it is a very imbecile plan to put up with dirty water because cholera sometimes breaks out where the water *seems* to be pure.

AN EASTERN SANITARY REFORMER.

There is scarcely anything that a determination and perseverance cannot effect in the way of sanitary reform. The "bit-by-bit" improvement made in London and our great towns by sanitary reformers is put to shame by what has been effected in the East. M. Littre, the French *savant* to the *Levant Herald*, gives the following information obtained by him regarding the proceedings of Soubhi Pasha, the new Governor-General of Syria:—

"When you saw Damascus twelve years ago," said M. Littre's informant, "it was undrained, feverish, and pestilential. After sunset, there being no light, and no police worthy of the name, its narrow streets were given over to thieves. There was no pavement, no scavengers but the dogs,

and the public ways were unutterably filthy. The butchers killed their cattle before their shops, flinging the offal to the dogs, and allowing the blood to settle in stagnant pools wherever it flowed. A powder magazine was left uncared for in the middle of the city. When Soubhi Pasha, however, became Governor-General, his first care was to cleanse the town. He allowed no more garbage to be flung into the streets, filled up the ruts and chasms, organised a regular service of street repairers and scavengers, removed the powder magazine outside the town, established three slaughter-houses in a suitable place, where the butchers are obliged to take all cattle to be killed, and finally established a municipality, the revenue of which will be increased by the new slaughter-houses alone to the extent of £33,000 per annum."

UTILISATION OF PUBLIC BURIAL-GROUNDS.

THROUGHOUT London, particularly in the City, little green spots are to be observed, sometimes ornamented by trees, and a gravestone here and there. These are the yards of the old City churches which were destroyed by the great fire. They have always been closed and walled in. There are other grounds beyond the City boundaries which are now disused for burials. In the Holborn Union there are three of these places of great extent, which, if properly laid out, would form pleasant places of recreation for the inhabitants of the district. We are gratified to learn that Dr. Gibbon, the Medical Officer of Health to the Holborn Union, has directed his attention to the subject, and have pleasure in quoting the following from his last annual report:—

"Amongst other measures for the prevention of pulmonary consumption, which, on an average, slays 248 adult persons, between the ages of 15 and 55 years, in our district every year, I have urged 'the provision of public walks or gardens of convenient access to the poorer classes, where they may be allured from dark courts and alleys to take exercise in the open air.' For several years past your Board have attempted to supply this want by endeavouring to get the three old burial grounds in the district thrown open as gardens or walks to the public. After many fruitless negotiations, conferences, etc., with the legal trustees of these grounds, it is satisfactory that your Board has invited the co-operation of the other sanitary authorities of the metropolis to ask the Legislature to pass a general Act, authorising the conversion of all disused burial-grounds in the central portions of the metropolis into public walks and gardens."

FROM ABROAD.—POISONED BY THE TRILLIONTH OF A DROP—DR. KRAEMER ON AN EPIDEMIC OF TRICHINOSIS—GEH. MED.-RATH. MÜLLER ON THE MORTALITY IN BERLIN DURING 1871.

M. DAVAINE read at the meeting of the Academy of Medicine, September 17, a paper on Septicæmia, some of the statements in which startled the attention of the few auditors who at this time of the year still continue to attend. He described the various experiments he had been making by the subcutaneous injection of septicæmic blood—*i.e.*, blood derived from an animal poisoned by putrified blood. He has practised twenty-five series of experiments on rabbits and guineapigs, thus finding that the virus acquires increased intensity of power and activity by passing through the animal organism. This becomes so tremendous that, to quote the effect of its last passage, "the blood of the rabbit killed by the ten-millionth part of a drop was injected into five rabbits in doses of the one hundred-millionth, the billionth, the ten-billionth, the one hundred-billionth, and the *trillionth of a drop*. All died within twenty-five hours." The homœopathists will surely prick up their ears at this announcement from so staid an experimental physiologist.

For some time past we have heard little of *trichinosis*: this has probably arisen from the great care taken by the authorities in the parts of Germany where it was once so prevalent, in having the flesh of pigs examined for trichinæ before it is allowed to be sold for food. That the affection is still met with, however, is seen by an interesting report published by Professor Kraemer, of Göttingen, in the *Deutsche Klinik*, Nos. 30 and 31, concerning an epidemic of trichinosis which he has had the opportunity of observing in the town of Bovenden, near Göttingen.

Called to that town in February of the present year, he met with a case of an obscure character, but which he regarded as of a catarrho-rheumatic nature until, called to another case occurring in the person of a slaughterer, in whom œdema of the face and limbs were additional symptoms, he suspected the presence of trichinæ. He soon heard of various other cases with similar symptoms, and succeeded in finding out that a pig had been killed at a particular house, and that all those persons affected had eaten of it there. On examination of the flesh of this pig it was found swarming with trichinæ, and especially so in the muscles near the insertion of the tendons. In a portion weighing fifteen grains fifty-eight were counted, and at a moderate calculation the entire flesh of the animal would contain 2,500,000. They were all surrounded by delicate and transparent capsules without any calcification, and seemed well developed. They were found also in the two kinds of sausages which had been made of the flesh. In one of these kinds which undergoes boiling in its preparation they were much altered in appearance, and some persons who partook of this kind did not suffer. The worst cases occurred in those who had eaten of the chopped raw flesh, although they had accompanied this with copious draughts of spirits—the popular specific against trichina-poisoning.

Altogether there occurred twenty-eight cases (twenty-one males and seven females), the symptoms first showing themselves in most of these at the end of the second or beginning of the third week. These symptoms are described by Professor Kraemer at considerable length; but, besides that they are now generally known, we have no space for his account. The most remarkable among them were the œdematous swellings which appeared in different parts of the body, commencing with the face, and thereby specially attracting the attention of friends. The reporter, however, thinks that some writers attach too much importance to this as a diagnostic sign. The œdema of the limbs, which followed that of the face, was very considerable. There was little fever in these cases, the pulse only rising in some to 100, and the temperature to 38° C.

This epidemic was a very mild one, for out of the twenty-eight cases, in one woman, aged 49, alone did it prove fatal. She had eaten plentifully both of the pig and the sausages. Being feeble and asthmatic, her early symptoms were obscured, the œdematous condition of the face and limbs being the most marked among these. Numerous specimens from various parts of the body were found to abound with trichinæ, and in fifteen grains of the biceps (near the tendon) were counted not less than 420. In the same weight of other muscles the following numbers were found, viz.—in the tongue 58, the crico-thyroideus 124, the thyro-arytenoid muscles 21, the masseter 213, the genio-glossus 188, the sterno-mastoideus 171, the diaphragm 129, the intercostals 113, the pectoralis 148, the rectus 106, the psoas 105, and the gastrocnemius 186. The greater number found in the biceps is therefore quite remarkable. In none of the muscles were the trichinæ capsulated, which is also remarkable, as the examination was made seven weeks after the meat had been eaten, while incapsulation usually occurs in the fourth week. The capillaries of the muscles were excessively injected, while the fibres were œdematous and easily broken up, so that a large number of fragments of fibre were seen in each preparation. This was especially the case with the gastrocnemius, for, while a large quantity of water flowed out from it, abundance of fragments of muscle, together with numerous isolated and sometimes rapidly moving trichinæ, were seen. The presence of such large numbers gave rise to hyperæmia of the muscles, with the consequent œdema and diseased condition of the fibre, producing the painful tension of the muscles, and the greater or less diminution of the power of using them

observed during the continuance of the disease and even during convalescence. The trichinæ were found in the small intestine more generally than in the large, and especially in the mucus adhering to the walls. Even in the vermiform process a pair were found with a brood of young. The male and female were easily distinguishable in the intestine, the latter being most abundant, and having often deposited its young.

That this epidemic of trichinosis has proved so much less fatal than others that have been recorded, results from the fact that most of the persons only ate once, and in small quantity, of the pig, and that the discovery of the disease was made early enough to stop the consumption of the greater part of it. Much influence cannot be attributed to the symptomatic treatment adopted; but too energetic attempts to act directly on the trichinæ would probably do more harm than good, for after a while they pass into a quiescent state.

It is very evident that the precautionary examination of pigs should be strictly enforced, for, had it been employed in this instance, even an inexperienced microscopist could not have failed to detect trichinæ which existed in such abundance. It is true that they are not always found so easily in infected pigs, and even attentive examination may fail to discover them, and a pig containing them may be allowed to pass. But this is no argument against the examination itself, and an animal so little infected will do comparatively little harm. As a proof of the benefit conferred by such examination, Dr. Kraemer states that since it has been rendered compulsory at Göttingen —more than six years since—not a single case of trichinosis has occurred in that city. The examination is, however, not so easily performed as the laity are apt to suppose, for even an experienced microscopist requires half or three-quarters of an hour for the thorough examination of a pig.

Geh. Med.-Rath. Müller has just published his "Report on the Mortality of Berlin during 1871." The year is unfortunately distinguished alike by the small number of its births and the large one of its deaths—a disproportion not even attained in the cholera year 1866. The births amounted to 29,530, and the deaths to 32,369; and as the census of 1871 gave 828,406 as the population, there was 1 birth to 28 and 1 death to 25·5. There were 8245 marriages. Of the births, 15,101 were male and 14,429 female, 4564 of the number being illegitimate—viz., 2306 boys and 2258 girls. Twin-births occurred 358 times, and triplets 4 times.

Of the deaths, as in other years, the greatest monthly number occurred in the summer months, in consequence of the greater number of children being carried off by diarrhœa. The mortality differed greatly in the forty-six different *Reviren* or police divisions into which the town is divided, the two extremes being 1 death in 17 and 1 in 47 inhabitants. A table is given, in which the *ages* of all those dying are set forth; and after abstracting 1293 infants born dead, it is found that there took place 442 deaths per 1000 deaths during the 1st year, 272 from 1 to 10, 39 from 10 to 20, 88 from 20 to 30, 83 from 30 to 40, 71 from 40 to 50, 54 from 50 to 60, 49 from 60 to 70, 36 from 70 to 80, 11 from 80 to 90, and 0·8 from 90 to 100. In the table detailing the *causes of death*, it is stated that the number of children born dead amounts to 4·3 per cent. of the births. *Suicides* were 188 in number, and were thus produced: Hanging, 83 (65 men, 16 women, and 2 boys); drowning, 35 (22 men, 12 women, and 1 boy); shooting, 38 (all men); poisoning, 15 (5 men, 9 women, and 1 boy); cut throats, 4 (all men); stabbing, 3 (all men); charcoal vapour, 5 (2 men and 3 women); jumping from windows, 5 (4 men and 1 woman)—making a total of 143 men, 41 women, and 4 boys. There were also 288 deaths from *accidents*, of which 49 were from drowning and 41 from running over. Forty-four dead bodies of new-born children that were found are included among the accidents. Deaths from *puerperal fever* are returned at 257; and although this is a larger number than usual, yet it is below the actual facts, as these cases are not infrequently returned under other names, especially inflammation of the abdomen. Moreover, none of the women dying at the Charité from this cause are included.

Small-pox, as nearly all over Europe, was very prevalent in Berlin; the deaths, which in 1870 amounted to 166, continued to increase in number to an extent never before known. The deaths chiefly occurred among young infants and old persons. The total number was 5086, 2497 of these occurring in males, and 2589 in females. The lessons to be deduced from this epidemic will be dwelt upon by Dr. Müller in a special report. There were also 214 deaths from scarlet fever, and 212 from measles. Dysentery and diarrhœa swept off its usual large contingent of children, the total number of cases being 3766. From diphtheria and croup there died 837. The class of chronic diseases occurred in about the usual proportions, phthisis heading the list with its 3503 deaths.

The last table given exhibits the differences in the mortality which takes place in *illegitimate children* as compared with legitimate. In 1871, 15·4 per cent. of the new-born children were illegitimate, as were 16·5 per cent. of those that died. While of the whole number of the new-born infants only 4·3 per cent. were born dead, of the illegitimate there were 7 per cent. During the first year there died 44 per cent. of the whole number of children born, and 66 per cent. of the illegitimate. Among the diseases which proved most fatal to children the following differences were observed:—Diarrhœa carried off 20 per cent. of the whole number, and 28 per cent. of the illegitimate; small-pox, 14 as compared to 9; eclampsia, each 12; and marasmus, 10 as compared with 15 per cent. It is evident, therefore, that the chief reason of this greater mortality is to be found in the defective diet and attention these unfortunates are subjected to.

THE A B C PROCESS.

(*From our Special Commissioner.*)

So much has been said and written for and against the plan, first suggested to its promulgators by some passages in the Old Testament, of purifying sewage by a mixture of alum, blood, clay, and charcoal, that few would venture to give a decisive judgment on its merits on the strength of a single visit to the works. But an account of the way in which the process is carried on may interest our readers.

Our inspection was made on an exceptionally cool afternoon last week, and occupied about two hours, the period at which the morning discharges into the sewers are said to arrive at the works being included in that time. The sewage was said to be weaker than usual, though there had been no rain. The barometer stood at about 29·9.

The great pumping-station for the outfall of the main intercepting sewer south of the Thames at Crossness is in itself worth a visit. The great engine-house, in which everything appears orderly, well finished, and withal colossal, contains four fine engines of 120 horse-power each, working eight large plunger pumps apiece. They have all been duly christened by the engineers, and the effect was somewhat comical when one was gravely told that it was "Albert Edward" who was pumping away at full speed, while "Alexandra" beside him was quiescent; but "Prince Consort" at the other end was lending a hand. The height through which the sewage has to be raised here, in order to allow it to flow into the Thames at high water, is twenty-six feet. As it has undergone another churning in the pumping-station at Deptford, where it has to be raised to enable it to reach this point by gravitation, it is tolerably homogeneous on its arrival in the great tanks (covering six acres and a half) which retain it here pending its outpour into the Thames at high water. All solid substances have disappeared, and scraps of paper—though the presence of the

pulp is abundantly shown when attempts at filtration are made —are no longer to be seen. The fluid in a mass has a dark grey colour, and a decided odour, in which sulphuretted hydrogen predominates. The daily quantity is about half a million of gallons; but as the storm-water is admitted to the sewers, a very moderate amount of rain increases the outflow enormously, and keeps all the pumps working at full speed.

Of this fluid the Native Guano Company are now treating 250,000 gallons daily, and will shortly treat twice as much, by the A B C process, the carrying out of the process having been for the past month in the hands of officials of the Metropolitan Board of Works, for the purpose of testing its efficiency. The Company's establishment is placed close to the great tanks, and the sewage is pumped from them into the works. Here it first comes into view, as it flows rapidly along a channel about eighteen inches wide, in a stream about three inches deep. Across the stream, but not touching it, is placed an inclined board, which distributes across the breadth of the stream a black fluid running upon it from an iron pipe. This is the B C, or blood, clay, and charcoal. Just in front is a similar but smaller board, on which a very small quantity of a white fluid runs; this is a solution of lime. About a yard behind a semi-transparent fluid is poured in from a pipe without a distributing board. This is the A, or alum, which is added separately after the B C, because when in combination it was found to hasten the precipitation unduly. The whole of the mixing process is now complete, and the stream, manifestly blacker and thicker than it was, passes on to the settling-tanks. Six of these, each about fifty feet by twenty feet, and eight or nine feet deep, are placed side by side in a row, and are connected together by overflow channels capable of being stopped at each division by small floodgates; and the stream which enters at the front end of No. 1 overflows at the rear end into No. 2, again from the front end of No. 2 into No. 3, and so on until all the tanks have been traversed, when it falls in a cascade of apparently clear water from the front brim of No. 6, is received into a brick basin, and flows away along a walled and paved channel some fifty yards long to the Thames. About half a dozen pieces of iron pipe, about an inch in diameter, perforated with holes, are laid at intervals across the bed of the channel, through which air is pumped into the effluent water. After this treatment the water is stated to be sufficiently aërated to be habitable by fish; but as no attempt is made to demonstrate the fact, it is to be hoped that the fish of the Thames are sensible of the attention thus paid to their comfort.

There can be no question that the water thus discharged into the Thames is immeasurably more pure, at all events in appearance, than the sewage as it is received. And if by the process which it undergoes in the meantime the Company are able, with an outlay of 30s. per ton, to produce a manure which can be readily sold at 70s. per ton, there seems to be no reason on earth why they should not do so—at all events, until somebody discovers a better plan. Unless it can be shown that the effluent water is worse for the river than the untreated sewage, it is clear that the return of the matters precipitated to the land is in any case no loss, even if the utility of the matters be denied, to the community. And it is undeniable that the sewage is both clarified and deodorised by the process. There is no perceptible odour from the cascade, and it is only by holding the water up to the light in a glass jar against a black surface that minute particles can be seen in suspension. It is, in fact, purer in appearance than the water sometimes furnished for drinking by some of the London companies. But the A B C process has not yet succeeded in evolving a good drinking-water from sewage. The effluent water has a salt and unpleasant taste, and when smelt in a glass jar, a faint odour; though in both these respects it is much superior to the neighbouring Thames water, even when the tide has risen and the sewage from the Metropolitan Works has not yet been poured in. The salt is stated to be due to the chloride of sodium normally present in the sewage, and simply to pass through the process unchanged. The engineers, both of the A B C and Metropolitan Works, use the effluent water for their boilers by preference, instead of drawing from the Thames.

The water having now reached its destination, we will go back and trace the history of the precipitate.

The proportion of ingredients used is 6 grains of alum, $\frac{1}{8}$ grain of blood, 20 grains of clay, and 6 grains of charcoal for 10,000 grains of sewage. When the quality, however, is unusually offensive, this proportion has to be increased; and when the sewage is decidedly acid, a sufficient quantity of lime has to be added to make it slightly alkaline, otherwise a mere trace of lime suffices. The grinding together of the blood, clay, and charcoal is accomplished by a pair of millstones in a rotating pan, in the way that drugs and other things are ground. The semi-solid mixture is then raised to two mixing-vats, each of which holds 500 gallons, and is stirred with water until the fluid is uniform, after which it is simply allowed to run into the stream of sewage, as before described. The alum and the lime are dissolved separately.

If a glass jar be filled with the blackened sewage from the stream a very few feet beyond the point of mixing, a dark grey, flocculent, powdery precipitate is seen to be forming throughout the jar. The rest of the process is simply the separation and drying of this precipitate. A fatty scum also forms on the surface, which is easily removed by a board placed across the stream. By far the largest amount of deposit naturally takes place in the first tank, the fluid becoming clearer in each of the others successively. The first tank is cleared once in three days, the others with less frequency, according to their requirements. In the clearing process the stream is diverted into the next tank, and the water, after being allowed to settle, is allowed to run off down to a point one foot above the mud, after which point it is sent back into the sewer to undergo treatment again. The mud is then allowed to flow into a channel leading under the floor of the press-house, whence it is drawn up by two pumps, and forced under a pressure of ninety pounds to the inch into a "Needham's press." The moisture is thus squeezed out of it, and it leaves the press as a series of flat black cakes, about an inch thick, of about the consistence of new gingerbread. These are piled in a store-house, where, by fermentation, they develope sufficient heat to raise the thermometer to 135° Fahr. (where it stood on this occasion), or sometimes even to 200° Fahr., and become dry enough to be broken up into lumps, which are afterwards reduced to powder in a disintegrator, put into sacks and sold as the manufactured manure.

Both the press-house and the store-house were certainly free from any putrefactive odour, and it was affirmed that the manure was capable of entirely breaking down and assimilating the tissues of a dead horse or cow that might be buried in it (the skin having first been removed), leaving only the bones perfectly macerated, and this without any offensive odour. At all events, no one need object to having the works in his neighbourhood if they are always as free from smell as they were when we visited them. It was also stated that the drawbacks which had originally caused objections to be made at Hastings and elsewhere had been overcome, and that the works at those places were now in full operation, without any complaints being made against them. Moreover, that another manure company had contracted to take the whole of the A B C manure produced at Bolton at £3 10s. a ton, less certain outgoings, for the purpose of mixing with refuse fish at the seaside, and making a more portable and less offensive manure than the fish alone form. It was further stated that, however offensive the sewage may be, the mud never has any bad smell.

The Company has seven acres of land hard by under cultivation, to test the manure. The wheat, the oats, the potatoes,

pumpkins, and other vegetables grown on this little farm, if the test is accepted as a fair one, afford strong evidence of its excellence. About half the bulk of the manure is stated to consist of the ingredients added to the sewage, the remainder being the matters abstracted. It is strongly denied that the A B C mixture by itself would form as good a manure as it does in combination with the sewage.

The question of the quality of the effluent is of almost equal importance with that of the efficacy of the manure. It must be confessed that the presence of live fish in the water would have furnished a more satisfactory proof than any analyses or statements of its fitness for admission into streams which are afterwards to be used as drinking-water. Even a mixture with river water to any known degree of dilution would have its value, as indicating the proportion which would be compatible with life. A statement made by the general manager at the Social Science Congress at Leeds last year affirms that from 60 to 70 per cent. of the soluble matters, besides all that are held in suspension, are abstracted from the sewage by the process. It would be interesting to know how far it is worth while, either on sanitary or economical grounds, to endeavour to remove the remainder, as the Company propose to do by means of four filtering tanks which are placed near those used for precipitation, but are not at present in use. The experiments hitherto tried were said not to have been thoroughly satisfactory. No. 1 filter (they measure about twenty feet by ten feet, and eight feet deep) was charged with porous iron, which had been found to give too strong a tinge to the effluent water; No. 2 contained the Dursley earth strongly recommended by Dr. Frankland; this, when tried on a small scale, had been found not to succeed, because it contained too large a quantity of carbonate of lime, which choked the filter.

Probably the addition of sulphuric acid in the proportion of a pint to a ton of the mud before drying, with the object of fixing the ammonia, has been discontinued; because, though mentioned in an account of the process published last year, it was not spoken of to us. Mr. Crookes, F.R.S., in his analysis made last year of one gallon of sewage treated with A B C mixture in the proportion of two drachms to 10,000 grains, finds the reduction effected to be no more than from 1·70 grains in a gallon of sewage filtered through porous paper to 1·68 grains, while the total amount of solid residue was about twice as much as that present in the Lambeth Company's drinking-water. But the general manager informs the Social Science Congress that "the alkaline matter in the sewage combines with the acid of the sulphate" (he is speaking of the alum), the clay "becomes charged with a portion of the ammonia," and the charcoal "removes the foul gases of the sewage, and accumulates some matters that are afterwards of value in the resulting manure." Surely there is a discrepancy here which should be settled by a fresh analysis of the effluent water as it goes to the Thames. The reduction in albuminoid organic matter is stated by Mr. Crookes to be from ·09 to ·03 grains per gallon, while the effluent water of the irrigation process reduced it only to ·08 grains. Recent experiments have tended to confirm the doubt which has been long felt, whether the quantity of ammonia furnished to the soil in manures has really the importance usually attributed to it. And as nothing can be more true than that "the proof of the pudding is in the eating," the statement made by the conductors of the Company, that farmers who have once tried the manure are the very people who come and ask for increased quantities at the price of £3 10s. per ton, is more to the point than a score of statements as to what ought to be its value. The Company seems, however, not to have persuaded the people of Leamington that the A B C system is preferable to irrigation, for their connexion with that town has ceased at the expiration of the three years for which they undertook the work. For our own part we willingly testify that on the occasion of our visit there was nothing at the works at Crossness that could be regarded as a nuisance, that everything appeared in good order, and that the effluent water, though not wholly free from odour and taste, was clear and not offensive. But we should like to hear what the fish have to say.

THE AUTUMN MANŒUVRES.

(Continued from page 336.)

But the morrow's march was anything but short. It led through Fonthill, Teffont, Chilmark, Dinton, Barford St. Martin, and Wilton, to some downs about two miles north-east of the latter place, where the enemy speedily came into view. It appeared that the operation of "turning his right" was being successfully conducted, and the battle became extremely warm. The march had been accomplished considerably within the time expected (as the General informed the troops in a short addendum to the sermon the next morning), and consequently the enemy was "smashed up" with great effect. The fatigued victors fondly imagined that they should merely have to tell off burying parties to dispose of the imaginary piles of slain, and to encamp on the field of battle. But they had not reckoned with their Controllers. These amiable gentlemen insisted that the march must be prolonged about eight miles to some other downs, distant about two miles from the village of Wiley, and about six from last night's camping-ground, making the distance marched some twenty-four miles, besides the battle. And by a fine stroke of humour, somebody contrived that when the camping-ground was at last reached, and the sites of the tents marked out on the stubble by daylight, the baggage should not arrive till dark, and the meat not until it was too late to cook it; and as few had eaten anything but a scrap of ration biscuit since 6 a.m., and all but a very few had to go to bed with nothing more in their stomachs than a potato, some biscuit, and some tea, the pleasantry was highly successful, and was much appreciated. The number of men who fell out during this rather severe day was four, two with diarrhœa, one (a bugler aged 15) with sore feet and exhaustion, and one with hæmaturia; but all but the last, who was ordered to stay behind, arrived in camp nearly as soon as the battalion. It should be noted also, for the information of those who say that the Volunteers cannot keep up with the Regulars, that some hundreds of men were passed on the road, consisting of West York and South Down Militia, and, in smaller numbers, of Rifle Brigade, Linesmen, and Guards. Those who carried the old pack, like the 4th Battalion Rifle Brigade, were by the unanimous testimony of the men at a great disadvantage compared with the others who had the new valise; though the latter, resting as it does on the renal region and sacrum, might be expected *à priori* to cause some discomfort when the body was sweating copiously. The men, however, are well content with it.

The next day (Sunday) was a welcome day of rest, and was devoted in great part to the repair of raw feet. It was followed by a day of shammer fighting and more terrific slaughter than any yet witnessed. After various instances of self-sacrifice, a battalion immolated itself at the close of the operations by advancing across the open, under artillery fire, against another, well posted under good shelter, with a front fully as strong as its own, and with its flanks covered, and halted at about 200 yards distance to meet its fate with dignity. The umpires, however, drew a veil over the scene, and everybody marched off across the plain to prepare for the final battle on the morrow. A wet stubble-field on a windy hill, overlooking the pretty little village of Berwick St. James, is the next halting-place, and here ensues a stay of three hours in pelting rain while the baggage is waited for. No tents, no food, no fire, draw forth the remark that

"With thee th' unsheltered moor I'll tread"

was never spoken to a Controller, and the question "What is the disturbing force? The Controllers that we meet with are good fellows enough, and seem anxious to oblige everybody, and the work is simple enough and all marked out beforehand; but still things persist in going wrong. Simonds with his beer beats them hollow: he seems always to turn up where he is wanted." Before a solution is found the baggage arrives, and the men, most of them wet to the skin, soon get the camp pitched, and the fires going. And here a word must be said for the cooking apparatus invented by Mr. Tompkins, of the Victoria Rifles, which, under the sedulous care of an officer of

the Inns of Court, who volunteered to act as sergeant cook, sufficed for half the battalion. It consists of four sheet-iron boxes, about two feet square, with the rear angles cut off, which are placed back to back in the form of a cross, the fire being made in the central space left between them, and the draught being furnished by shallow cross trenches dug under the boxes, which act as ovens. Large kettles are placed on the top, leaving only enough space between them to serve as a chimney, and the intervals between the limbs of the cross are filled up with turf to prevent loss of heat by radiation. The proportion of fuel used to work done is very much smaller than in the ordinary arrangement of trench- and camp-kettles; and the men have the advantage of getting baked meat, which is a luxury in camp. The weight of the whole apparatus when packed is 5 cwt., which is greater than that of the number of camp-kettles used for an equal number of men; but where fuel has to be carried it turns the balance in favour of the apparatus. Nearly all the superior officers, including the Duke of Cambridge, came to see the novel sight of camp cookery by a new-fangled machine worked by lawyers, and appeared much impressed by it. But the general remark of the Regulars was, "You are very good fellows, and we are glad to see you, but what on earth induces you to come here?" The idea of volunteering is still a mystery to the British officer.

To-morrow found the battalion not all laid up with coughs, colds, and rheumatism, as might have been expected, but without a solitary case of the kind requiring treatment. The constitutions of the men had responded to the fine dose of health that they had been inhaling for the past ten days; and the wetting and chill which, if it had happened on the first day, would probably have laid up not a few, did no harm to anyone. A march of about six miles brought the First Division into action across the village of Woodford; and here both the slaughter and the abstention from slaughtering were as remarkable as on previous occasions; in fact, this was the only occasion on which really heavy file-firing was heard. As to the details of the battle, they may doubtless be gleaned by the curious from the charmingly varied accounts of skilled correspondents; but there can be no doubt that in the end of it the army defending London found itself on the wrong side of the Avon, where, presumably, it did not want to be, and with the enemy across the river, and between itself and the capital, where, presumably, it did not want him to be. But the umpires could not make up their minds as to the result, and had to be left arguing, surrounded by a cordon of armed lawyers.

On Tuesday and Wednesday nights the camp was at Durrington-field, about three miles north of Amesbury and eight from the battle-field; and the day between was devoted to rest, cleaning up, and visiting Stonehenge. "Who built it?" "It can't be post-Roman, as Fergusson says it is;" "There must have been a large population;" "There must have been a highly organised community and powerful minds;" "They must have had iron implements;" "Whipcord must have been cheap;" and a host of other speculations passed from man to man. But this must be left for future visits. The great march past is imminent, and the parade-ground a glorious one, with the great Beacon-hill rising at the back of it, affording room for countless thousands of spectators. And, indeed, the sight when the troops were displayed in review order the next day was one of the prettiest military spectacles possible. The bright uniforms, the great expanse of green turf, the clear sky, and all Wiltshire out for a holiday, made everybody glad that he had not stayed at home that day. And there never was a better kept ground or a better ordered review. First the horse artillery, cavalry, and infantry of both armies march past the saluting-point under the hill, where many ancient men of valour are gathered near the Royal Standard, and then the horsemen return and go by in grand style at the trot and gallop, finishing by advancing in line to salute.

While the cavalry and horse artillery were going through their splendid movements, the infantry regiments were drawn up in line of contiguous columns of double companies opposite the saluting point, at about 500 yards distance, and the order was given to lie down. Here, as usual, there were no water-carts, nor anything but a very green and nearly dry pond. A countrywoman's can of water was eagerly bought up at a penny a tumbler, and men began to nibble small portions of ration biscuit and cheese. Conversation also began to set in after the long silence. The striking beauty of the scene, and the wish that more could have been there to see it, impressed everybody. One wondered whether such an assemblage had ever before met on that magnificent parade-ground—on the occasion, for example, when that great barrow, which stands alone at one end overlooking it, was made; it looks indeed like the tomb of a pre-historic Achilles commanding the plain on which he had marshalled his men. Another whether Vespasian, after whom a neighbouring camp is named, had ever held a review here; and whether his legions looked brighter and smarter than these, or rode and marched and kept their dressing better; for these are manifestly things in which anybody may attain perfection. And then the question is raised, "Why on earth do those official people always snub the Volunteers? They see that we can behave ourselves, and that we don't melt away after a march or a shower of rain, and they know that we can shoot better than the Regulars; so, as they can't possibly defend the country with the small numbers they have, I can't for the life of me see why they don't make use of us!" "Well, you see, the defence of this country is farmed out to a Limited Ability Company, who have the monopoly of it; and if the mass of tolerably educated men in the country once got the idea into their heads that the system was capable of improvement, and must be put into other hands, who would take care of Dowb? What would become of all the fellows who are born with cocked hats on? It is obvious that the people must not be allowed to learn too much." "The case is precisely the same as that of the established religion," says another; "the comfort and elegance of the rectories, and the backwardness of the clodhoppers, show what the services of the endowed teachers have been worth to the country for the last three hundred years; but as soon as anyone else tries to improve matters the monopolists are up in arms, and 'dissenter,' 'secularist,' 'freethinker,' are the recognised terms of abuse indulged in. The fact is simply this: if a monopoly is to be kept up, interlopers must be kept down." "Friend Horace has a remark very much to the point," growls somebody:—

"'Dulce est desipere *in loco*.'"

"What do you mean?" asks a neighbour. "Can't you construe?" is the reply—"'Tis pleasant to be a fool in place.'"

And now the order is given to rise, and the long line of infantry of two English army corps—not quite equal to one of other nations—advances about three hundred yards for a final salute, and all is over. A march back to camp, and general wind-up of everything, finishing with songs round a camp fire (permitted on this evening only), close the day; and on the morrow a very hot and dusty ten-mile march at mid-day, accompanied part of the way by the band of the 50th Regiment, brings a railway-station into view, and the brief campaign to an end. It is probable that there were few, except those compelled by engagements already made, who would not have willingly remained another fortnight, so great is the charm of the open-air life to those who have once tried it. And though the Volunteers claimed and used their privilege of grumbling like the Regulars, yet all agreed that the managers of the force were right in not admitting Volunteer battalions to the camp of exercise for a less period than a fortnight. The second week is worth three times as much as the first.

But it may be said that all this has very little to do with Medicine. On the contrary, here has been described a medicine which all the able-bodied youth of England should be encouraged, if not compelled to take, to the great advantage of themselves and the country. If every young man were taken from his ordinary pursuits of money-grubbing, idling, or anything else, and compelled to spend an annual month for some years with the home guard under canvas and on the march, his body would be fortified by the wholesome life and spare diet, and his mind by the admission into it of the ideas of comradeship and forgetfulness of self. If our brethren would do what they can to commend this view to the young men of this country, they would be doing much to counteract the destructive influences of town life, which do exist, let statisticians say what they please.

The arrangements made by the Army Medical Department were sufficient for the needs of the campaign, and that is the most favourable thing that can be said of them. Of anything like improved organisation—of attempts to provide for the requirements of a large home army, of even a rudiment of the organised force of 60,000 attendants on the sick and wounded, which the Germans, on the testimony of the acting chief of the department at Berlin, took with them into France, there was no trace. Even the new pattern ambulance waggon was not to be seen. Probably some committees may be still sitting, —the period of incubation in this climate is a long one. But happily the number of sick was trifling. The Regulars in the first division had less than $\frac{1}{2}$ per cent. sick, instead of 5 per cent. —the usual number in garrison; and of the patients the

great majority were suffering from reminiscences of garrison gaieties. The First Provisional Battalion sent only four men home, of whom two were not in a fit state to do duty when they arrived; the third had an angry-looking wound on the elbow, resulting from a fall down some rocks in Wales; and the fourth extensive chafing of the skin from marching. The third man returned to duty in three or four days; and with these exceptions, every man went through the work, and felt greatly the better for it afterwards. The component parts of the battalion went their several ways, each with a kindly feeling for the rest, and with a hope to shake hands again on future occasions of the kind.

THE VACCINATION LAWS OF EUROPE.

No. III.

We continue this week our account of the laws respecting vaccination in the different European States.

Denmark.

1. Vaccination is compulsory, and must be performed before the age of 7 years.

2. In case of non-compliance, penalties are prescribed and strictly enforced.

3. Revaccination is compulsory only for the army; for other persons it is not compulsory, but recommended and facilitated by the law.

4. There has been, and still is, some opposition to vaccination amongst the people; but the fact that the new law concerning compulsory vaccination was approved by the Diet in 1871 shows that the opponents are in the minority.

5. The maintenance of the law is enforced upon the entry of every child in all schools. Not only a child cannot enter any school, public or private, without having been vaccinated, but when on this occasion the law is found to have been eluded, vaccination is enforced by the infliction of fines.

Sweden.

Vaccination is compulsory in Sweden, and must be performed before the completion of the infant's second year. This duty of undergoing vaccination applies also to children over 2 years of age, and, indeed, to all persons, unless it can be certified that they have had small-pox.

Vaccination is enforced by fines, according to paragraph 23 of Royal Regulations. If any parent, guardian, or other person having children under their charge, neglect to have them vaccinated on or before the completion of their second year, the parochial or police authorities appoint the person who has thus been negligent or obstinate a fixed time within which the neglected vaccination may be performed on payment of a fine of from one to three rixdollars (sixteen shillings). If this is not attended to, the fine is enforced, and a new period fixed and double fine appointed. Should this be resisted, the case is reported to the Government, and steps taken according as may be necessary. Should such neglect or obstinacy be shown when small-pox is prevalent, the fines are always fixed at the highest sum in the first instance.

Neglect to take vaccinated children to be inspected on the eighth day is punished by fine, as is also refusal to allow vaccine lymph to be taken from the arm of the child; and if small-pox be prevalent the fine is double.

No rigorous enforcement of these provisions can be said to exist; and, moreover, but rarely does an occasion for such arise. Revaccination is not absolutely compulsory, but vaccinators are enjoined to recommend it. In the army all recruits are revaccinated, without taking into consideration whether they have had small-pox or been successfully vaccinated. No opposition is now shown on the part of the public or of individuals, least of all on that of physicians.

No person may be admitted into a public school, whether teacher or pupil, unless duly certified to have had small-pox or to have been successfully vaccinated.

Rewards are given to successful vaccinators, and the privilege of free postage is given for despatch of vaccine lymph.

Austria.

Vaccination is not compulsory. No penalties are in existence for neglect of the vaccination regulations. Revaccination is not obligatory. No opposition to vaccination is met with on the part of the people, and the number of cases of persons dissatisfied with the results of the operation is very small. Indirect efforts to promote vaccination are made: thus, for the obtaining of an official stipend, endowed appointments, and so forth, the production of a medical certificate of successful vaccination is desired. The omission of vaccination is not punished by any civic disabilities.

Hungary.

The answers to the questions submitted by us to the Hungarian Government are so complete that we deem it necessary to publish some of them in full. Thus, to the first question—Is vaccination compulsory in Hungary?—the reply is as follows:—

"Although vaccination is a subject of State arrangement in the countries of the Hungarian Crown, the carrying out of which is provided for out of the public funds, yet the operation is not directly compulsory at any age in this country; the advantage of, and the extended protection afforded by, vaccination must rather be made clear to the people by means of occasional popular instructions, and everything must be carefully avoided which might cause annoyance to the people or excite consequent antipathy on their part to the institution. Penalities for non-compliance with vaccination regulations have reference to the physicians and surgeons appointed as public vaccinators. Physicians and surgeons neglecting to perform vaccination, or who do not take proper care for the uninterrupted preservation of fresh and pure lymph, or who vaccinate with impure lymph, or who do not bring to the knowledge of the authorities any pronounced outbreak of small-pox—further, all those who in any way seek to lessen the confidence of the public in the institution of vaccination—are punished by penalties more or less severe. Revaccination is not compulsory at any age whatever, yet the people are made acquainted, on the part of the Government, with the usefulness of the same at all times, especially in small-pox epidemics. There is no opposition amongst the people to the operation of vaccination. A disinclination to have the lymph taken away is sometimes observed. It is sought to make vaccination as general as possible in Hungary by making it in a certain way indirectly compulsory: thus, without production of an authentic vaccination certificate, or one of a previous attack of small-pox, no one is supplied with a stipend from the State, or may be admitted into a State educational institution or military training school. No one, however, is punished, on account of not being vaccinated, with civic inabilities or exclusion from admission into the public schools."

Italy.

Vaccination is not compulsory in Italy. The Italian Government endeavours to encourage the practice of vaccination by requiring that pupils in all Government educational establishments should be vaccinated. Excepting under extraordinary circumstances, such as the prevalence of epidemic small-pox, the Government of Italy pays no attention to the practice of vaccination.

REVIEWS.

Treatise on Diseases of the Bones. By Thomas M. Markoe, M.D., Professor of Surgery in the College of Physicians and Surgeons, Surgeon of the New York Hospital, Surgeon of Bellevue Hospital, Consulting Surgeon of the Mount Sinai Hospital, and of the Nursery and Child's Hospital, etc. New York: D. Appleton and Co., Broadway. 1872. Pp. 416.

Since Mr. Stanley published his work, now almost a quarter of a century ago, much has been done towards the elucidation of the pathology of bone; still, however, there was ample room for some good monograph on the diseases of bone, brought up to the standard of knowledge of the present day.

It is well known that our sister country America is fast acquiring an enlightened and comprehensive literature of her own, and the many able workers in the Transatlantic medical and surgical schools are determined that their own branch shall in no way lag behind the other divisions of learning in this respect.

Up to a certain date, America was content to receive and appreciate the products of English and foreign writers, but for some time past she has gone a step further in the process of intellectual development, and has been producing at home works founded upon her own experience and investigations.

In no field of literature are these remarks more true than in that of medical and surgical sciences.

The volume now before us is from the pen of an American surgeon and teacher of surgery, and contains the subject-matter of lectures delivered at the College of Physicians and Surgeons of New York. It is divided into three parts—(1) Diseases of Bone; (2) Tumours of Bone; (3) Malignant Diseases of Bone. These are preceded by a short introduc-

tion, in which "the office of the skeleton in the animal eeonomy" is briefly sketehed. Here the author, it will be observed, classes the liability to disease as one of the evidences of the high vital endowments of bone tissue. He does this on the following ground—viz., that the "reparative power increases as perfection and complexity of organisation diminish;" but this reparative force is ever present as an antagonist to disease, so that the proneness to disease is in the inverse ratio to the reparative power, and therefore the animals highest in the scale are those most subjeet to varied and severe disorders. But this same principle extends to the different tissues of the same individual; so that whereas we find disintegration from the effects of inflammation almost the only morbid process in tendon, and ulceration in its various forms the chief disease of cartilage, the more actively living, more vascular tissues are exposed to all the most important morbid ehanges. Among these higher tissues bone holds a prominent position, which, upon the author's view, is abundantly vindicated by the varicty, frequency, and severity of its diseases, there being no morbid condition of the soft parts of which a counterpart may not be found in bone. In fact, bone is "A microcosm in which the whole story of disease is to be traeed, and yet which presents many phases of morbid action so entirely peculiar to itself as to entitle its study to be ranked among the most interesting and fruitful provinces of the great domain of pathology."

In what manner, then, do we find the author dealing with this important subject? Dr. Markoe does not pretend that his book is a "eomplete compendium of all that is known on the subjects of which it treats," but states that it is the result of his own observations and studies, and of "free reference to the materials so richly scattered through our periodical literature."

Whatever question may arise in the mind of Dr. Markoe's readers as to the value of the work as a summary of his own observations, they will be pretty sure to remark, and perhaps somewhat cynically, the very lengthy and very frequent quotations of the writings of others. It will be gratifying to the English reader to notice the repetition of references to English authorities; but he will, no doubt, be astonished to find as many as four out of seven illustrations in one chapter taken from Erichsen and Billroth. But, though we eannot extol the book for its originality, nor for the additions it makes to our knowledge, it gives a good description of the subjeets upon which it treats; it is concisely and lucidly written, and will unquestionably be read with advantage by the practitioner or the student.

In Part I. the fourth chapter is given up to the notice of a form of disease of bone not often specially alluded to in works on Surgery—viz., "chronic sinuous abscess." The author has chosen this term to express that kind of abscess which follows an acute inflammation of bone, and from which the pus finds its way to the surfaee through the compact external shell of the bone, along a course which is neither free nor direet. Matter accumulates within the eavity, and new inflammations and suppurations are excited in the bone substance surrounding, until, after a time varying from a few weeks to many months, the disposition to form new abscesses ceases, and the bone is left perforated by three or four or more sinuses, generally all communicating with a central excavation in the position of the original abscess. In this state the parts may continue for an indefinite period, even many years, owing no doubt to the unfavourable physical conditions of the disease—viz., a deep cavity containing pus, communicating imperfectly with the surface by means of narrow and tortuous canals. For these cases the proper treatment is a free use of the trephine and chisel, so as to lay fairly open the anterior wall of the abscess and sinuses. The author lays stress upon the value of thoroughness in the operation: it is not sufficient merely to open the abscess by the removal of a portion of the anterior wall, but by its complete removal the cavity should be converted into a mere groove or excavation on the surface of the bone. This treatment is the more desirable, too, beeause there is the same tendency in this kind of abscess as in the ordinary closed chronic abscess to approach and involve the joint near which it is situated. The resemblance of this disease to, and the difficulties of the diagnosis of it from, necrosis, are well pointed out. So strong and so many are the marks of similarity, however, that they habitually deeeive careless observers.

Chapters VI., VII., and VIII. are given up respectively to rickets, mollities ossium, and fragilitas ossium. We do not, however, find anything here requiring any lengthened notice. Rokitansky, Jenner, Shaw, and Tyler Smith are resorted to for the building up of the remarks on rickets. One stone of the strueture is worthy of speeial notiee, and that is the aecount given of the changes in the flat bones of the eranium in rickets. Billroth drew attention to the fact that sometimes the softening and compressibility of the occiput is the only symptom of rachitis. Dr. Markoe, after a few words upon the *thickening of the flat bones* which sometimes occurs in riekets, refers to this softening and deficiency of bony matter in points of the cranial bones, under the name of "eraniotabes." He gives the details of a case reported by Dr. Jacobi, of New York, and quotes Dr. Jaeobi's opinion that "the clinical eause of the predilection of rachitical absorption for the oeeipital portion of the head must be sought for in the recumbent posture of the infant." Absorption will take place at a number of spots, wherever "rachitical deposits" having copiously taken plaee the weight of the brain and the pressure of the pillow fall. This craniotabes is not to be considered more unfavourable than other signs of rachitical disease if there be no complication on the part of the brain or its membranes. The vexed question as to whether mollities ossium or malaeosteon (which are used by the author as synonymous expressions) is invariably a fatty degeneration is answered by the author in the negative. He states that in some eases the replacing material is of a gelatinous nature, and presents few or no traces of fat, and in certain others the amount of fat in the bones does not vary from its normal proportion. The author, however, furnishes no facts and no special analysis on this subject, and contents himself with the bare statement of opinion. This is to be regretted. Paget says he has never seen a ease fulfilling "in any degree the general notion of mollities ossium as a disease consisting in the removal of the earthy matter of bone and the reduction of any part of the skeleton to its eartilaginous base." Hence he thinks two diseases have been included under the term mollities ossium—viz., fatty degeneration, which seems to be more frequent in England; and the simple softening of bones, or osteomalacia, in which they appear redueed to their eartilaginous condition, whieh he states seems more frequent in Germany and France, and of which a case (related by Dalrymple, Benee Jones, and Maeintyre) occurred in England. Billroth, however, thinks that ostcomalacia may with eorreetness be designated "fungous fatty osteomyelitis," and observes that complete absorption of the bone sometimes occurs. We cannot help regretting, therefore, that Dr. Markoe has not given us more minute details about the pathology of this disease as it has been observed in America.

Fragilitas ossium is described as a condition of brittleness of bone, rendering it liable to fracture from trivial eauses, and distinct from that weakening of the texture of the bones which often eo-exists with very different diseases of the bone tissue, such as malaeosteon and eancer. It may be unconneeted with any disease of the bone or constitutional disorder, and witnessed in persons in good health and eapable of fulfilling the duties of ordinary life; but it may also occur in others in whom some symptoms—vaguely spoken of as ehronic rheumatism—preeede the condition of fragility. In some cases it is hereditary, and the peeuliarity is observed in several members of the same family. In those cases where no disease exists, but where the condition of bone is one merely of delicacy and slenderness of constitution, the fraeture will be repaired rapidly and perfeetly; but in many cases in which rheumatic pains have existed in a marked degreo or for a long time, union will be slow and imperfect—sometimes failing altogether.

In Part II., 120 pages are occupied by the description of *tumours* of bone. The author fully appreciates the difficulty of making a elassification of these, as of any other tumours, which can meet all requirements. He, however, selects that which is perhaps open to the least objections—viz., the anatomical—though he does not rigidly adhere to this arrangement, for he gives one-fourth of the whole of Part II. to the description of tumours of the jaws.

The last seventy-nine pages, composing Part III., eontain an aeeount of the symptoms, pathology, and treatment of malignant diseases of bone.

In order to make elear to his readers what he intends to include under the term "malignant diseases," he states the three great clinical features which pathologists are agreed upon are the ehief signs of malignancy, and couples with them the two well-marked anatomical characteristics of "heterology and infiltration." The headings under which he describes the sub-elasses are, as usual, hard eancer, medullary, epithelial, eolloid, and melanoid. An additional chapter on "Ostoid Cancer" follows the descriptions of the above-named, but this eonsists almost entirely of excerpts from Paget and Stanley.

The ehapter on the treatment of these malignant diseases

needs no further remark than that it is well considered. The author states very concisely and plainly the cases in which he advises, and in which he does not advise, an operation.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, September 17.

Agrégés or Sub-professors—Dr. Ball's Clinique—Puerperal Paraplegia—Addison's Disease—A Female Medical Student—M. Guêniot on Premature Confinements—Death of M. Horteloup.

In one of my last I mentioned that during the vacation the Clinical Professors are generally replaced by *Agrégés*, who deliver a series of lectures, not only for the benefit of others, but with a view of preparing themselves for the more exalted position of Professor. Among the *Agrégés* so occupied for the present are M. Ball, who is acting for Professor Behier, at the Hôtel-Dieu; M. Peter, for Professor Sée, at the Charité; M. Lannelongue, for the Professor of Clinical Surgery, at the latter Hospital; and M. Guêniot, for Professor Depaul, at the "Clinique d'Accouchements."

Dr. Ball, who had to become naturalised to obtain his present position, is an old student of King's College, and as far as I can learn is the first, and up till now the only, Englishman who has obtained the *Agrégation* or Sub-professorship of the Faculty of Paris, a post much envied and sought for only by those who feel themselves really qualified, and to obtain which one has to go through a series of severe tests, theoretical and practical, of which I gave you an account in May last.

Dr. Ball's cliniques are very instructive—as, indeed, all cliniques are; but his visits are particularly so, as he is not only communicative at the bedside of the patients, but his lectures are clear and precise, without that redundancy of words so common with French professors. He has selected for his programme a series of the most difficult subjects in Medicine, and I have only to name some of them to give you an idea of their interest and practical bearing; these are—Hysterical contraction (*contracture*), puerperal paralysis, morbus Addisonii, sclerosis, locomotor ataxy. The first lecture was devoted to the history of hysterical contraction. In the second lecture Dr. Ball gave full particulars of a case of puerperal paraplegia. He proceeded to describe the symptoms, nature, and mode of production of this disease. He stated that puerperal paraplegia, although it occurs more frequently after parturition, is sometimes met with during pregnancy. That the puerperal state has an unfavourable influence upon the functions of the spinal cord is proved—first, by the weakness which pregnant females so frequently experience in the lower limbs; secondly, by the aggravation of paralytic symptoms in women who become pregnant after being paralysed. Dr. Ball quoted several interesting cases of this latter description. He went on to say that paraplegia, when it supervenes in the puerperal state, generally affects women who have never had children before; but that in some exceptional cases paraplegia will occur in women who have previously been confined six, eight, or even ten times without experiencing any such phenomena. When, however, paralysis has once occurred in the puerperal state, its recurrence during a second pregnancy is not unfrequently observed. The development of the disease, according to Dr. Ball, is in general slow and insidious; the patients feel weak in the knees, are tired after the slightest exertion, and feel a tingling sensation in the tips of the toes. By degrees these symptoms increase, and paralysis sets in. Only one limb is paralysed at first, the other limb retaining its functions for a certain space of time; at length both limbs become powerless, and in several cases the bladder and rectum participate in this state of things. In some cases, on the contrary, the invasion of the symptoms is sudden, and the progress of the disease prodigiously rapid. Paralysis of both limbs may be complete in one or two days, and in severe cases the upper limbs soon become paralysed, the respiratory functions are affected, and death rapidly supervenes. At the post-mortem examination the signs of acute meningo-myelitis with abundant suppuration have been frequently found to exist; in other cases an extensive hæmorrhage of the spinal cord had taken place. In one case the cord was softened in the greater part of its extent. The sequelæ of puerperal paraplegia are not, however, so formidable in the great majority of cases, and most patients recover within a few weeks or a few months. Others, less fortunate, remain crippled for life. In these latter cases there evidently exists an organic lesion; in the former the paraplegia must in all probability be attributed to reflex action. Dr. Ball here discussed at length the various theories brought forward by Fleetwood Churchill, Brown-Séquard, and others, with respect to this class of cases; and the lecture was concluded with some remarks on treatment, which would be too long to give *in extenso*.

With reference to Addison's disease, the learned doctor said that no new light had been thrown upon the pathology of this affection, although recent investigations tended to class it among the neuroses; others look upon it as a chromatogenous or pigmentary disease, whose seat is the rete mucosum, and that the disease of the supra-renal capsules is an accidental or occasional complication, and hence some have proposed giving it the name of melasma or melanoderma. In the present state of our knowledge, Dr. Ball continued, the treatment can only be symptomatic, and the prognosis is very unfavourable, although he exhibited one case in which a cure had been effected. But whatever the real nature of this obscure affection, the name of Addison will ever be associated with it, as he was the first who gave a description of it. His concluding words in praiso of Addison we shall quote textually:—"L'analyse approfondie de tous les faits jusqu'à present connus nous permet d'affirmer, sans aucune réserve, que la maladie d'Addison existe; et en attendant que sa nature nous soit mieux connue, nous croyons devoir lui conserver le nom de l'illustre clinicien qui l'a, pour ainsi dire, tirée du néant. C'est un juste tribut d'admiration que nous rendons à sa memoire."

In following Dr. Ball's clinique, I met an English lady-student who told me that she was one of Miss Jex Blake's party, about whom there was so much ado in the Edinburgh University. Her case being under consideration, she has come to Paris to utilise her time, and on her return to Edinburgh for the winter session she intends to reopen the campaign, and hopes to come off victorious, at least as far as concerns the admission of the ladies to the clinical study in the wards in common with their brother students. The French, she said, were more liberal, and wondered why their country-women did not take advantage of the opportunities afforded them of improving their condition. Politeness commanded me to make no retort, but in conversation with a French gentleman on the subject, to whom I put the question, he replied that French ladies were too feminine and had too much *amour propre* to give up the prerogatives of their sex.

In a lecture at the Clinique d'Accouchments, M. Guêniot spoke of a variety of subjects. He referred to the present healthy condition of the patients, although the wards were as full as ever; but he was surprised at the number of premature confinements that had lately taken place in that hospital. During the last month, sixteen, or more than half the admissions, were prematurely confined—that is to say, between the seventh and before the completion of the ninth month—which M. Guêniot attributed to the following causes—misery, fatigue, mental depression. Most of the patients were young, and belonged to that class (waitresses, cooks, laundresses) whose occupations required them to be on their legs for many hours in the day, and in some cases extended even far into the night; and he has known many instances where the unfortunate creatures had to work in the upright position from twelve to eighteen hours, thus leaving them but six out of the twenty-four for rest; add to this the mental depression arising from the poverty of some of the mothers, and from the desertion by the fathers of their offspring after their seduction, M. Guêniot said he was only surprised that the results were not worse.

One woman was confined at five months and a half of pregnancy—but this, he added, came under the category of abortions (*avortements*), the cause in this case being ovarian cyst,—another at the eighth month from prolapsus uteri, a third from placenta prævia, and a fourth from death of the fœtus. All these causes acted in the same way—that is, in exciting uterine contractions, or in disturbing the balance between the circulatory and nervous systems. All the cases turned out favourably as regards the mother and child, except that of the patient with prolapsed uterus, who died from purulent infection.

September 23.

Death has been of late very busy among the members of the Profession in Paris. In less than six months I have had to record the deaths of some four or five medical celebrities. I have now to announce that M. Horteloup, senior, has been suddenly cut off, if not in the prime of life (as he was 71 years of age), we can at least say in robust health. From what I can

learn, the deceased on going to bed the night before his death, which took place on the 16th inst., felt particularly well; but on waking the following morning he was seized with a violent palpitation, and in half an hour ceased to live. His obsequies took place on Saturday, the 21st, and were attended by a large concourse of friends both in and out of the Profession, his son, who is also a doctor, being the chief mourner.

M. Horteloup was very popular, and had a very large *clientèle*. I had often heard it said of him that his practice was so extensive that he used to spend ten or twelve hours a day in his carriage; so one can say that he really died in harness. He was very active for his age, always cheerful, and very hard working. He lost his wife about three months ago, and had not been the same man since, though on that melancholy occasion he showed the greatest possible stoicism, for on the very day of his partner's decease, he not only continued his usual rounds, but was called in to see a *confrère*, an old friend of his, who was taken seriously ill. He attended to the summons without hesitation, and visited his sick friend without mentioning a word of the mournful event of which the latter had only been made aware by the usual *lettre de faire-part*, or funeral notice. M. Horteloup was Honorary Physician to the Hôtel-Dieu, Officer of the Legion of Honour, and President of the "Société Centrale de l'Association Générale des Médecins de France," to which post he was almost unanimously elected only a short time ago.

AUSTRALIA.

Melbourne, Victoria, July 17.

Small-pox in Victoria—Revaccination—Foot and Mouth Disease—The Commission on Diphtheria.

This month has been made memorable by the occurrence of small-pox in the colony. There have been three deaths, all in the same family, and eight other cases which have terminated in recovery. The disease was reported to have shown itself on the 4th for the first time, but it seems tolerably certain that a death which occurred on June 22 in the same family, although reported as varicella, was really a case of true variola. The disease has been unquestionably introduced from California. The family in which it occurred left San Francisco on April 27, variola being at that date prevalent in that city. The *Nebraska* reached Honolulu on May 5, and very soon afterwards the disease broke out in that island. On May 21 the vessel reached Auckland (New Zealand), and there also the disease has appeared. From Auckland the passengers were brought on to Melbourne by the *Hero*, touching at Sydney and some other ports *en route*. It is not ascertained whether variola has been reported in New South Wales, but it is pretty certain that the germs of the disease were brought here by the family which, landing on June 4 from the *Hero*, proceeded to Sandhurst, our principal gold-field city, and, as has been already stated, manifested the disease on the 22nd, although this case was recorded as varicella. As soon, however, as the Central Board of Health was advised of the occurrence of variola, the Chief Medical Officer, Dr. M'Crea, adopted very prompt measures in the way of isolation, disinfection, and revaccination. A complete panic has been occasioned, and the desire for revaccination has made public vaccinators exceedingly busy. It was rumoured a few days ago that a case of variola had been reported in Fitzroy, a suburb of this city, but it turned out to be only an eruption from dentition. Considering the efficiency with which the vaccination clauses of the Health Act are carried out in this colony, and the very active measures taken to hinder the spread of the disease, there is not much fear of there being an epidemic of it. Very strict quarantine regulations have been enforced, and they will be most scrupulously carried out; so that I do not foresee the likelihood of our population being extensively affected by it.

Curiously enough, the advent of the small-pox followed close upon the incursion of the bovine foot and mouth disease, which during the last six weeks has been the standing occasion of comment in pathological circles. A commission was at once appointed to investigate this disease, and it is now generally understood that it has been effectually repressed, or, as we are wont here to describe such things, "stamped out."

The ferment occasioned by the other pathological excitement—to wit, diphtheria—has quite subsided. The report of the absurd Commission, concerning which so much has been said, and out of which so much bad blood has been set in circulation, is said to be ready for presentation to Parliament. We are looking somewhat eagerly for a document which can hardly help being an absurdity, considering all the circumstances out of which it has grown. Indirectly connected with this Commission is the explanation why five members of the Medical Board have resigned in disgust. The Government have appointed a Board to inquire into the reasons of the resignation of Dr. Howitt, Dr. Motherwell, Dr. Barker, Dr. Youl, and Mr. Thomson, and it is expected some curious revelations will come to light. The Medical Board consists altogether of nominees appointed by the Governor in Council, or, to speak more exactly, by the Prime Minister of the day. As this latter person is virtually irresponsible for the time being, he is able, if he think fit, to gratify his personal preferences in any way he likes, and may thus put on the Board any number of his friends.

PROVINCIAL CORRESPONDENCE.

IRELAND.

Dublin, September 24.

Exhibition of Arts, Industries, and Manufactures.

Most of the chemical, pharmaceutical, and allied exhibits are to be found in the west gallery of the nave, which is devoted to Section A of the Exhibition, including minerals, vegetable, animal, and chemical products.

In case No. 300 is a series of specimens illustrative of Stanford's patent method of treating seaweeds. They are first subjected to destructive distillation in iron retorts, the products being charcoal, ammoniacal liquor, tar, and gas. The charcoal obtained in the first instance is afterwards made to yield potassium and sodium salts, including the iodides and bromides. A second series of specimens in the same case illustrates Stanford's chemical method of dealing with excreta of towns. This is a modification of the dry-closet system, in which the deodoriser employed is a charcoal derived from the sewage matter itself. In the first instance the excreta mixed with charcoal are distilled in iron retorts; ammoniacal liquor, tar, and gas being produced in the process. From the ammoniacal liquor sulphate of ammonia and acetate of lime are subsequently obtained, the tar and gas being also utilised, and the charcoal, which is worth £5 a ton, increasing in quantity from time to time. A third group of specimens in this very interesting collection shows fluid sewage matter which has been filtered through seaweed charcoal. The resulting fluid is clear and colourless.

Mr. Price, of the Belmont Works, Battersea, London, shows some admirable samples of glycerine, and in his case (No. 308) the various processes in candle-making are exemplified under the headings "Acidification," "Distillation," "Pressing" (oleic acid), and "Moulding."

The "Anti-Adulteration Society of Ireland," a new association, under the presidency of Lord Talbot de Malahide, has been doing good work in detecting, and prosecuting for, offences of adulteration of food, manures, &c. In the Society's collection of exhibits are samples of oxide of iron used to adulterate coffee; alum and rice flour, from wheaten flour; plaster of Paris and turmeric from mustard; Venetian red from cocoa and coffee; cocculus indicus from beer; red lead from Cayenne pepper; sand, flour, and alkaline salts, to the amount of 30 per cent., from snuff and tobacco; sand from guano; white clay (terra alba) from starch; and chrome yellow, arsenical green, and vermilion (sulphide of mercury, to the extent of 1 per cent.) from sweetmeats. For the last mentioned adulterations several confectioners in our city were prosecuted and convicted a few months ago. Specimens of genuine Leopoldshall "Kainit," a potash salt from the Anhalt mines, used as a manure, are exhibited in contrast to several spurious samples of the same.

The advances made in the preparation of chemical manures of late years are very fully illustrated in the Exhibition, the companies and firms represented being the Drogheda Chemical Manure Company; the Dublin and Wicklow Manure Company (a splendid case of specimens); Messrs. W. and H. M. Goulding, of Dublin and Cork; Richardson Brothers and Co., of Belfast; A. L. Eckford, of Dublin; and Boyd and Alexander, also of Dublin. The last-named firm, among other samples, show sulphate of soda containing 98 per cent. of sulphate, sulphuric acid of specific gravity 1·845, and chloride of lime with 38 per cent. of chlorine.

The Marine Salts Company of Ireland exhibit specimens of their manufactures at Galway. Among these I noticed kelp, prepared from laminaria digitata and laminaria saccharina;

iodine, bromine, potassium (chloride, sulphate, and bromide), etc.

Case 317 contains a most interesting group of products derived from coal, manufactured and exhibited by the engineer to the gas-works of this city, Mr. John Somerville. The principal specimens are creasote, carbolic acid, naphtha, picric acid, benzole, sulphate of aniline, paraffin, sulphate of ammonia, and a large number of beautiful aniline dyes. Close by are some enormous crystals of Pendleton alum, obtained from ordinary coal shale by Spence's method. This consists in dissolving out the alumina with sulphuric acid from what was formerly the waste coal shale. One ton of alum may be obtained by this process from fifteen tons of shale.

The General Mining Company of Ireland exhibit samples of products from their works at Silvermines, co. Tipperary. Zinc oxide, ochre, calcined calamine, and sulphides of lead and zinc are represented. In a large case standing in the north gallery, the Mining Company of Ireland (Limited) have quite an exhibition of their own, including specimens of copper from Knockmahon, co. Waterford; of lead and silver from Ballycorus, co. Dublin; of lead from Luganure, co. Wicklow; and of coal from Slieveardagh, co. Tipperary; and Duhallow Collieries, co. Cork.

In the west gallery, Messrs. Boileau and Boyd show an admirable collection of chemical and pharmaceutical preparations. The case containing these is surmounted by two pyramids of barium nitrate crystals, and a towering mass of crystals of sulphate of copper. In the case itself are specimens of the various iron salts of the Pharmacopœia, of iron alum, of bromide and red iodide of mercury, iodide of lead, sulphate of nickel, chloride of cobalt, the mica-like iodide of cadmium, bromide of cadmium, nitrate of ceranium, cyanide of potassium, chromic acid, mannite, podophylline and jalapine, and beautiful silky crystals of theine. As an illustration of the sterling worth of home manufacture this case is second to none in the Exhibition, and it reflects great credit on the enterprising firm it represents.

Before concluding this letter, I wish to call your attention to an announcement lately made that a course of twelve lectures on sanitary science will be delivered in the Exhibition building during October and November, by Dr. Chas. A. Cameron, Professor of Hygiene in the Royal College of Surgeons, Ireland, and Analyst to the City of Dublin. A comprehensive syllabus of the lectures has been published, and I have little doubt that this fresh proof of the anxiety of the executive of the Exhibition to advance science and art in every way will be appreciated by the public, especially at a time when attention is being so repeatedly and so forcibly drawn to the subject of sanitary improvement.

GENERAL CORRESPONDENCE.

THE PUBLIC HEALTH ACT.

Letter from Mr. C. Bulteel.

[To the Editor of the Medical Times and Gazette.]

Sir,—I forward by this post, at your request, another of my papers on the Public Health Act. In your observations last week you need not have been so kind as to have concealed my name, as my mind is thoroughly made up, and I am not likely to change my opinion on the importance of the Medical Officer of Heath being independent of private practice. The point appears to me to be, not so much whether the members of the medical profession are all so high-minded as to be entirely uninfluenced by private considerations (as a rule they may be so, though there are lots of flunkeys among them, as proved by their willingness to accept such positions, as they do in some cases, under the Poor-law Board); the point rather is, Is it justifiable to place a medical man in a public position in which, if he does his duty fearlessly, he will be exposed to inevitable risk of loss of practice, and thereupon of income?

I am, &c., C. Bulteel, F.R.C.S.

62, Durnford-street, Stonehouse, Plymouth, September 25.

THE PROPOSED MEDICAL MICROSCOPICAL SOCIETY.

Letter from Mr. J. W. Groves.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reply to Mr. T. C. White's letter in the last number of the *Medical Times and Gazette*, proposing the establishment of a medical section of the Quekett Microscopical Club, I beg to state that I consider his motion quite impracticable, for this, if for no other reason—viz., that all the members of the Club, both medical and non-medical, would have access to the meetings of the Section, the lay members thereby seriously inconveniencing the medical, and preventing them from gaining those advantages which they would probably obtain either in a separate society or in a microscopical section of some medical society. Though I am endeavouring to establish a separate society, I quite agree with several gentlemen who have communicated with me on the subject, that it would be advisable to add a section, which should meet the wants almost everyone feels, to one of the existing societies. But then the question arises—"To what society could such a section be added?" I answer—"Certainly not to the Quekett."

I am, &c.,

St. Bartholomew's Hospital, Sept. 23. J. W. Groves.

"HOSPITABLE HOSPITALS" AND "SICK HOMES."

[To the Editor of the Medical Times and Gazette.]

Sir,—Under the heading "Hospitable Hospitals" letters have appeared in this week's *Times* justly advocating the establishment of some kind of "sick home," to which strangers taken ill at hotels could be removed, and where nursing and comforts could be supplied at a moderate cost. The suggestion is not new, and some such institutions exist already. They need to be multiplied, and to be of various classes. We want special accommodation for fevers and small-pox; we want homes where surgical operations could be performed; others for cases of chronic illness. But there is one piece of hospitality which these institutions refuse to recognise, and which, if conceded, would bring them into far greater repute and use.

The sick traveller who was taken ill at Bâle, and received into the hospitable hospital there, was attended by his own medical adviser. But at the institutions in England the doors are closed against other than the medical officials of the establishment. The patient who enters must submit to be treated by the staff—possibly a very superior body of men—but he or she may have predilections for someone else, which surely deserve to be gratified.

It is suspected by most of us that hospitals are initiated and set going for the benefit of the ambitious and meritorious medical men who constitute the first staff. These gentlemen gain a position and status which insures them a large reputation. They need not advertise themselves; it is done by the hospital prospectus. But all this is averse from the interest of practitioners as a mass.

Let me put this case. There is an institution for the reception of invalid gentlewomen, where all care and comforts are supplied at a very small cost. So far, well. But last winter it happened to me to be treating a lady of scanty means, whom I advised for economy sake to go into this institution. "Can I have you to attend me?" she said. "No; you must submit to the attendants of the Home." This, she paid me the compliment of saying, was a very hard condition, and she would rather remain under my treatment, which was doing her good.

I know a case of a lady who went into one of these "homes" during a winter, for the sake of the many advantages and comforts they give, but who was determined not to accept the treatment of the very amiable and distinguished physician under whose care she was placed. She gave him the vaguest account of her symptoms, and succeeded in concealing the existence of a cancer, of which she died next year. The moral is obvious. If the "hospitable hospitals" are to be established with clean hands, and a single eye to the benefit of the sick, they must give the sick the entire liberty of choosing their own medical attendant, if they desire to have any other than that of the home. Thus there will be no slap in the face to the

G. P.

Metropolitan Hospital Dinners.—The opening of the medical session will be inaugurated by a series of festivals. At St. Bartholomew's Hospital the staff and old students will dine together on October 1, by permission of the governors, in the fine old hall of the institution, Mr. Luther Holden in the chair.——The annual dinner of the past and present students of the Middlesex Hospital Medical College will take place at St. James's Hall, when Mr. T. W. Nunn will occupy the chair.——The dinner of the old students of St. Mary's Hospital will be held at Willis's Rooms, under the chairmanship of Mr. Henry Spencer Smith.

LEGAL INTELLIGENCE.

CRIMINAL PROSECUTION: ILLEGALLY SIGNING A CERTIFICATE OF LUNACY.

At the Central Criminal Court, on September 25, before Mr. Justice Lush, Mr. Alexander Ogilvie surrendered to his recognisances to answer a charge of having unlawfully signed a medical certificate by which a gentleman was admitted into a house for the reception of lunatics.

On the part of the prosecution, which had been instituted by the Commissioners in Lunacy, Mr. Poland (with whom was Mr. Collins) explained that the prisoner was indicted under the 16 and 17 Victoria, cap. 96, sec. 13, which enacted that any person who should sign any certificate under that Act, in which he should be described as a physician, surgeon, or apothecary, not being a physician, surgeon, or apothecary respectively within the meaning of that Act, should be guilty of a misdemeanour. The statute directed that a person who was not a pauper could only be detained on an order signed by a relation and on two medical certificates signed by two physicians, surgeons, or apothecaries; and so carefully were the provisions intended to prevent persons from being improperly confined that the certificates had to declare that each person certifying had examined the patient separately, and stated other particulars required by the Act. The Act itself defined a physician, surgeon, or apothecary to be legally qualified to practise as such, and, by a subsequent Act, called the Medical Act, a register had to be kept of legally qualified medical men, who could only be registered on proving that they held the requisite diplomas entitling them to practise. By a subsequent Act it was enacted that medical men authorised to sign certificates under the Lunatic Acts, should be persons registered under the Medical Act. It was also enacted that any certificate signed by an unregistered medical man was invalid. The gentleman who had been taken to the asylum in this case had received a sunstroke, and was unquestionably insane for some time. Dr. Stewart, of the University of Glasgow, and a Licentiate of the College of Physicians, was called in to see the patient, and he, being authorised so to do, signed one of the certificates. A second one being required, the defendant, who resided at 4, Lime-grove, Shepherd's-bush, was also called in by the relatives, the patient being at that time violent, and resident in that neighbourhood. The defendant had not the word "surgeon," but "surgery and midwifery," painted outside his house with his name, and in this way he appeared to have tried to evade the Act. In the certificate he described himself as surgeon and general practitioner, and against his signature he wrote the words "Surgeon R.N., 1830." The two certificates having been signed, the patient was then removed to the Peckham House Lunatic Asylum on July 20. Copies of the certificates were then forwarded by the proprietor of the asylum to the Commissioners in Lunacy, who, according to their practice, at once carefully examined them to see that the detention was regular. Finding only the word "surgeon" and no college mentioned, they sent the defendant's certificate back to be amended. The defendant then added to his certificate "M.D. St. Andrews, 1828." That created suspicion, and they then discovered he was not registered in the last published "Register," and from inquiries they ascertained that he had not been registered since the last edition was published. They at once communicated with the proprietor of the asylum, and the patient was discharged on August 6, having been detained there since July 20 under the illegal certificate; and he was then, happily, so far relieved that it was unnecessary that he should be again restrained. That being so, Mr. Poland purposely avoided mentioning his name, as it might cause him pain and interfere with his prospects. On inquiry it was afterwards ascertained that the statements the defendant had made in his certificate as to his qualifications before mentioned were wholly false. It also appeared that, according to the "London and Provincial Medical Directory" for 1856, Alexander Ogilvie, of the address mentioned, was described as being a Licentiate of the Royal College of Surgeons, Edinburgh, 1826, and also of the Hon. East India Company's Service, 1828. Something occurred about that time to render inquiry necessary, and his name was afterwards omitted from that book. The Commissioners, having their attention called to the entry when the present inquiry occurred, found that he also had not those qualifications. The certificate in question was, therefore, not signed by a medical man who had merely omitted to get himself registered, but by a person who had no authority whatever to sign it. The Commissioners, in all those cases, carefully scrutinised the orders and certificates at once, to see that the detention was legal and proper; and when they found what the real facts of this case were they felt it to be their duty to prosecute the defendant, not only for the purpose of making the law fully known, but with the view, by the punishment of the defendant, to deter other persons from violating the provisions of the Lunacy Acts, which contained provisions carefully framed for the protection of the public against improper detention on grounds of alleged lunacy.

Mr. Besley, as counsel for the defendant, in mitigation of punishment said that it could not be questioned that the Commissioners of Lunacy were justified in the prosecution, for the purpose, as their counsel expressed it, of letting the law be known. But Mr. Ogilvie was not aware that in signing as a "surgeon within the meaning of the Lunacy Acts," which as a fact he was not, he was committing a misdemeanour. He was 70 years of age, and after being scholastically and professionally educated was recommended by the late Sir B. Brodie for an appointment as Surgeon in the Royal Navy. He actually served aboard the *Britannia* in 1828, but was not rated as Surgeon, and therefore no trace was left of that service at the Admiralty. For forty-two years he had practised surgery and midwifery with great success, and for twenty-five years had lived at his present address, 4, Lime-grove, Shepherd's-bush. The patient lived three doors off, and on July 17, early in the morning, he found him suffering from cerebral congestion, the result of a sunstroke. Active treatment was resorted to, and on the next day Mr. Stewart, the other signatary of the certificate, who was the family medical attendant, saw him in consultation with Mr. Ogilvie, and approved that treatment. The patient became more violent, and as two attendants from the asylum and two nurses could not control him, Mr. Stewart procured the necessary papers for his removal to the asylum, and a brother of the invalid requested Mr. Ogilvie to sign. The case was urgent, and Mr. Ogilvie, no doubt, yielded to the request, but received no fee or reward, and was only influenced by charitable regard for the poor man, who was dangerous to himself and others. After the prosecution was instituted he petitioned the Commissioners to forego it, and numerous testimonials, which were now handed to his lordship, expressive of appreciation of Mr. Ogilvie's skill and attention, from persons who had been treated by him, were sent with the petition. Some were from medical men who highly esteemed Mr. Ogilvie, and one from the vicar of the parish, acknowledging the advantage of his advice in times of prevalent sickness. It was not a case where any harm had arisen to any living being, and, remembering Mr. Ogilvie's advanced age and high character, he trusted his lordship would deal with him in accordance with the facts which had been fully stated.

Mr. Justice Lush said this appeared to be the first case of the kind in which a judge had been called to pronounce sentence, and the statute itself left the punishment entirely at large. It merely classified it as a crime for which a fine or imprisonment, or both, might be inflicted. The Court had, therefore, to consider what was the mischief intended to be suppressed, and the probability of any recurrence of it. He did not doubt that Mr. Ogilvie's intention was entirely free from any immoral taint. It was not a case in which, for any bad purpose of his own, he sought to imprison this gentleman, nor was it a case of lending himself to any bad motives of other people. He appeared to have acted under the belief, which seems to have been well founded, that it was really for the gentleman's own welfare that he should be put under proper care. It was a case in which there was the smallest degree of criminality that could be supposed to be involved in that particular clause of the Act. Had it been otherwise he should have inflicted a serious amount of imprisonment; but as the motive was the benefit of the patient himself, and as the course in question was taken at the instance of friends who had charge of him, it appeared to him to be a crime of a mitigated character. Still, it was an offence against the Act of Parliament, which was intended to provide for the good treatment of the unhappy persons who might be deprived of reason, and also to restrain those who, from interested motives, might have an object in imprisoning them in a lunatic asylum. It was an Act which could not be violated with impunity, however laudable the motive might have been in this particular instance; and, looking at all the circumstances, he thought the justice of the case would be satisfied by a pecuniary fine. He therefore sentenced the defendant to pay a fine of £50, and to be imprisoned until it was paid.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentleman passed his Examination in the Science and Practice of Medicine, and received a Certificate to practise, on Thursday, September 19, 1872:—

Smith, Richard, Digbeth, Birmingham.

The following gentleman also on the same day passed his Primary Professional Examination:—

Twort, William Henry, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ALLCHIN, W. H., M.B. Lond., M.R.C.S., L.S.A.—Physician to the St. Marylebone General Dispensary.

BIRT, ERNEST, M.R.C.S. Eng.—Assistant Medical Officer to the Berks County Asylum, Moulsford, near Wallingford.

CAMPBELL, HENRY ROBERT—Medical Officer for the Twickenham District of Brentford Union, in the place of his late father.

POLLARD, THOMAS MILBANKE, L.K.Q.C.P.I., L.R.C.S.I., L.M.—Medical Officer of the Dunkineely Dispensary District of Donegal Union.

RYAN, JOHN, M.R.C.S.—Medical Officer for the Annacotty Dispensary District of Limerick Union.

WEBB, CHARLES FRERE, L.R.C.P. Edin., L.M., M.R.C.S. Eng.—Medical Officer for No. 1 District of Basingstoke Union, *vice* James Potter Lewis, L.R.C.P. Edin., M.R.C.S. Eng., resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—Dr. William W. Dalby, Staff Surgeon, to the *Glasgow;* Dr. John R. Holman, Staff Surgeon, to the *Britannia;* Dr. William Loney has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in her Majesty's Fleet.

WAR OFFICE.—MEDICAL DEPARTMENT.—Assistant-Surgeon Decimus Filius de Hodgsou, M.D., from the Royal Artillery, to be Staff Surgeon, *vice* Andrew Robertson Smith, who retires upon temporary half-pay; Assistant-Surgeon Henry Harrison, from the 46th Foot, to be Staff Assistant-Surgeon, *vice* James Shaw M'Cutchan, M.B., who exchanges; Assistant-Surgeon John Thomas Milburn, from the 10th Hussars, to be Staff Assistant-Surgeon, *vice* Henry Cornish, appointed to the 10th Hussars; Assistant-Surgeon William Henry Garde, from the 21st Foot, to be Staff Assistant-Surgeon, *vice* Richard Lambert, deceased; Staff Assistant-Surgeon Thomas Alexander Clapperton Macarthur retires upon temporary half-pay.

BIRTHS.

COPE.—On September 21, at Broad-green, Croydon, the wife of Walter H. Cope, M.R.C.S. Eng., of a daughter.

ELKINGTON.—On September 17, at 52, Gillingham-street, Eccleston-square, the wife of A. G. Elkington, Surgeon Major Grenadier Guards, of a son.

GOURLAY.—On September 19, at Weston-super-Mare, the wife of Frederick Gourlay, M.D., of a daughter.

LLOYD.—On September 18, at Mellington Hall, Montgomeryshire, the wife of George Lloyd, M.D., of twin sons.

LONSLEY.—On September 13, at Eldon-road, Reading, the wife of Oded Lonsley, M.R.C.S. Eng., L.S.A., of a son.

MARTIN.—On September 19, at Cambridge House, Portsmouth, the wife of John Henry Martin, M.D., of a son.

NASON.—On September 23, at Stratford-upon-Avon, the wife of John James Nason, M.B., of a daughter, stillborn.

WILSON.—On September 21, at 25, Promenade, Cheltenham, the wife of Surgeon-Major J. Wilson, Madras Army, of a daughter.

WORLEY.—On September 22, at Brook Lodge, De Beauvoir-road, N., the wife of W. C. Worley, L.R.C.P. Lond., M.R.C.S. Eng., of a daughter.

MARRIAGES.

BISHOP—TRELOAR.—On September 19, at the parish church, Lewisham, William Bishop, L.R.C.P. Edin., M.R.C.S. Eng., of Elham, Kent, late of Chipping Norton, Oxon, to Annie, daughter of Thomas Treloar, Esq., Pitmain Lodge, Granville-park, Blackheath.

BRENNAND—LITTLE.—On August 7, at Singapore, James Brennand, Esq., to Sophia, eldest daughter of — Little, M.D.

GOODALL—BLAYDES.—On September 19, at St. Mary Magdalene, Peckham, Joseph Goodall, L.R.C.P. Lond., M.R.C.S., of St. Ives, Hunts, to Ann Strickland Blaydes, daughter of the late Thomas Blaydes, Esq.

HILLYER—SPRATT.—On September 7, at Flushing, New York, U.S.A., the Hon. William Richards Hillyer, Judge of Ocala, Florida, U.S.A., to Fanny Frederica Spratt, only daughter of J. Eldridge Spratt, L.F.P.S. Glasg., of Mayfair, London.

MASTERMAN—GOODWIN.—On September 19, at All Saints' Church, Norfolk-square, G. F. Masterman, M.R.C.S. Eng., L.S.A., of Burnham, Bucks, to Maud, second daughter of the late Charles Goodwin, Esq., of Addiscombe, formerly of Copford, Essex.

NICHOLSON—SIMPSON.—On September 19, at St. Mary's, Lichfield, Emilius Rowley Nicholson, M.D., to Cecilia, second daughter of Charles Simpson, Esq., Town Clerk, Lichfield.

ORTON—HARRISON.—On September 19, at St. John's, Birkenhead, George Hunt Orton, M.B., eldest son of William Orton, Esq., Narborough Hall, Leicestershire, to Mary Parker, only child of George Harrison, Esq., Grangefield, Birkenhead.

PEATFIELD—SIDDON.—On September 21, at St. Martin's-in-the-Fields, Trafalgar-square, Thomas John Peatfield, Assistant-Surgeon Royal Artillery, youngest son of the late Joseph Peatfield, Esq., of Edwinstowe, Nottinghamshire, to Alice Mary Jane, widow of the late Samuel William Siddon, Esq., of Pleasley-hill, Mansfield, Notts.

PRITCHARD—PALLISTER.—On September 19, at St. James's Church, Gravesend, Urban Pritchard, M.D., youngest son of Andrew Pritchard, Esq., of Canoubury, London, to Charlotte (Lottie), eldest daughter of Blades Pallister, Esq., of Gravesend.

UNDERHILL—LAMBE.—On September 18, at St. Thomas's, Edinburgh, Charles Edward Underhill, B.A., M.B. Cantab., to Anna Wilhelmina, daughter of the late Alexander Imlach Lambe, of Berhampore, Bengal, and 8, Coates-crescent, Edinburgh.

YARROW—GUTHRIE.—On September 4, at St. Andrew's-place, Brechin, Forfarshire, Frederick John Yarrow, of Monte Video, to Eliza, eldest daughter of John Guthrie, M.D., of Brechin.

DEATHS.

BRYAN, EDWARD LANGDON, M.D., of 15, Kensington-park-gardens, London, at Brighton, on September 20.

CAMMACK, SARAH HARE, widow of Robert Cammack, M.R.C.S., of Lincoln, and mother of the Rev. J. C. Cammack, curate of St. James's, Norland, W., at 15, Saunders-road, Notting-hill, suddenly, on September 8.

CHATTERTON, JAMES, M.D., Assistant-Surgeon Scots Fusilier Guards, eldest son of George Chatterton, Esq., J.P., at the Tower, London, on September 21, aged 28.

CROTHERS, JESSIE, wife of Robert Crothers, M.D., formerly of Moy, co. Tyrone, and Nice, France, at 2, Warrior-square, Square-terrace, St. Leonard's-on-Sea, after a long illness, on September 22, aged 51.

CURTIS, BEATRICE LILLIAN, infant daughter of J. Lindsey Curtis, Assistant-Surgeon 18th Royal Irish Regiment, at Malta, on September 5.

FALLOON, EDWARD S., M.D., at 12, Shaw-street, Liverpool, after a long and painful illness, on August 13, aged 53.

HALL, FREDERICK, M.R.C.S. Eng., L.S.A., at 269, Stanhope-street, Regent's-park, N.W., after a long and painful illness, on September 18, aged 73.

JACKSON, STEWART ARDAGH, second son of the late Edward Marriott Jackson, Surgeon-Major, late H. E. I. Co.'s Service, lost at sea in the *Glenmark*, which sailed from Port Lyttelton, New Zealand, on February 1 last, and has not since been heard of.

KIDD.—On September 2, at 16, Belvidere-place, Mountjoy-square, Dublin, Isabel Norah, aged 6½ months; and on September 16, at 30, Merrion-square South, Dublin, Lilian Elizabeth, aged 6 years and 3 months—the beloved children of Leonard Kidd, M.B., Surgeon 51st (King's Own) Light Infantry.

THOMPSON, MABEL, daughter of Staff Surgeon-Major J. A. W. Thompson, at Southsea, on August 17, aged 1 month and 3 days.

WOOD, CHRISTIAN SUSANNAH, wife of William Wood, M.D., at Vincent House, Wakefield, on September 15, aged 61.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

HOSPITAL FOR CONSUMPTION, BROMPTON.—Resident Clinical Assistants. Candidates must send in their applications, with testimonials, on or before October 1. Further particulars may be obtained at the Hospital.

PARISH OF ST. GEORGE'S, HANOVER-SQUARE.—Medical Officer of Health. Candidates will be required to strictly carry out the duties as laid down in the 132nd Section of the Metropolis Local Management Act, from time to time to test the gas, and to analyse the water supplied to the parish, to carry out the duties of Analyst under the Adulteration of Food Acts, and to superintend the Inspector of Nuisances in the exercise of his duties. Applications, with testimonials, to the Vestry Clerk, at the Board-room, Mount-street, W., on or before October 16.

SUNDERLAND INFIRMARY AND DISPENSARY.—Dispenser to take charge of the Infirmary and Dispensary in Lambton-street. Applications, with testimonials, to the Secretary, John Kitts, 67, Tatham-street, Sunderland, on or before October 1.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the Universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Bath Union.—Mr. W. A. Cox has resigned the Fifth District; area 6504; population 3688; salary £40 per annum.

Glanford Brigg Union.—Mr. T. T. Des Forges has resigned the Burton Stather District; area 15,515; population 2700; salary £38 per annum.

Tenterden Union.—Dr. Tessier has resigned the Biddenden and Halden Districts.

APPOINTMENTS.

Bingham Union.—Henry Wotton, L.R.C.P. Edin., M.R.C.S. Eng., to the Bingham District and the Workhouse.

Manchester Township.—Thomas Price, M.R.C.S. Eng., L.K.&Q.C.P.I., as Junior Assistant Medical Officer at the Workhouse Hospital.

THE ROYAL MEDICO-CHIRURGICAL SOCIETY.—The first meeting for the ensuing session will be on Tuesday, October 8, at 8.30 p.m., at 53, Berners-street.

ROYAL COLLEGE OF SURGEONS.—The library and museum of this institution will be reopened on Tuesday next, October 1, on which day the annual registration of metropolitan students will commence, terminating on the 15th. The primary and pass examinations for the diploma of Member will take place early in November.

DR. EVORY KENNEDY has been pursuing an active canvass in Londonderry during the last few days, on Liberal principles.

A NEW infirmary was opened last week at Oldham. The cost of the building, which is £7500, has been defrayed by subscription.

SMALL-POX is still raging with great violence at Valparaiso.

THE Small-pox Hospital at Hampstead is now, and has been for the past month, clear of patients. A proposal to convert it into a place for the reception of imbeciles is under consideration.

THE St. Pancras Guardians have resolved to appoint, subject to the sanction of the Local Government Board, Dr. Rudyard as an outdoor Medical Officer for the schools at Leavesden for six months, as an experiment, at a salary at the rate of £70 per annum.

THE Medical Society of London will commence its meetings for the session on Monday, October 21. The Lettsomian Lectures will be delivered by Henry Lee, F.R.C.S. —subject, Urethral Discharges. The annual oration by Andrew Clark, M.D., F.R.C.P. The subject for the Fothergillian prize essay for March, 1873, is on Cancer; for March, 1874, on Therapeutic Means for the Relief of Pain. Dissertations competing for the above must be sent in on or before the preceding November 1.

ANDERSON'S UNIVERSITY, GLASGOW.—On Tuesday, Mr. George Forbes, B.A., of St. Catherine's College, Cambridge, was elected to the chair of Natural Philosophy, and Dr. Lindsay, Glasgow, was appointed to the chair of Medical Jurisprudence.

INOCULATION IN INDIA.—The Government of India has lately ruled that the prohibition of inoculation is only justifiable when complete means of protection by vaccination have been supplied to the people.

INDIAN MEDICAL OFFICERS.—By advices from India of August 30 we learn that it has lately been decided that commissioned medical officers of the army holding civil medical appointments are subject to the same rules in regard to privilege and other leave as military officers in civil employ.

THE VACANT PHYSICIANSHIP TO THE NORTH DUBLIN UNION DISPENSARY.—The Commissioners for Administering the Laws for the Relief of the Poor in Ireland have, on the report of Mr. O'Brien, Poor-law Inspector, confirmed the election of Mr. William Dudley White to the above appointment.

SMALL-POX IN THE RIVER.—It was reported to the Plumstead District Board, at their meeting last week, that the Norwegian brig *Fido*, with small-pox on board, had been beached on the shore at Charlton for repairs, but the parish sanitary inspector had taken immediate steps in the matter, and the ship was taken down to the quarantine ground below Gravesend.

VACCINATION IN SHOREDITCH.—The Vaccination Officer (under the new Vaccination Act) of Shoreditch, in his first half-yearly returns, shows that the total number of children registered as having been born in the parish during the past six months was 1853. Of these, 1378 had been successfully vaccinated, 3 were insusceptible, 188 died unvaccinated, 201 cases were removed to unknown places, and out of the 1853 children there were 47 whose non-vaccination was unaccounted for.

SKIN-GRAFTING.—M. Marduel has in the *Lyon Médical* (for September 15 and preceding numbers) an elaborate analysis of all the hitherto published facts connected with this subject, which will prove of great use to all those investigating it. In regard to the "clinical results" which may be fairly deducible from the trials of the practice, he speaks much less sanguinely than many of those who have adopted it. It is true that the grattings seem often to have increased the rapidity with which cicatrisation takes place; but then this is especially observed in those wounds which have a red, healthy appearance, and seem (as Reverdin says) as if about to cicatrise; but when we have to do with atonic, fungous, and soft granulations, the means fail, as they do in scrofulous wounds and all others that have no tendency to cicatrise. Some surgeons, indeed, ask whether the true cause of the more rapid cicatrisation when it does take place is not rather the minute care which is taken in dressing the wound. Then, again, the solidity of the cicatrix has not always proved considerable, ulceration in it readily occurring. In fact, the success of skin-grafting, amidst so much contradictory evidence, cannot yet be considered as established, and further investigation into all the circumstances attending the practice is called for.

THE FRENCH MEDICAL FACULTY OF STRASBURG.—This learned body, founded in 1808, and which, in point of the number of its students, was surpassing Paris before the outbreak of the recent war, is now finally abolished, the *ad interim* school which had been established since the cession having received notice that it will be closed after the 30th inst. Five of its professors have joined the new German University. The others are in a deplorable position; for, although the French Government has announced its intention of providing for them in the new Faculty to be established at Nancy, it has taken no steps to give effect to its resolution. In the mean time, all practitioners must choose before October 1 whether they will be French or German subjects, and in the former case the loss of their practices will ensue unless they consent to live as foreigners in what was once their own country.

LONGEVITY.—Last Saturday's *Western Daily Press* records the death of William Webb, at the age of 105. The deceased received his discharge from the Royal Marines in 1799.

ADULTERATED VINEGAR.—The addition of vitriol to vinegar—a common habit with unscrupulous dealers—will in future render them liable to a penalty of £20 for each offence.

POMADE IN LOSS OF HAIR.—M. Bouchut recommends the following to be rubbed in night and morning when the hair falls off after delivery or serious illness, giving at the same time, internally, iron and quinine, and in some cases the syrup of arseniate of soda:—Extract of henbane 10, tincture of iodine 5, and beef-marrow 30 parts, scenting with bergamot. —*Union Méd.*, September 17.

MEDICAL WOMEN.—Professor Bischoff, of Munich, thus expressed himself in a recent address:—"The female sex, conformably to a divine and natural disposition, is not possessed of the capacity of studying and practising the sciences, and still less Medicine. The study and practice of Medicine are opposed to the most noble aspects of, and deprive of its finest appanages, the nature of woman—decency, modesty, compassion, charity, all advantages which distinguish her from man. The production of medical women is incompatible with our governmental institutions relating to schools and universities. Their presence at lectures on Medicine disturbs the success and compromises the morality of young persons of the other sex. The increase in the number of medical practitioners brought about by incapable and half-instructed medical women would interfere with and disturb in the most mischievous manner the future culture of the art and science of Medicine. Such increase would also have the effect, while it materially injured men-practitioners, of compromising the sanitary condition of the country, alike in time of peace and of war."—*Presse Belge*, September 15.

SIR PATRICK DUN'S HOSPITAL, DUBLIN.—At a special meeting of the Board of Governors of Sir Patrick Dun's Hospital, held on September 17, a letter from the Rev. Joseph Grant Mooney, C.C., was read, dated St. Patrick's, Ringsend, September 9, and addressed to the Board of Directors of the Hospital. The letter complained of neglect of a boy named Thomas Mullins, who, suffering from small-pox, was admitted into Sir Patrick Dun's Hospital. The allegations were that he was allowed to remain for several hours without drink and without attendance; that whilst suffering from delirium he was allowed, on the evening of the 4th ult., to get out of his bed, and dress himself, leave the ward and Hospital, and, going out into the cold air, run across the grounds, and climb the Hospital gates unobserved; and that he would have effected his escape, only, fortunately, he was seen in the last act by a young girl connected with the Hospital, who gave the alarm to the nurses, when he was rescued from his perilous position, and brought back to the ward with great difficulty and force. The Rev. Mr. Mooney's letter having been read, the Board proceeded to take evidence from the officers and servants of the Hospital, after which they directed the Registrar to send the following letter to the Rev. Mr. Mooney:—"Sir Patrick Dun's Hospital, Grand Canal-street, Dublin, September 23, 1872.—Rev. Sir,—I am directed by the Board of Governors of Sir Patrick Dun's Hospital to inform you that

your letter of the 9th inst. was considered at a special meeting held on the 17th inst., and the charges therein contained were investigated. I am directed also to enclose a copy of the evidence taken, upon which the board have come to the conclusion that, with the exception of the brief absence from the ward of the nurse in charge, in respect of which they altogether acquit her of blame, none of the instances of neglect complained of in your letter have any foundation in fact. The Board feel it due to themselves and to their officers, in consequence of the publicity already given to the matters investigated by them, to send copies of your letter and of the evidence taken to the public press.—I am, sir, your obedient servant, JOSEPH R. BEATTY, Registrar." With reference to this matter the following facts may be mentioned:—Small-pox has been dreadfully rife in the districts of Ringsend and Irishtown, near Dublin; and on investigation it was found that on an average only one in every four patients was sent to hospital when stricken down with the disease, the great majority of cases being treated in the crowded homes of the sufferers. This lamentable state of things was largely due to the influence on the poor population of false charges of neglect brought by the mother of a boy treated at Sir P. Dun's Hospital against the nurses of that institution. "How great a matter a little fire kindleth, and the tongue is a fire."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

F. P.—There was one insurance society which favoured homœopathy, but it has come to grief.

Meteorology.—Apply to Casella, Holborn-circus, E.C., who will give you an estimate. You will find Buchan's "Handy-book of Meteorology," published by Blackwood, useful.

A Third Year's Student.—The desired information will be found in the Calendar of the College of Surgeons. The subjects for the prizes can be ascertained from the Secretary.

Chas. Famarris.—Yes. There is the Maternité, or hospital for accouchements, in Paris. Dr. Tarnier is the Physician-Accoucheur.

Thos. Omer.—We have only to say—"'Tis true, 'tis pity, and pity 'tis 'tis true."

C. N., Sheffield.—See a case by Dr. Hughes and Messrs. Hilton and Ray, Guy's Hospital Reports, 2nd series, vol. iv.

W. S. D., Hereford.—No. For a description of the apparatus see *Medical Times and Gazette*, July 24, 1869.

H. Stevenson.—Sir James Simpson has described the affection under the head of "Ball-valve Obstruction of the Rectum by Scybalous Masses." See *Edinburgh Monthly Journal of Medical Science*, April, 1849.

Sunderland.—We have read with much regret the report, contained in the *Sunderland Herald* of Saturday last, of a meeting of the Governors of the Hospital for Sick Children in that town. It appears that, owing to a disagreement between the Physicians to the institution—Dr. Pyle and Dr. Morley Douglas—the Hospital was threatened with destruction. Indeed, Dr. Pyle not only resigned his appointment to it, but it was asserted that he had induced the treasurer to give up the possession of the house where the business of the Hospital was carried on. Dr. Douglas, in this state of matters, very properly called a meeting of its subscribers and friends, whom he justly said were the proper persons to decide whether the institution should cease to exist. A meeting was accordingly held on Thursday week, and somewhat numerously attended. It is to be regretted, as Dr. Pyle's conduct was called in question by Dr. Douglas, that that gentleman was not present. Several of the Governors expressed their sorrow that a dispute had arisen between the medical officers, and eventually a resolution was carried appointing a sub-committee to inquire into the constitution and state of the Hospital. We shall look with interest to the result of the inquiry.

Medical Officers of Health under the Public Health Act, 1872.—The Town Clerk of Leicester, in a report on this Act recently submitted to the Town Council, says—

"It was stated that the Government intended hereafter to pay half of the remuneration of the Officer of Health, and also half the remuneration of the Inspector of Nuisances. But although it was at all times pleasant to a Board to put its hand into the pocket of the Treasury, with a sort of notion that if they gained nobody lost, it was clogged in this case with certain conditions which they would do well to consider before they accepted them. There was a provision in the Act to this effect—that any officer whose salary or any portion thereof was paid out of money voted by Parliament, was to be subject to the same jurisdiction and superintendence of the Local Government Board as they had in the case of the medical officer of a district of the union; the effect of which was, if they accepted the money, that the general action, the appointment, the duties, the salary, and the dismissal of their officers would be entirely dependent upon the Local Government Board; and it would be for them to consider whether they were disposed, for the sake of one-sixth of a penny rate in the pound in the course of a year, to sacrifice so much of their municipal independence as the acceptance of the money required."

If the "municipal independence" of Leicester conflicts with its sanitary welfare, there is no doubt which ought to give way.

Edinburgh University.—Professor Maclagan, in presenting a bust of Professor Syme to the University of Edinburgh on August 1, said—"The Syme Surgery Fellowship has been instituted, and, by the aid which had been received from the Association for the Better Endowment of the University of Edinburgh, it now possessed a capital fund of £2500. The first competition would be held in 1874, and that man would indeed be fortunate who was able to announce himself to the world as the first Syme Surgery Fellow of the University of Edinburgh."

Student.—The study of Medicine involves the study of the whole of human nature—moral as well as physical. Of these the moral is infinitely the higher in itself; and, as regards the power of doing good, the man who understands *human nature—i.e.*, its moral nature—will beat hollow the man who piques himself upon his knowledge of *physiology* as commonly understood. Don't imagine that we underrate the value of accurate and measured observation. We have written yards of argument in favour of the plan of training a youth in the niceties of chemical manipulation, in accurate weighing and counting and measuring, over that of training him as apprentice in a surgery to learn rough facts in a casual way. And the most exquisite accuracy ought to mark the practitioner's clinical method. Instead of saying the pulse is fast, the skin hot, and the breathing rapid, we ought to know by the chronometer and thermometer how hot and how rapid. We ought to know a man's weight, and whether he gains or loses, and the quantity of daily urinary excreta. Physical diagnosis by the ear, the eye, the touch, the measuring-tape, the pleximeter, etc., ought to be carried out to the full. But surely whilst this is all done there is no reason to neglect the mind, the sentiments, the passions, the whole character, the revolt of which against "surroundings" is a thing that must be taken into account in interpreting the symptoms of women and of men too. Now, it is to this knowledge of human nature in its highest phase that literature is a key. We do not mean to say that to be a good Greek scholar will compensate for being a bad stethoscopist, but we say that a competent knowledge of literature will help a man to use his physical knowledge to the greatest advantage.

Alumnus.—We are thankful of our correspondent's approbation, and for the cutting he sends us from the *Edinburgh Courant* of August 2. Professor Maclagan, at the ceremony of "capping" the graduates on August 1, gave the embryo doctors some most excellent advice as to the employment of their leisure. First he spoke of the claims of literature, and evidently has no relish for the idea that science need be illiterate:—

"First let me urge upon you the claims of literature. I know very well that you can have had but little time during the last four years for any reading except that which pertained to Medicine, and that, however good your preliminary education may have been, must have become a little rusty as respects the *belles lettres*. Have you any lingering regard for the ancient classics? Revive your acquaintance with them. . . . . Have you a certain consciousness that you are not so well up as you might be in English literature? In that case, by all means let the ancients sleep for a while, and let your literary revival, like good charity, begin at home. Have you only a slight acquaintance with modern languages? Set about improving yourselves in one at least of them. Look at that noble language of Germany. If you do not value it as that of Goethe, Schiller, Arndt, Uhlan, Körner, value it at least as the mother tongue of Liebig, Külliker, Virchow, Frerichs, Casper. If you find the poets too much for you, then let me recommend to you the pleasant simple tales of Nachländer or Freytag. Sit down doggedly with the book and a dictionary, read it through chapter by chapter; you will meet with nothing wrong in it, and at the end you will find that your time has not been lost. Do your tastes rather incline towards French? . . . . Let me commend to you the admirable stories of MM. Erckmann-Chatrian, on which I shall only make this criticism, that whilst some histories are fiction under the mask of history, these are history in the form of graphic fiction. . . . . Here there is something for your leisure hours at once pleasant and practical—pleasant in itself, and practical in respect of the science of which it is the vehicle. With both ancient and modern literature before him, let no man say that he is at a loss as to how to occupy his leisure time. But if your tastes are not literary, let me urge upon you the claims of science. I begin by entering my protest against the idea that the cultivation of science is inimical to success in practice. Of course, if any man means to take up science as his life's work—with a view, for instance, to teaching it—he will find this incompatible with medical practice. But I am speaking of science, not as the business of life, but as the occupation of leisure, and it is absurd to suppose that that which tends to sharpen the faculty of observation, in respect of natural objects, can be detrimental to the faculty of observing the phenomena of disease. . . . . Let me mention two examples. It was when he was a practitioner in his native town of Lewes that Gideon Algernon Mantell laid the foundation of that acquaintance with geology which made him afterwards not only the author of one of the most popular scientific books that ever was written—'The Wonders of Geology'—but the discoverer of the greater number of those gigantic fossil lizards which are the marvel of modern, as they must have been the terror of primeval, times. . . . . George Johnston, of Berwick-on-Tweed, though he was brought up under the most practical of masters, Abercrombie, though he was the busy leading practitioner of his town, found time critically to describe the plants of his neighbourhood in his 'Flora of Berwick-on-Tweed;' more critically still, to examine and write the history of 'The British Zoophytes and the British Sponges,' and by these, and his numerous less important zoological memoirs, to acquire for himself a large reputation as a man of science. Let no man say, with such instances before him, that the earnest and successful practice of medicine and the cultivation of natural science are incompatible. If,

however, your tastes or opportunities are not favourable to botanical or zoological, or geological or chemical research, let me suggest the meteorology of your district as a good occupation for your leisure. A very moderate outlay for instruments, and methodical habits of observing, may enable you to do good practical service in elucidating some of those climatic conditions which determine the healthiness or unhealthiness of a district."

COOKERY IN THE COTTAGE.

D. says "It is quite lamentable to read in the *Times* of first-rate fresh-water fish—carp and tench—being thrown away because the cottagers' wives are too ignorant to cook them, or have not the means. All domestic economy seems, in obedience to the order of economic development, to be going to the wall. A century ago housewives spun their own flax and wool, and had their own clothes woven of the 'home-spun' material. Now-a-days they buy ready-made calico pregnant with artificial whitening (*vide* Dr. Buchanan's report) and shoddy cloth, and most likely buy everything in the shape of clothing ready-made. A poor man's wife cannot cut out and make up a shirt. In like manner food. Home-brewed and home-baked have gone the way of home-spun. Alumed bread and vile tea form the sustenance of our labourers and artisans—*i.e.*, of their wives and children, for the men 'take it out' in the shape of beer and steaks. A savoury home-made dish is unknown. The peasants even neglect the fruit trees in their gardens."

COMMUNICATIONS have been received from—

Professor FLOWER; Dr. W. H. PEARSE; Mr. J. CHATTO; Dr. JAGO; Dr. R. H. BAKEWELL; Dr. CHARLES BELL TAYLOR; Mr. T. M. STONE; Mr. SAMUEL LEE; METEOROLOGY; F. P.; Mr. GROVES; Dr. HERBERT DAVIES; Mr. T. J. E. BROWN; Mr. E. LAURANCE; Mr. BULTEEL; Mr. THOMAS MILBANKE POLLARD; Mr. J. WALTERS; Mr. W. ARMSTRONG; Dr. MCCRAITH; Messrs. FINZI and Co.; Mr. W. W. REEVES; Dr. MORDEN DOUGLAS; Mr. GASKOIN.

BOOKS RECEIVED—

Seventh Report of the Quekett Microscopical Club and List of Members—A Manual of the Diseases of the Eye, by Professor C. Macnamara, Calcutta—The Influence of the Mind upon the Body, by Daniel Hack Tuke, M.D., M.R.C.P.—A Summary of the Principles of a Comprehensive Measure for the Improvement of the Sanitary Laws, by Henry W. Rumsey, M.D., F.R.C.S.—Sixteenth Annual Report of the Medical Officer of Health for the Holborn District of the Board of Works—Report of the Reigate and Redhill Cottage Hospital—On the Curability of Cancer, by Dr. G. Von Schmitt.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—American Journal of Insanity, July—Dublin Journal of Medical Science, July—Newcastle Daily Chronicle—Sunderland Times—Sunderland and Durham County Herald—The Western Lancet, August—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

September 28. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

30. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

October 1. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

2. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

OBSTETRICAL SOCIETY, 8 p.m. Mr. Lowndes, "On the Registration of Still-Births." Dr. Snow-Beck. "On Pelvic Hæmatoma." And other Papers.

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Meeting.

3. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

4. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 21, 1872.

BIRTHS.

Births of Boys, 1144; Girls, 1115; Total, 2259.
Average of 10 corresponding weeks, 1862-71, 2046·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	590	516	1106
Average of the ten years 1862-71	638·9	604·7	1243·6
Average corrected to increased population	...	...	1368
Deaths of people aged 80 and upwards	...	...	38

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	2	1	5	...	3	...	14
North ...	751668	1	...	2	1	7	...	6	1	15
Central ...	333887	...	1	2	1	2	...	2	...	5
East	638928	3	5	6	1	10	1	4	2	23
South	966132	1	3	...	1	7	2	6	3	38
Total	3251804	5	10	12	5	31	3	21	6	95

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·630 in.
Mean temperature	54·3°
Highest point of thermometer	73·4°
Lowest point of thermometer	37·6°
Mean dew-point temperature	47·5°
General direction of wind	W.S.W.,W.,&W.N.W.
Whole amount of rain in the week	0·10 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 21, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Sept. 21.	Deaths Registered during the week ending Sept. 21.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2259	1106	73·4	37·6	54·3	12·39	0·10	0·25
Portsmouth ...	115455	12·1	86	52	72·8	36·4	55·5	13·05	0·09	0·23
Norwich	81105	10·9	36	40	68·2	35·0	52·1	11·17	0·30	0·76
Bristol	186428	39·8	121	75	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	39	45	67·2	33·8	52·6	11·44	0·33	0·84
Birmingham ...	350164	44·7	253	186	68·0	42·2	54·0	12·22	0·10	0·25
Leicester	99143	31·0	61	69	67·0	38·5	52·5	11·39	0·45	1·14
Nottingham ...	88225	44·2	49	49	69·2	46·3	53·9	12·17	0·11	0·28
Liverpool	499897	97·9	403	285	63·4	41·7	52·1	11·17	1·64	4·17
Manchester ...	352759	78·6	280	208	69·5	41·0	53·9	12·17	1·08	2·74
Salford	127923	24·7	91	74	64·0	38·6	52·3	11·11	0·80	2·03
Oldham	84004	20·2	56	69	...	...	...	...	...	...
Bradford	151720	23·0	142	92	70·0	41·6	54·5	12·50	0·41	1·04
Leeds	266564	12·4	172	162	68·0	39·0	54·1	12·28	0·32	0·81
Sheffield	247847	10·9	193	127	68·0	40·5	53·6	12·00	0·25	0·63
Hull	124976	35·1	97	76	66·0	35·0	51·0	10·56	0·35	0·89
Sunderland ...	100665	30·4	140	48	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	91	66	63·0	38·0	51·3	10·72	0·03	0·08
Edinburgh	205146	46·3	110	86	61·0	34·7	49·0	9·44	0·10	0·25
Glasgow	489136	94·8	384	246	63·5	36·5	49·8	9·89	0·50	1·27
Dublin	310565	31·9	142	130	65·9	35·5	51·2	10·67	0·25	0·63
Total of 21 Towns in United Kingd'm	7393052	34·0	5205	3291	73·4	34·7	52·6	11·44	0·40	1·02

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·63 in. The highest was 29·95 in. at the beginning of the week, and the lowest 29·42 in. on Wednesday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture X.

The *Tylopoda* or cushion-footed ruminants are at present only represented by the two species of camel of the Old World and the three or four species of the genus *Auchenia*, the llamas, alpacas, and vicugnas of South America. As in so many other parts of their organisation, they differ somewhat from the *Cotylophora* or typical ruminants in the structure of their digestive organs, especially of the stomach. It is true that the various compartments of this complex viscus present a general analogy with those of the former section, but their exact homologies are not so easily traced, and they have consequently been differently named by anatomists who have described them. There is even no general agreement as to the number of distinct compartments which should be assigned to it. The large sac placed anteriorly and to the left (see Fig. 35, *a b d*), lined with dense epithelium, and into which the œsophagus enters, undoubtedly corresponds with the paunch or rumen. Its special peculiarity in this group of animals is the presence in its walls of a number of diverticula or pouches, with muscular septa, and sphincter-like arrangement of their orifices, by which they can be shut off from the rest of the cavity, and into which fluid only enters in the normal conditions of life. These are not scattered irregularly or continuously over the surface, but collected into two distinct patches of narrow, elongated form; the remainder of the inner surface being

Fig. 35.

Fig. 35.—Diagramatic section of camel's stomach: *a* œsophagus, *b* ridge dividing the rumen posteriorly, *c* cells of the right compartment of the rumen, *d* cells of the left compartment, *e* groove leading from œsophagus to the compartment *h*, *f* muscular ridge bounding one side of the groove, *g* second stomach or "water-bag," *h* small compartment constricted off (in some camels, at least) from *i* the abomasus or true digestive stomach, the upper part of which has longitudinal folds of the mucous membrane, *k* pylorie valve, *l* dilated commencement of duodenum.

smooth and without the papillæ so characteristic of this part in the *Cotylophora* and *Tragulina*. The whole cavity is more globular than in those animals, and not folded in the same manner, but is partially divided into two compartments by a strong ridge (*b*), extending down the posterior wall. That to the right is the smaller, and in its general situation corresponds very much to the reticulum of ordinary ruminants. The œsophagus (*a*) enters into it near the upper end of the dividing ridge. In each of these compartments one of the groups of water-cells before mentioned is located—the smaller group (*c*) extending horizontally round the right end of the smaller compartment; the larger group (*d*) stretching longitudinally down the posterior wall of the larger or left compartment, along the side of the partial septum, from the left border of which a series of about eight parallel bands (a) extend at right angles, and, being intersected by other shorter bands, form the principal boundaries of the cells. The wide opening into what is commonly considered the second stomach of the camel, and therefore by many anatomists supposed to be the homologue of the reticulum, though, as pointed out by Daubenton, quite differently situated—also called "water-bag" (b)—is at the upper, posterior and left end of this compartment, immediately above the large posterior group of cells. This cavity (*g*) is comparatively small and of oval form, smooth externally, but with its interior almost filled with intersecting bands, the principal ones of which run across the long axis of the cavity, and form the walls of numerous cells somewhat similar to those of the rumen, and like them lined with a very vascular mucous membrane covered with a delicate epithelium, and surrounded externally by a plexus of large veins. (c) Though this sac is separated from the entrance of the œsophagus by the upper end of the partial septum of the rumen, a smooth groove (*e*) bordered anteriorly by a strong muscular band (*f*) passes from the cardiac orifice round this ridge into the farther end of the cavity. The alternate contraction of the posterior septum of the rumen (*b*) and of the band (*f*) must direct the food either into the paunch as when first swallowed, or through the water-bag to the next compartment as after rumination. A narrow oblique opening leads from the "water-bag" into a small oval or sub-globular chamber (*h*), with a smooth or slightly alveolated lining membrane, which opens by a rather larger aperture into the curved, elongated, tubular abomasus or true digestive stomach (*i*). This is rather wider near the extremities than at the middle. In its upper part the mucous membrane is raised into close-set, narrow, longitudinal lamellæ, but in the lower part it is smooth or broadly ridged and velvety. In consequence of this difference of appearance of its lining it has been sometimes considered as two cavities, the upper one being supposed, though with little ground, to be the homologue of the psalterium of the *Cotylophora*. It should be mentioned that the dromedary (*C. dromedarius*), and the llamas differ from the Bactrian camel in having the small round cavity next to the water-bag not distinctly constricted off from the abomasus; and the llamas have the longitudinal lamellæ of the latter very slightly developed. The pylorus (*k*) is a transverse aperture guarded by an oval longitudinal protuberance, as in most *Artiodactyles*. Immediately beyond it the duodenum has a sub-globular dilatation (*l*), which is reckoned by some anatomists as still another compartment of the stomach. (d) The cæcum is simple and cylindrical, the colon convoluted as in other ruminants; the under surface of the liver is marked by numerous irregular and intersecting fissures, and there is no gall-bladder.

The stomach of the camel inhabiting the Arabian desert is commonly looked upon as a striking example of specialised structure, especially adapted for a highly specialised mode of life; but it is very remarkable to find an organ exactly similar in all but some unessential details in the llamas of the Peruvian Andes and the guanacos of the Pampas. On the most probable hypothesis of a common origin, it is interesting to find that, long as these two genera must have been isolated,

(a) These are rather too numerous in the figure.

(b) Daubenton considered this to be a cavity superadded to those of the ordinary ruminants; others, as Chauveau, reckon it the homologue of the psalterium.

(c) Gratiolet regards these cells rather for the purpose of absorbing fluid rapidly than as reservoirs, and strengthens his view by reference to the fact that they are proportionately very largely developed in the young *Camelidæ* feeding entirely on fluid aliment, while, as mentioned before, at the same age in the other ruminants, the corresponding part of the stomach is almost rudimentary. ("Anatomie de l'Hippopotame," p. 388, 1867.)

(d) The above outline of the general characteristics of the camel's stomach is taken chiefly from the preparations in the Museum of the College, from Daubenton ("Buffon," vol. xi., p. 255), and from Sir Everard Home's paper, (*Phil. Trans.*, 1806, p. 357.) The account given by Dr. Crisp (*Proc. Zool. Soc.*, 1865, p. 257) differs in many respects. All the descriptions above named appear to have been taken from the two-humped camel. Dr. Jackson has given a good account of the viscera of the one-humped camel or dromedary (*Boston Journal of Natural History*, vol. iv., 1842, p. 1).

and differing as they have become to do in many ways, they still retain such close similarities in parts which in other groups appear readily subject to adaptive modifications.

The order Proboscidea at present consists of a single genus (*Elephas*) containing the two well-known species of elephant, Asiatic and African, survivors of a once numerous and widely distributed family. These animals present so many points of peculiarity in their organisation that they cannot be included in any of the other ordinal divisions, but must form a group apart. They are strictly vegetable feeders. As far as relates to the functions of nutrition, their teeth are reduced to the few large complex crushing molars, the canines being absent, and the incisors, when present, though often largely developed, are chiefly used for other purposes than obtaining food. The long, highly mobile and prehensile proboscis, continued forward from the upper lip, however, forms a most efficient instrument for gathering the various kinds of herbage on which the animal feeds, and bringing it within reach of the action of the molar teeth, thus serving the purpose of the lips, incisor teeth, and tongue of other animals feeding on similar substances.

The mouth is small, and narrow in front. The tongue is compressed laterally, high, narrow-pointed and bent down in front, and closely attached to the floor of the mouth, so that it cannot be protruded from the cavity. Its surface is smooth, being evenly covered with minute conical papillæ, with prominent fungiform papillæ scattered along the sides, and a few large circumvallate papillæ near the base. According to Camper,(e) the duct of the parotid leaves the superior extremity of the gland, and passes across the masseter very near the upper border of the muscle, and therefore agreeing with its disposition in the rodents, and unlike that characteristic of the ungulates. The ducts of the submaxillary glands open on distinct papillæ beneath the free apex of the tongue.

The stomach is simple, rather narrow and elongated, with a large conical *cul de sac* to the left of the œsophagus, the lining membrane of which is produced into transverse folds. Of the intestinal canal about two-thirds are small and one-third large intestine. The latter is not thrown into any regular folds attached to each other as in the true ungulates, but forms convolutions on the free edge of a broad mesocolon, just as the small intestine does on the mesentery. The conical and sacculated cæcum is very free, and can occupy almost any situation in the abdomen. I found it in a fœtal African elephant lying to the left side and with its apex towards the thorax. The ileum passed towards the left to enter it. The colon, which is of much greater calibre than the small intestine, and imperfectly sacculated, passed towards the pelvis, making many convolutions beneath the small intestine; then it ascended on the right side to the under surface of the liver, where it became closely attached to the duodenum at the root of the mesentery; it then formed the usual transverse arch, and descended in a tolerably straight course to its termination in the pelvis.

The liver is small for the size of the animal, and of simple form, being only divided by an umbilical fissure into two lobes, of which the right is the larger. There are no lateral fissures, and neither caudate nor Spigelian lobes are developed. There is no gall-bladder, but the bile-duct is wide and long, its mucous membrane is reticulated, and its terminal portion considerably dilated. The pancreas has two ducts, one of which opens into the biliary duct, the other separately but near to it.

A very aberrant group of animals, having apparently some affinities with the ungulates, but with a fish-like exterior and aquatic habits, constitutes the order Sirenia. As their external characters present some resemblance to those of the *Cetacea*, or whales, they have often been confounded with that group, though in reality very distinct from them. They are represented at present by only two genera—*Halicore*, the dugongs of the Indian Ocean, ranging from the Red Sea to North Australia; and *Manatus*, the manatis of both sides of the tropical Atlantic. A third genus, *Rhytina*, found only in the North Pacific, became extinct towards the close of the last century, and fossil remains of several others are known. They all frequent the coasts—chiefly bays and estuaries of rivers—and feed exclusively on aquatic vegetables, whence the name of "herbivorous cetacea" formerly applied to them.

No animals of this group came under the observation of Hunter. Our knowledge of their visceral anatomy is chiefly derived from the memoirs of Everard Home,(f) Owen,(g), and Vrolik.(h)

The teeth of both these animals are, so far as the functions of alimentation are concerned, limited to a series of bruising or crushing molars; but in the anterior part of the mouth their place is supplied by thick horny plates, which cover the narrow prolonged symphysis of the lower jaw and the corresponding part of the surface above. In the dugong these are made up of parallel vertical horny fibres, which, in numerous separate round patches, are longer and more distinct than elsewhere, giving the surface the appearance of a well-worn scrubbing-brush.

The tongue is small and narrow, does not reach the fore part of the mouth, and is only free for about half an inch at the tip. The dorsal surface is nearly as hard as the plates in front of it, and it has a pair of nipple-like horny processes at the base. The aperture of the fauces is extremely contracted, as in the capybara. According to Rapp (i) and Owen there are two large triangular parotid glands, situated immediately behind the large ascending ramus of the lower jaw, and a thick layer of simple follicular glands is developed above the membrane of the palate. The œsophagus is very narrow and muscular, and has an immense accumulation of muscular fibres, forming a sphincter, around its entrance into the stomach. This organ, which is figured by Home, is somewhat pyriform externally, with a constriction near the middle. At this point a septum projects internally, with a central aperture about three-quarters of an inch wide, which divides the whole cavity into two compartments, cardiac and pyloric. The first, however, does not appear to correspond functionally with the cardiac portion of the stomach of the ungulates with complex stomachs, as the epithelial lining of the œsophagus is not continued into it. Its lining membrane is soft and smooth, or has a few irregular rugæ. Near the left side of the entrance of the œsophagus is a hemispherical glandular mass, which forms a conspicuous protuberance externally, and has a single oblique crescentic orifice on the mucous surface. This orifice leads to a flattened canal, which courses through the lower part of the mass in a spiral manner, but branches in the upper part. The membrane lining this canal is thickly dotted with the orifices of the glands of which the organ is chiefly composed. The pyloric cavity of the stomach is elongated and narrow and curved. Projecting from its upper surface, near the constriction which separates it from the cardiac cavity, are two long conical cæcal appendages, the walls of which do not appear to be especially glandular. They communicate with the general cavity of the stomach by free orifices, without any valvular constriction. The inner membrane of the pyloric cavity is similar to that of the cardiac, and is thrown into a few rugæ. The pylorus is an orifice of half an inch in diameter.

The intestinal canal is very long, but narrow and with thick muscular coats. According to Home the small intestine is five, and the large as much as nine times the length of the animal. The latter is somewhat wider in diameter than the former, and has a thinner muscular coat, but is not sacculated. At their junction a conical cæcum, about six inches long, is placed, very remarkable on account of the immense thickness of its muscular walls, which have been not unaptly compared to those of the ventricle of a heart; and therefore quite unlike the cæcum of any other known mammal—in fact, the whole alimentary canal is formed upon a type quite peculiar to itself.

The liver has a small umbilical fissure, and two better marked lateral fissures, dividing the upper surface in the usual manner, and it has a small Spigelian lobe below. There is a large gall-bladder which receives the biliary secretion in an unusual manner—viz., by a pair of large hepato-cystic ducts, which enter the cervix obliquely, just as the ureters convey the renal secretion to the urinary bladder. The orifices of these ducts are half an inch apart, and three inches from the fundus vesicæ. The cystic duct, six inches in length, opens into the intestine on a prominence five inches from the pylorus. The pancreas is simple, seven inches in length, thick and obtuse at the splenic or left end, and gradually becoming smaller towards the duodenum. Its secretion is carried from the component lobules by from twenty to thirty ducts, each about two lines in diameter, to a very wide common excretory canal, which terminates below, but on the same prominence with, the cystic duct.—(Owen.)

The stomach of the manati resembles that of the dugong in

(e) "Œuvres," tome ii. Hunter also describes the viscera of an elephant (*op. cit.*, vol. ii., p. 170).

(f) "Anatomy of the Dugong," *Philosophical Transactions*, 1820, p. 315; "Manati," *ibid.*, 1821, p. 390.
(g) "Anatomy of Dugong," *Proceedings of the Zoological Society*, 1838, p. 29.
(h) "Manatus," *Bijdr. tot de Dierkunde*, D. 1, 1851.
(i) "Die Cetaceen," 1837, p. 131.

its general features, being divided into a cardiac and a pyloric compartment—the former with a glandular protuberance, near the œsophageal entrance, and the latter with a pair of cæcal appendages. These are, however, more constricted at their basal portion, and more curved than in the dugong. Vrolik found the intestinal canal to be eleven times the length of the animal, the small and large intestines being equal. The cæcum is quite different from that of the dugong, wanting the very thick muscular walls, and being short, wide, and dividing towards the apex into a pair of conical processes. The liver is provided with a gall-bladder, which, however, according to Steller, was wanting in the extinct great northern sea-cow (*Rhytina stelleris*). This animal appears to have had a stomach like the others of the group, except that it wanted the pyloric appendages. It had a large and simple cæcum.

It is to be expected that our knowledge of the anatomy of this interesting group will be greatly increased when Dr. Murie's forthcoming elaborate memoir on the Manati, in the *Transactions of the Zoological Society*, is published.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON A CASE OF ACUTE GLANDERS IN THE HUMAN SUBJECT.

By SIDNEY COUPLAND, M.R.C.S.,
Physician's Assistant at the Middlesex Hospital.

By the kind permission of Dr. Greenhow, I am enabled to publish the following notes of a case which occurred in his practice at the Middlesex Hospital:—

J. D., aged 35, a costermonger, living at Clerk's-mews, St. Giles's, was admitted into the Hospital on April 29, 1872. There was nothing of importance in his family history, and his previous health had been generally excellent, except that twenty years ago he had suffered from small-pox, and twelve years ago from rheumatic fever. He had never contracted syphilis. Had lived fairly well, and, according to his wife's account, had been a "total abstainer" for the past seven years. He had lived in his present abode, with his wife and family of six children, for three years—they inhabiting one ill-ventilated room over a stable. He attributed a "fever," from which all his children suffered last year, and for which they were admitted into the Fever Hospital, to the effluvia arising from the stable. Ten months ago he lost a horse, and the next one he had sickened on April 12 of the present year, and died on the 19th. It had much running at the eyes and nose, which the man used to wipe with a flannel he kept in the stable. The patient averred that, so far as he knew, he had no open wounds or abrasions on his hands or elsewhere. On the 20th (the day following his horse's death) he had a long and hard day's work till 11 p.m.; he did not feel well, and shivered several times in the course of the day. The same night he took to his bed, to which he kept up to the day of admission, on the ninth day of his illness. His wife states that on the 21st two or three "boils" came out on the forehead, and one large one on his left thigh, which was lanced by the medical man in attendance; but that there was no further eruption till the 28th, when a large crop appeared, first on the forehead, then on the thighs, and lastly on the arms. During the week he had suffered from "cold in the head and eyes," intense thirst, great flushing of face, a slight cough, with very scanty expectoration—once or twice of florid blood—and with gradually increasing prostration, but no additional rigors to those on the first day of his illness.

On Admission.—The patient, who was a powerfully-built man, was suffering from extreme prostration, but complained of no pain. His intellect was somewhat impaired, speech thick and confused; suffering from great thirst; tongue large, moist, and thickly coated; bowels confined. Left eye was closed, the upper eyelid tumid and erythematous; right eye much suffused, conjunctiva injected. No running at nose; but patient had a frequent slight hacking cough, with scanty expectoration, which he raised with difficulty. Back of fauces and arches of palate much injected; presented no appearance of ulceration or pustular eruption. The skin over the whole body was more or less completely covered by a papular and pustular eruption, the size of the papules being very various; the majority a quarter of an inch in diameter, flattened, with a bright red base; others, again, presented all the characters of variola pustules, especially those on the abdomen, where the smaller ones were distinctly umbilicated and "shotty." The eruption was more copious over the face and limbs than over the trunk; still, a few well-marked pustules existed over the thorax, abdomen, and back, as well as others which had only reached the papular stage. Over the face and forehead there were many slightly elevated, flattened, hard papules, besides pustules, all of a large size. The dorsum of the right hand was much puffed and œdematous, the wrist considerably swollen and fluctuating. A red blush, with a fairly well-defined margin, extended over the ulnar side and back of the wrist, and the lower half of forearm posteriorly. There was no eruption here, but just below the bend of the elbow there were several pustules, and thence to the shoulder. The eruption was irregularly disposed on all sides of the limb, apparently not following in the course of the lymphatic vessels, which were not inflamed, nor were the axillary glands enlarged. The left hand and wrist were free from swelling or eruption, but the left elbow was swollen, and on the radial side of the upper third of the forearm were three or four small fluctuating swellings; while the other aspects were covered with large pustules, the eruption extending nearly to the wrist, the pustules over the lower half of the forearm being small, and varioloid in appearance. The whole of the left upper arm was covered irregularly by the eruption. The right thigh and leg were about equally covered by a copious eruption of pustules and papules of various sizes. On the outer aspect of the left thigh, about the middle, was a deep, oval ulcer, about an inch and a half by one inch, its long diameter parallel with the axis of the limb, having a ragged margin, and a dirty base, which was covered by a thin layer of ichorous pus. This was pointed out as the first pustule which appeared on the 21st, and as having been laid open in the course of the week. Over the anterior and inner aspect of this thigh were several subcutaneous abscesses. There were many pustules on the left leg, and one situated just above the inner malleolus closely resembled the pustule of "Charbon," (a) having a central black nucleus, and a broad, well-defined, dark purplish base. The radial pulse could not be felt. On auscultation, the cardiac sounds were inaudible, being replaced by a sharp, short, blowing murmur, best heard at the base of the heart. The impulse of the heart was very feeble, 128 per minute. Respiration short and shallow, 40 per minute, not embarrassed. Breath-sounds harsh over whole chest, and a few sonoro-sibilant râles audible with expiration on left side. He was ordered a draught containing fifteen grains of quinine, which was repeated in six hours' time. Free administration of stimulants and fluid nutriment was also maintained.

At 7 p.m. his condition was unaltered. He was perfectly conscious. Temperature 102·8° Fahr.; pulse 128; respiration 40. A drop of blood drawn from the finger was examined microscopically, and the following appearances were exhibited:—There was a notable excess of white corpuscles. The red discs did not form *rouleaux*, but were much changed, very deeply crenated, and many aggregated into irregular masses, in some of which the individual corpuscles were indistinguishable. Besides this there were many very small and highly refractile bodies, some of which, aggregated into masses the size of a red corpuscle, suggested their origin from the disintegration of such bodies; but many others were scattered irregularly over the field. The whole field was covered by a fine network of filaments from coagulation of fibrin. No bacteria or vibriones, or bodies in any way resembling them, were observed under the power used—500 diameters (Hartnack No. 7). At 10 p.m. the patient's condition changed rather suddenly, he falling into a state of semi-stupor, with intervals of delirium. His thirst had increased in intensity, drinking all that was offered him with great avidity.

April 30.—At 12.30 a.m., patient was lying in a comatose state, from which he could not be roused. A noticeable change had occurred in his features. Temperature 105°; respiration 56; gasping. Two hours later, or ten hours after admission, patient died.

Autopsy, seven hours after death.—Body warm; well nourished; well-marked rigor mortis. Much of the redness of skin around the pustules, and the erysipelatous blush on right wrist, had faded. The pustules, on section, presented a firm surface, their contents being caseous rather than purulent. One or two of the subcutaneous abscesses in region of left elbow were opened, and yielded sanious pus. No enlargement

(a) Nélaton ("Eléments de Pathologie Chirurgicale," 2nd ed., t. i., p. 345) defines minutely the anatomical differences between "charbon" and "malignant pustule," laying great stress upon the existence of the vesicular areola in the latter.

of any of the superficial lymphatic glands. The muscles were very red. On removing the calvarium and dura mater the vessels of pia mater were full of blood; there was intense capillary injection over upper surface of both frontal lobes of cerebrum. Substance of brain was firm, and to all appearance perfectly healthy throughout. Very little fluid in the ventricles. The spinal cord and its meninges presented no abnormal appearances to the naked eye; the substance of the cord was very firm. The right lung was firmly bound down to parietal pleura by old adhesions. The organ was intensely congested, and of a black colour; the tissue very soft and friable, breaking down under finger with the greatest ease; this condition being most marked in the posterior half of the lung. Scattered through the lung, chiefly in the upper lobe, and mainly situated immediately beneath the pleura, were several nodules of the average size of a pea, firm in consistence, greyish-white in colour, not encapsuled, but distinctly marked out from the lung tissue. The left lung was adherent slightly at its apex posteriorly, where a small cavity existed, large enough to contain a sparrow's egg, containing semi-purulent matter, with a firm fibrous wall. As in right lung, so here, throughout the upper lobe were scattered similar greyish, firm nodules, whose cut surface was lobulated and raised above level of surrounding tissue. In neither lung were any "pyæmic abscesses" met with, and in both the lining membrane of the bronchi was much injected. The heart, which was firmly contracted, contained a firm, decolorised, and laminated clot in the right side; the left cavities were empty. Beyond slight thickening of the aortic valves there was no valvular lesion. At the root of the aorta a small amount of atheroma occurred in the lining membrane. The substance of the heart was unusually red. The liver was large—weighing eighty-five ounces—pale, friable, and greasy-looking. On the upper surface of the left lobe, close to the attachment of the falciform ligament, and about one-third of the distance from the posterior border, close under peritoneum, was a firm greyish-white mass, about half an inch in diameter, with well-defined margin, not encapsuled; while the surrounding liver-tissue was in nowise altered. On section this mass appeared of a rosy-grey tint, markedly lobulated, while its cut surface projected beyond rest of surface of liver. A similar mass, even more distinct and separate, was situated at the extreme margin of the liver, just above the gall-bladder; while a third and smaller mass of like naked-eye characters existed on the under surface of left lobe. The right lobe exhibited no such appearances. The alimentary canal exhibited no abnormalities, save that the cardiac end of the stomach was intensely congested. The mesenteric glands were enlarged. The spleen was very red and exceedingly pulpy. The kidneys were pale and fatty. The spinal cord and medulla, together with portions of the liver and lungs, were reserved for microscopical examination.

Microscopical Examination.—Sections of the papules on skin showed intense congestion of the vessels in subdermic tissue. Owing, however, to the tissue having been preserved in spirit, it was impossible to get good sections through the corium and epidermis. Such as were obtained showed an abundant cell growth around the hair follicles, but the relation of this to the epidermal and dermal elements was not satisfactorily made out.

The nodules in the lungs were found to be mainly composed of nuclear elements of varying shapes and sizes (from one-six-thousandth to one-three-thousandth of an inch) aggregated around the bloodvessels, and filling up many alveoli. The alveoli in the immediate neighbourhood were occupied by large nucleated "catarrhal" cells and granular exudation material (*vide* Fig. 1).

In the liver the nodules which were so well defined to the naked eye were found to consist mainly of liver tissue, with, however, a considerable increase in the interlobular connective tissue. Much of this, especially that surrounding the portal canals, was in the nuclear stage, the nuclear elements being histologically similar to those existing in the pulmonary nodules, while differing in no respect from the early stage of cirrhosis (*vide* Fig. 2).

Fig. 1.

Fig. 1.—Section of nodule in lung, magnified about 200 diam.: *a*, nuclear growth, extending into alveoli; *b*, alveolus in neighbourhood, containing catarrhal products.

Fig. 2.

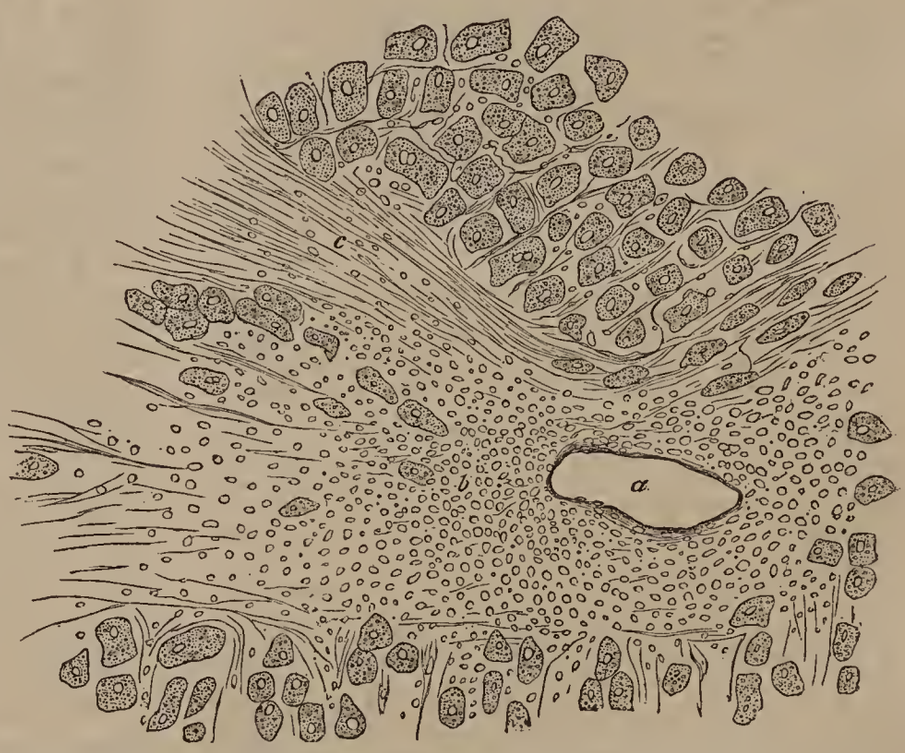


Fig. 2.—Section of nodule in liver, magnified about 200 diam.: *a*, portal canal, cut transversely; *b*, nuclear growth in neighbourhood of portal canal, extending between hepatic cells; *c*, increased amount of interlobular connective tissue.

The spinal cord exhibited evidences of acute inflammation, superadded to chronic fibrous thickening. Thus throughout the whole length of the cord, and more particularly in the middle dorsal region, there was great increase in the connective tissue of the cord and in the walls of the vessels. In no part was a central canal to be seen, but in its place appearances precisely similar to those recorded by Dr. Cayley in the last volume of the Pathological Society's *Transactions* from a case of paralysis agitans. In that case it is stated that "the central canal of the cord throughout its whole length was completely transformed. In its site was an oval tract,

very much larger than the normal canal, crowded with cells of various sizes and shapes, the majority having the characters of leucocytes, others of an oval or elongated form, but none presenting the characters of the normal epithelium of the central canal. This tract occupied not only the site of the central canal itself, but also that of the surrounding central substantia gelatinosa." In the present case the tract itself did not much exceed the limits of the central canal (*vide* Fig. 3); but

FIG. 3.

FIG. 3.—Transverse section of spinal cord—cervical enlargement—showing one-half of the obliterated central canal, and surrounding grey matter: *a*, central canal of cord, blocked up by cellular products; *b*, groups of cells (leucocytes?) in grey commissures; *c*, transverse section of a blood-vessel, showing thickened walls; *d*, anterior column of cord, nuclei between nerve-tubules; *e*, small vessel, surrounded by leucocytes.

scattered in groups in its neighbourhood, all over the grey commissure, were numerous cells resembling leucocytes, which stained deeply with carmine. The rest of the grey matter, and the white substance too, between the nerve-tubules was "speckled" with like bodies, some of which were especially abundant in the course of the smaller vessels, the situations of which were here and there indicated by the linear groupings of these cells.

Remarks.—From the absence of any affection of the nasal mucous membrane the foregoing case would perhaps rather come under the head of "acute farcy" than of glanders proper.(b) Still it would then be a case of farcy without lymphatic affection or "farcy buds," and as there are cases of glanders on record in which no nasal affection was present (*e.g.*, one recorded by Mr. Poland in *Medical Times and Gazette*, 1869, vol. i., p. 297), the present case could equally well be included under the latter category. One of the most recently reported cases of this disease is one which occurred in the Middlesex Hospital two years ago,(c) where the patient, a cabman, who had been inoculated three weeks before, was admitted with subcutaneous abscesses in the forearm. These were at once laid open and injected with chloride of zinc lotion. Two days later another abscess formed in calf. No pustular eruption appeared till the fourth day after admission, when "two pustules with a bright red areola around them appeared upon the left leg." From that day till his death, eight days after admission, fresh pustules continued to appear over face, trunk, and limbs. At the post-mortem examination opacity of the arachnoid and softening of the anterior lobes and left middle lobe of brain were found. No growths or pyæmic abscesses existed in any organ.

Another case, in which the morbid anatomy is fully detailed, is one recorded in the *Gazette des Hôpitaux* for August 25, 1868.(d) It was a case under the care of M. Hérard, at l'Hôpital Lariboisière. The patient was both a butcher and a horse-dealer. In following the former of these trades he wounded his left hand; and two days later, in his other character, he was compelled to kill one of his horses, which had become glandered. This occurred six weeks before he was admitted into the Hospital; but severe pain in left arm, with rigors and thirst, came on a few days after he had thus inoculated himself. It was not till twelve days before admission that there was extension of pain to other limbs and appearance of an eruption, together with exacerbation of fever. The pustules of the eruption are stated to have resembled those of variola, but with exaggerated proportions. There were muscular abscesses in forearm and elsewhere. No lymphatic affection. The nose was swollen, and discharged a sanious liquid; the right eye closed, with œdematous lids. There was intense fever. A few râles were heard in the chest. Patient died within twenty-four hours after admission, the right eyelids and root of nose having become livid and gangrenous in appearance. Two hours after death it is noted that the blood contained bacteria. In the elaborate account of the post-mortem examination there is described the existence of small, elevated, yellowish nodules, with surrounding areas of congestion studding the mucous membrane of trachea; while the "lungs presented on their surface raised firm tumours, grey, rosy, or yellowish in colour, having a grey and granular section, quite purulent; around each of these bodies, which varied in size from a millet-seed to a large pea, was an area of acute congestion." The lining membrane of the larger bronchi bore like nodules to those in trachea, and the tubes themselves contained thick puriform liquid. In a report by M. Cornil upon the microscopical appearances presented by all the morbid parts, it is stated that the masses in the lungs "consisted solely of catarrhal pneumonia, and in no respect resembled the tubercular granulations or glanders granulations of horses."

I desire now to point out a few of the more interesting facts in connexion with the present case. The late appearance of the eruption is a fact which has been frequently noticed, but the exact character of this eruption has been variously described. Mr. Poland,(e) while admitting the specific nature of the glanders eruption, states that in the cases he has observed it was vesicular and then pustular, contrary to the opinion of Virchow, who believes the eruption in the skin to consist of tubercles, essentially the same as those on the mucous membrane, and that they speedily become caseous. In the present case there were no vesicles to be seen at all, but papules in every stage—from a slight, barely-elevated erythematous area to a large, well-defined, distinctly raised "tubercle," between which and the "pustulo" there was every gradation.

It is difficult to affirm how far the nodules occurring in the lungs and liver are to be deemed specific, and how far mere accidents in this case. In histological characters they do not differ from the glanders growths described by Virchow as occurring in these and other organs; but then always secondary to like growths on the respiratory mucous membranes, which in the present case did not exist. The nodules in the lung in M. Hérard's case were simply areas of catarrhal pneumonia which had gone on to suppuration; and lobular pneumonia was noticed in Mr. Poland's case already referred to. If they were true glanders growths, as in the horse, they would occur mostly as "peribronchial growths" (Cornil and Ranvier), whereas these nodules existed at the surface of the lung, and only surrounded the finest terminal bronchioles and the bloodvessels, encroaching mainly upon the alveoli, many of which they filled. In this latter respect, as well as in their large size and limited number, they differed from true "tubercles," although, so far as their anatomical elements are concerned, they cannot be differentiated from these bodies. So, again, with the liver, where these growths were very few in number. Here they seemed to have a distinct relation to the portal canals and the

(b) "Acute farcy presents, almost constantly, all the characters which have been described as those of acute glanders, with the single exception that there is a total absence of affection of, or discharge from, the nares." —*Reynolds's System of Medicine*, vol. i., p. 706.

(c) *Medical Times and Gazette*, 1870, vol. i., p. 463.

(d) My attention was drawn to this case by a footnote in the "Manuel d'Histologie Pathologique," by MM. Cornil et Ranvier (p. 212), in which the question is raised as to whether human glanders is simply purulent infection or not.

(e) "Holmes's System of Surgery," vol. i., p. 703, and *Medical Times and Gazette*, 1869, vol. i., p. 296. In the case recorded inoculation was practised, and the vesicular eruption becoming pustular traced.

interlobular connective tissue, but, owing perhaps to their being still in the "indifferent nuclear stage" of growth, they presented no points of histological difference from tubercles or the early stage of cirrhosis.

The pathological histology of the spinal cord is as yet very imperfectly elaborated, but observation has already conclusively shown that similar abnormal appearances are to be met with in widely different diseases. I have already alluded to the striking similarity between the microscopical characters of the spinal cord in this case and in a case of paralysis agitans. I may add to this the appearances presented in tetanus, as recorded by MM. Michaud, in a paper recently published. In this case obliteration of the central canal in the lumbar region, and the occurrence of nuclei in its neighbourhood, are described, the description being accompanied by a figure which might well have been substituted for Fig. 3 in this paper.(f) The authors of this paper, after stating that the obliteration of the central canal is of little import, since it has been found in healthy subjects frequently, go on to say that "the fact which we are bound to consider as peculiar to the pathological anatomy of tetanus is the appearance of numerous nuclei in the grey commissure and at a considerable distance from the central canal."

Far more general and extensive myelitis was observed in a case of hydrophobia admitted into University College Hospital, under the care of Mr. Erichsen, last summer. But in paralysis agitans, tetanus, and hydrophobia, disturbance of the spinal nervous system is manifest during life, and it is not surprising in such cases to find pathological changes harmonising with clinical observations. With glanders it is different, and it raises the question whether similar myelitic(?) conditions occur in pyæmia also.

Finally, that no bacteria were seen in the blood in this case must by no means be taken as conclusive evidence against their existence, since their general small size and slight development in the blood of living subjects might readily lead to their being overlooked, unless present in very large quantity and observed under very high powers. The state of disintegration of the red corpuscles and the amount of molecular matter in the blood in this case resembled the condition of the blood in the patient suffering from hydrophobia, above mentioned.

(f) Archives de Physiologie-normale et Pathologique. Brown-Séquard. Jan.-Fev., 1872.

ON THE PATHOLOGY AND TREATMENT OF SMALL-POX.

By ROBERT H. BAKEWELL, M.D.,
Late Medical Officer of Health for the Colony of Trinidad,
President of the Medical Board, and Medical Attendant of the Small-pox Hospital of Port of Spain, etc.

(*Continued from page* 252.)

I REGRET very much that, owing to the breaking successively of four clinical thermometers, and to the impossibility of replacing them in Trinidad, my observations on temperature are so incomplete. The highest of which I have record during the secondary fever is 40·6° (105° Fahr.). A temperature of 39° to 40° (102° to 104° Fahr.) is common, and this may diminish in fatal cases to 36·5° (97·6° Fahr.) without there being any real amendment. Indeed, my observations, such as they were, entirely confirm the statement of Dr. Grieve, of the Hampstead Small-pox Hospital, that the temperature is no guide to a correct prognosis. The only point which seems to me well established is, that in severe confluent cases, when other symptoms do not amend, a sudden fall of the temperature to the normal point, or below it, is a certain sign of a fatal issue. This fall of temperature may be noted without a thermometer by touching the feet of the patient. They become cold to the touch—at least, in the tropics—*e.g.*, *Case* 4 (Small-pox Hospital): J. K., male, admitted November 22, 1871. This being one of the cases admitted on the day the hospital was opened, no notes were taken until the 24th, owing to the multiplicity of my duties. On the 24th the note is—"Has been much neglected, and had hardly any food outside. Pulse 104, very feeble; subsultus tendinum." 25th, morning: Very weak; slept well; pulse 96; temperature 35·4° (95·6° Fahr.)—two observations taken between scrotum and thigh; faculties clear; feels very cold; thermometer 84° Fahr. in the shade. Evening: Impossible to get a thermometrical observation owing to his constant restlessness and jactitation; subsultus increased. 26th: Restless all night; took some brandy; no observation could be taken; died at 1 p.m. (See also Case 174 *infra*.)

Case 129.—S. D., male, 22, admitted and eruption appeared on January 25—extremely copious, and over the whole body. Note on February 2, 9.15 a.m.—"Slept well, but is quite cold up to knees; hands also quite cold; took his porter this morning, and some tea. Nurse says he was 'quite sprightly.'" Died same day. Post-mortem examination showed immense numbers of ascarides lumbricoides in intestinal canal; old adhesions of capsule of liver, which was very hard; nothing else particular.

Delirium is an indication of a very dangerous condition of the system. It may occur in the stage of primary fever; and in bad confluent cases, in which the two fevers are almost continuous, it often occurs every night for eight or nine nights. Many cases recover, but it is sometimes weeks before the mind regains its accustomed vigour.

Case 146.—R. C., female, vaccinated (three scars), aged 19, admitted February 10; second day of eruption; miscarried before admission; answers questions vaguely; muttering delirium.

11th.—In the night feet became cold; night nurse came to me for some rum; catamenia appeared this morning; eruption purplish on legs; is now sleepy; pulse very feeble. Potassæ nitratis ʒij., sp. ætheris nit. ℥ss., aquæ ℥viij., sum. ʒj. 4tâ quâque horâ. 6 p.m.: Still drowsy, but passes urine abundantly; pulse 110, better, but intermittent.

12th.—Still drowsy; slept well.

13th.—Varioles developing; voice good; not drowsy; pulse feeble. Mist. cinch. c. opio ʒss. 4tis (tinct. opii ♏x.).

14th.—Asks for something to eat; pocks beginning to scab on face. Soup; porter Oss.; an egg for breakfast.

15th.—Skin cooler. Soup; egg and salt fish. Night: Delirious. Porter Oss. stat.; liq. opii sedativ. ♏xx. statim.

16th.—Still delirious, and very weak; pock rounding everywhere; did not sleep last night. Mist. cinch. c. opio (tinct. opii ♏xx.) ʒj. 4tis; porter Ojss.

18th.—Very weak; has a large slough on one labium majus, and varioles on the other; picks her face very much. Continue porter, Oss.; rice-pudding and egg; wine ℥vj. daily.

19th.—Asks for fowl and Irish potatoes. Continue mist.; omit porter; wine ʒij. every four hours.

20th.—Bowels much purged; motions dark green; slough on labium has separated; another has formed near fourchette. Ol. ricini ʒj., tinct. opii ℥ss. 5 p.m.: Mist. nit. comp. ʒ. 4tis.

21st.—Purging has stopped, but the sores on the labium have extended. It appears that she was taking medicine for venereal disease before she had small-pox; has been a prostitute. Mist. sp. vin. gall. ʒjss. c. tinct. opii ♏xx. 2dâ quâque horâ.

22nd.—Pulse 106, intermittent; sores looking healthier; better altogether.

23rd.—Going on well; pulse 88. Boiled fowl; increase sp. vin. gall. in mixture to double the quantity.

24th.—Eats fowl well; wants another this morning; sores looking healthy.

27th.—Sores healing. On further examination, there is a purulent discharge from vagina. Lot. alum co. pro inject.; porter Oj., and wine ℥vj. daily.

29th.—Amentia from debility.

The patient went on gradually improving, but on March 9 it is noted "still imbecile."

25th.—"Still half silly."

She was discharged on April 5 quite well in bodily health, and the mind had nearly recovered such powers as it originally possessed. She took for some weeks ten ounces of old port and a pint and a half of Guinness's stout daily.

In the case of R. F. (No. 47), male, aged 17, admitted December 28, he was delirious for several days, and refused food so obstinately that he was only kept alive by injections of beef-tea, egg, and wine. The mind remained weak until the time of his discharge, on February 19. Several other cases might be quoted.

The secondary fever may be prolonged after the maturation of the varioles and the formation of scabs by the occurrence of secondary accidents—such as abscesses, sloughing of the skin, ulceration produced by the larvæ of flies, a pemphigoid eruption which comes on as the varioles are dying up, inflammation of the eye (especially corneitis and iritis), crops of boils, and, as was remarked before, from the contents of the varioles being pent up under the horny skin of the palms of the hands and soles of the feet.

It is needless to enlarge on these points here, as they have already, with one exception, been so fully described; but the very serious symptoms caused by the presence of the larvæ of

flies in hot climates require some special notice. Flies are the pests of the sick in the tropics, and are so numerous that it is almost impossible to keep them off. Mosquito nettings were tried at the Small-pox Hospital, but it was found that in the cases where they were most required the patients, in their restlessness or delirium, tore them down. The fly which is most troublesome in small-pox cases appears to be ovoviviparous—at least, it is difficult to account for the marvellous rapidity with which the larvæ appear and attain their full growth, if they are hatched from ova. There is another fly whose ova are frequently discovered, and, of course, immediately removed; but with the most careful watching and attention it was impossible to prevent the appearance of larvæ. They burrow under the skin of the soles of the feet and palms of the hands, in the back, between the fingers, under the eyelids, in the external auditory meatus, between the vulva and the thigh, between the scrotum and thigh, and inside the labia majora. They cause frightful ulcerations, and, if neglected, may occasion death. The following case is an illustration :—

Case 117.—G. L., aged 12, male, admitted January 22, 1872, at noon, in articulo mortis; died at 3 p.m., much emaciated. Two-thirds of the lower lip have sloughed away; globe of right eye has collapsed after sloughing of cornea; body is nearly covered with sores containing grubs; the middle and ring fingers of the right hand in a state of mortification from the destruction of all the soft tissues at the root of those fingers by grubs, which were burrowing in numbers in the ulcerated tissues. Large sores, as if eaten by rats, on both knees and on upper part of both legs; was pulseless on admission. This condition was produced by starvation and neglect, as the eruption had been only semi-confluent. (See also Case 95, G. M., *infra*.)

Patients seldom complain of "worms," as they call them. In *Case* 43 (Small-pox Hospital), the patient had a large larva under the upper eyelid, and never said anything about it. My attention was drawn to it by the nurse, and I removed it, but too late to save the cornea, which sloughed. It is difficult in such cases, without a very careful examination, to distinguish between the inflammation and chemosis caused by the disease and that caused by the irritation of the larva.

In *Case* 95 (Small-pox Hospital), the labia majora were in part eaten away by larvæ before the patient's admission. Large deep ulcers remained when they were cleared out.

Museular tremor and *subsultus tendinum* were very common in those cases that ended fatally. (*Vide supra*, *Case* 15—Small-pox Hospital.) They occurred also in some who recovered, and though dangerous symptoms, and indicating extreme exhaustion, were not invariable precursors of death.

Panic-terror was frequent at the height of the epidemic. Some patients came into the Hospital with pulses of 40 to 60, and required stimulation with brandy to get them up to the normal standard. There is no doubt that many persons died of fright some days before the disease would have killed them. *Case* 106 (Small-pox Hospital) was one of this kind. The eruption was corymbose and confluent, and the patient, a girl of 18, would probably have died ultimately, but she took it into her head that she *must* die, and she died on the fifth day of the eruption. The last note is—"Has not passed urine since last night, when the bowels were open. Vulva very sore from copious eruption; quiet; slept well last night; tongue clean; pulse 108." Subsequently she passed urine freely, but died the same night, I believe from depression caused by fright.

The following case in a coolie illustrates well the effects of panic :—

Case 193.—B. S., unvaccinated, aged 40, male, admitted March 30, when it was noted that "eruption is pretty copious over body—some very suspicious pitted scars, just like those of small-pox; but denies any previous attack." Pulse 48; temperature 35·9° (97·6° Fahr.). Half a pint of stout to-day; mist. cinchon. c. opio 4tis. Soup diet.

March 31.—Slept well. Pulse 60; respiration 24; temperature 36·2° (97·2° Fahr.); tongue white; expression anxious. Brandy ʒj. directly; porter, a bottle during the day. An hour after taking brandy temperature the same. 6 p.m.: After taking a bottle of stout, temperature 36·9° (98·4° Fahr.); pulse 60. 9 p.m.: Sleeping quietly; did not wake him to take temperature, but found his skin warm; pulse as before.

April 1.—Pulse 56; temperature 37·5° (99·5° Fahr.); eruption developing. Evening: Temperature 38·4° (101·1° Fahr.); asleep.

2nd.—Tongue clean; pulse 60; temperature 36·7° (98° Fahr.); eruption developing well (all this time he had a bottle of good stout daily). 10 p.m.: Complaining of foot, in which elephantiasis is commencing. Pulse 72; temperature 38° (100·4° Fahr.). Mist. sedativ. ʒj. 4tâ quâque horâ (each dose containing twenty minims of Battley).

3rd.—Morning: Slept after one dose of Battley; pulse 60; temperature 36·4° (97·5° Fahr.).

4th.—Morning: Last night skin cool; was fast asleep; did not take temperature. To-day pulse 56; temperature 36·4° (97·5° Fahr.). Rum ʒij.; porter, a bottle daily. Mist. cinchon. comp. ter in die.

6th—Quite convalescent.

7th.—Pulse 52; scabs falling off; omit rum.

9th.—Going on all right.

12th.—Pulse 84.

30th.—Discharged well.

It will be seen that this man did not get over his fright until nearly all the scabs had fallen off. I could not reassure him, being unable to speak Hindustani.

Perconfluent Variola.—What I have ventured to call the perconfluent form of eruption demands some special consideration, inasmuch as I have not yet met with any description of it, and it is certainly, by the testimony of men who have seen former epidemics, a new thing in Trinidad.

The *primary* fever is of a very intense kind, and the pains in the back and limbs are extremely severe. There is delirium and vomiting. These symptoms I gather from the description of patients' friends. The first appearance of the eruption is hardly perceptible in blacks, but in white or light-coloured people it is exactly like a scarlatina rash—intensely red, and disappearing for a moment on pressure; equally diffused over the whole body. The next day it presents a glistening or shiny appearance from the effusion of a clear fluid under the epidermis; the fever continues unabated. In the worst cases the patient refuses all food almost from the first, and there is constant hiccough; but as this form never occurs but in persons whose blood is rich in red corpuscles, and who are of vigorous constitution, they last longer than might be expected. From the first day of the eruption the symptoms of blood-poisoning are very marked; the patients are often wildly delirious, and there is extreme and continued restlessness. On the second or third day a state of semi-coma comes on, the patient lies torpid, and is with difficulty roused to answer questions; the pulse is about 110 to 120; there is generally constipation, but the urine passes freely and voluntarily. From the third to the fifth day in the worst cases death occurs in a state of complete coma, with stertorous breathing. Several such cases were brought in semi-comatose without a history, but with an eruption of the second or third day. Such cases were the following :—

Case 113.—P., black, adult. Admitted January 19; unvaccinated; perfectly insensible; covered everywhere with a fine vesicular eruption; lay for a few hours without speaking, then died.

Case 61.—P. R., female, aged about 20; prostitute. Admitted January 4. Noted as an utterly hopeless case; covered from head to foot with confluent eruption; semi-comatose; died next day.

Case 187.—C. B., *mestiz* (mixed Spanish and Indian blood). Admitted March 6 from the Colonial Hospital, where I saw him the previous day. He then had the scarlatina-like rash on him. Is now (March 6) covered with a red glistening rash over the whole of the body; delirious, constantly tossing about; will take neither nourishment nor medicine.

7th.—Vesication universal; particularly marked on feet where the epidermis is considerably raised. Died same day comatose.

These may be taken as types of the worst kind of cases. Generally the subjects of them were either prostitutes, drunkards, or people of mixed Spanish and Indian blood from the Spanish main. All the males of the latter description who were admitted to the Small-pox Hospital died. I was not able to save a single one. They were generally unvaccinated or very imperfectly vaccinated, and they had either hæmorrhagic or perconfluent variola, or else confluent of the severest kind.

My notes of perconfluent cases are very scanty, as I required so much time to make notes for purely clinical and practical purposes that I had none to spare for cases that were evidently hopeless from the first. They came in, they lay two or three days refusing everything, and they died. Treatment was useless, and was not attempted beyond giving a sedative to allay the excessive restlessness and procure sleep.

During the last twenty-four hours of life they generally presented a horrible spectacle. In their restless tossings about they rubbed off the epidermis in large patches. Often nearly the whole of the limbs were thus denuded, and the raw cutis

dried and scabbed and bled until death occurred. They would sometimes scratch themselves raw in this way. They would rarely lie on a bed, but would roll themselves on to the floor—the usual sleeping-place of the lower orders in the West Indies—and even then would not lie on a bed or mattress, but on the bare boards.

The refusal of all nourishment—liquid or solid—was the usual precursor of a fatal issue; but in rare cases the patient took food well until a few hours before death.

In cases presenting the same type on the head, neck, and extremities, but with the ordinary confluent, semi-confluent, or corymbose eruption on the trunk or part of it, the symptoms were not so urgent. Some of these cases recover. The following is a fair sample of one of these severe cases, but I do not class them with the perconfluent cases, because the eruption was not confluent over the whole body:—

Case 174.—J. H., male, black, unvaccinated, aged 24; eruptive fever commenced on February 25; eruption on the 26th; admitted on 27th.

February 27.—High fever; pulse 102; temperature 40·9° (105·6° Fahr.). Great pain in back and head; groaning much. Venæsectio ad ℥xij. Spoon diet. Calomel gr. vj., haust. sennæ comp. post horas iv. An hour and a half after the bleeding, temperature 40·4° (104·7° Fahr.); eruption copious. Troubled with hiccough. Laudanum epithem to epigastric region. 7 p.m.: Temperature 40·3° (104·5° Fahr.). Has vomited bile several times.

28th.—8 a.m.: Slept well; bowels well opened; pulse 96; temperature 39·4° (103° Fahr.); eruption looks as if it would be perconfluent; tongue clean. ℞. Potass. nit., potassæ chlor. āā gr. x., aquæ ℥jss., 4tis horis. 9 p.m.: Hiccough again; wants rice; repeat epithem. ℞. Chlorodyni (Collis Browne's) ♏xxv., acid hydrocyanici dil. ♏ij., aquæ ad ℥j., fiat haustus. (Forgot to put down temperature.)

29th.—Temperature 37·8° (100° Fahr.); hiccough troublesome this morning; eruption extremely copious everywhere; tongue clean; bowels open. Mist. cinchonæ c. opio 4tis horis. Composing mixture (Battley's liq. opii sed.) if required.

March 1.—Took three doses of composing mixture in the night; but was walking about all night. Pulse feeble; eruption perconfluent on face—*i.e.*, one single vesicle, without any line of separation anywhere—excessively close on the remainder of the body. No pocks on the tongue; but complains of sore throat. Passes urine copiously. Perstet.

March 2.—10 a.m.: Temperature 36·8° (98·2° Fahr.). Eruption perconfluent on face, arms, legs, and thighs. Pulse very weak at 7 a.m.; then ordered wine ℥iv. Has vomited since; no hiccough; urine clear and copious; bowels not open. Slept well in the night. Port wine ℥ij. every four hours; strong beef-tea; arrowroot in small quantities.

3rd.—Pulse 104; temperature 36·6° (97·8° Fahr.); slept well. 8 p.m.: Temperature 36·7° (98° Fahr.).

4th.—(Eighth day of eruption). Pulse 96; temperature 36·9° (98·4° Fahr.). Pocks scabbing on face, filling out on thighs and body. Drowsy; muscular tremor; keeps down wine, but takes no other food; continue wine, and give also ℥jss. of egg flip every two hours.

5th.—Will take *nothing*—neither food nor medicine. Tried him myself. Was awake all night; slept this morning for a short time. Temperature 35·9° (96·6° Fahr.). From this time he gradually sank, taking nothing except a little stout, and died on the 7th.

In this case I felt certain there would be a fatal issue when the temperature fell to 36·8° (98·2° Fahr.), and was not raised by wine. This was one of the few cases in which I tried venæsection in the primary fever; I shall have to make some remarks on this matter when the question of treatment comes to be considered. I may just remark, that in this case it lowered the temperature half a degree Centigrade, and, as I well remember, seemed to relieve the patient. The following case is another good example of the kind of which about 25 per cent. of the admissions consisted. He was admitted at the height of the epidemic one morning, with three others. I was away at the time they came in, and the head nurse met me with the cheerful intelligence that four cases had been taken in, and she thought they would all die; and that the wife of one of them had sent the clothes to bury him in!(a) I then had the hospital full, nearly all being confluent, corymbose, or hæmorrhagic cases.

Case 64.—J. P., aged 21, male, black, a baker, vaccinated, admitted on January 5. Has had fever since the 1st; eruption appeared yesterday. Says he has not been a drinker. Eruption corymbose and confluent.

January 6.—Eruption very thick on face, arms, and lower extremities; no fever; tongue white, coated; bowels not open. Purgative pills; spoon diet.

7th.—Bowels open; tongue cleaner; pulse 80, rather intermittent; did not sleep well.

8th.—Eruption excessively copious on lower limbs; corymbose on knees and hands. Pulse 100, intermittent; sleeps badly. Tinct. opii ♏xx., potassæ nit. gr.x., 4tis horis.

9th.—Has had only one dose of the composing draught; slept well; tongue clean; pulse 96, feeble; muscular tremor; ate this morning.

10th.—Spirits good; slept well; took arrowroot; pulse 96. Continue tinct. opii.

11th.—Slept well; tongue white and coated; pulse 112; "feels comfortable;" asked for porter; breathing quiet. Mist. cinchonæ c. opio; porter, half a bottle; strong beef-tea and arrowroot.

12th.—Tongue swollen; looks like wet flannel. The whole of the thighs, legs, arms, and face are confluent. Porter, one bottle. 4 p.m.: Much muscular tremor; asleep.

13th.—Lies semi-comatose and very low.

14th.—Epidermis detached in many places; the whole surface of the body is like one vast blister produced by the application of a weak vesicating fluid—that is, just a little elevated from the cutis. Wine ℥j. every four ounces; continue porter, etc.

15th.—Has taken nothing but water in the night; lies conscious, but quiet; is quite rational; told the nurse just now to "Go to ——" when she told him to remember God; the greater part of the cuticle is detached; the face dried up as if baked. Died same day.

(*To be continued.*)

(a) This man ultimately recovered, much to his wife's disgust. He gave me a great deal of trouble by changing his religion every few days.

ABSTRACTS OF

THE INTRODUCTORY ADDRESSES DELIVERED AT THE OPENING OF THE MEDICAL SCHOOLS.

CHARING-CROSS HOSPITAL.

The Introductory Address was delivered by Dr. James Watt Black. The lecturer said: In offering you a friendly welcome, and fervently desiring your welfare and success, it is with satisfaction that we note the increased facilities for instruction afforded by the completion of the recent alterations in the buildings of this hospital and school.

While we lament the losses the medical staff has sustained during the past year, we rejoice to know that the consequent promotions and accessions are such as will maintain the honour and advance the interests of the institution. By his acceptance of the office of special lecturer on Clinical Surgery, on his retirement from the senior Surgeoncy to the Hospital, Mr. Hancock has laid both teachers and students under deep obligations. The appointment of our admirable Dean, Dr. Pollock, to the post of special lecturer on Clinical Medicine, is one at which we all heartily rejoice.

This is the first time in the history of Charing-cross Hospital that one of its staff has been raised to the presidentship of the Royal College of Surgeons of England. It is with just pride that we congratulate ourselves and Mr. Hancock on his attaining this high distinction. Let us hope that, in the future, the College of Surgeons will often follow the course which it has now inaugurated.

I am sure I speak for all my colleagues, as well as for myself, when I say that we unreservedly engage to render you every assistance in our power in the prosecution of your studies. Truly it is no light task you have undertaken. It is well you should realise this at the outset, so that you may nerve yourselves betimes for its performance. If there is any truth in the statement of Cassius, that

> "Men at some time are masters of their fates,"

assuredly your student days, more than any other, form the critical period during which you hold the power to shape your career. The amount of information you have to acquire is immense, and the character of that information is extremely diversified. You need to possess a competent knowledge of anatomy, physiology, botany, chemistry, materia medica, therapeutics, pathology, morbid anatomy, principles and

practice of medicine, principles and practice of surgery, midwifery, diseases of women, diseases of children, and forensic medicine. To crown all you must be able to apply the results of your study to the actual phenomena of nature. No calling more requires the active exercise of all the intellectual faculties than the study and practice of Medicine, for the phenomena of life in health and disease are complex beyond those of any other department of human research. None demands more subtlety of discrimination, or of discovering essential differences underlying superficial resemblances; none more requires the converse faculty of discovering resemblances and identities disguised by diversity of surroundings. The memory, too, must be retentive, and capable of embracing many different orders of facts. Several of the senses must be sharpened by use, for you continually need the power of quick and accurate perception by sight, touch, and hearing. Moreover, habits of determined application and of concentration of thought are indispensable. In certain departments of Medicine manipulative skill is also necessary.

Nothing can therefore be more manifest than the importance of thorough preliminary training as a preparation for professional study. It is not so much a large amount of general knowledge that is required, as the possession of well-cultivated intellectual faculties, well-exercised senses, and a habit of continuous application. It seems to me that our preliminary examinations are too aimless—too little framed in accordance with the special requirements of the medical student. While proof of memory is abundantly insisted on, there is, I venture to think, no sufficient test applied to the candidate's other intellectual powers. For this latter purpose evidence of the mastery of one well-selected subject would go further than the exhibition of a smattering of fifty. Again, it might be advantageously required that the candidate should show adequate powers of observation—to say nothing of any sense except that of sight. This might easily be done by demanding a practical acquaintance with any objective science, such as botany, zoology, geology, or even entomology. Further, it is perhaps matter for regret that more prominence is not given to the subject of physical science. It is in physics that we find the explanation of a great mass of medical phenomena; and to the student who has not attained considerable proficiency in that science many of these phenomena must be unintelligible. Lastly, in order to insure as far as possible that men shall come fresh to the study of Medicine, it might be wise to rule that all preliminary examinations should be passed some time—say two or three months—before beginning the professional curriculum. It may seem to you too late thus to insist on the importance of preliminary education, but it is still in your power to remedy some of its defects by a well-directed industry in the pursuit of your medical studies.

Let no man dream that a competent knowledge of Medicine can be obtained without downright honest, hard work. No amount of talent and previous training can afford exception from toil, nor even from drudgery. He deludes himself sadly who supposes he has mastered any branch of study, if he is conscious of having undergone no genuine drudgery in the attempt. You will find obstacles, great or small, confronting you at every step, but, with pluck and endurance, you will soon acquire the habit of surmounting them. When bravely met, difficulties are productive of real pleasure, for they give to our work a keen relish which it could not otherwise possess. A blunder frequently committed is that of not settling into harness at the very beginning of the session. The first stages of the journey may seem so easy or unimportant that they may be safely left untraversed for the present. This procrastination continues until the student unexpectedly finds himself far behind, and unable, except by prodigious efforts, to overtake his teacher. Many a time and oft, even after a good beginning has been made, the student is tempted by false hopes or groundless fears to slacken his pace. Nothing but persevering, bulldog tenacity can bear him successfully onwards. If the work of a single day be neglected, an irretrievable loss will be incurred, for it is only at the sacrifice of other duties that future amends can be made. You may say this is a mere truism. So it is. But if you will only get a few common-sense truisms like this thoroughly worked into your experience, you will find them of more service than all the rhetoric in the world.

But do not allow yourselves to be led astray by the thought that good preliminary training, followed by hard work, will of themselves suffice. Mere indiscriminate plodding will never fit you for your profession. Your procedure should be regulated by a just estimate of the qualifications requisite for medical practice. At the same time, you must take care lest your reason become blinded by your tastes. By all means cherish any special tastes you may possess, and derive from them what pleasure and profit you can, but do not let one pursuit rob another of its due share of attention. As students, you must not be specialists. The carrying out of this principle will require some self-denial on your part, but the sooner you become accustomed to the discipline the better. It should be your ultimate aim to combine in right proportion science and art. In the practitioner these two agencies should always go hand in hand. The result they yield is like that of the multiplication of two factors, which added together make up a given number. The product is greatest when the two factors of the multiplication are equal. It is diminished if one of them be reduced, even though the other be correspondingly increased. The most exact and extensive knowledge will be of little use to you if you cannot apply it to the prevention, diagnosis, and treatment of disease. Those who merely accumulate facts without learning how to turn them to practical account will ultimately find themselves in a still more pitiable plight than that of a gentleman I have heard of. One day as he was walking disconsolately in Hyde-park he was met by a friend, who, after a minute's conversation, begged to know the cause of his seeming distress. He immediately burst into tears, exclaiming, "I have got three-quarters of a million of money to spend, and God only knows what I am to do with it!" On the other hand, so-called practical skill unsupported by scientific knowledge is utterly worthless, and even misleading. The mere practical man is in reality a mere *doctrinaire*, full of false pathological theories which often form the basis of a mischievous treatment. You cannot have too much scientific knowledge, but you must not spend all your time in acquiring it. Again, you cannot have too much practical skill; but that, to deserve the name, must be based on scientific knowledge. As a man may know all the principles of art, and yet be as incapable as a gorilla to make a picture, and as another may produce daubs which he imagines to be fine pictures, though they contradict all the truths of nature, so it is in Medicine with the merely scientific and the merely practical man.

Towards the attainment of your object you will derive much assistance from lectures. Lectures are not unfrequently disparaged in our day; but, nevertheless, they serve extremely important ends. The living voice of the lecturer excites attention and interest more readily than does the book. When you thereby become *en rapport* with the speaker, your mind receives an impetus difficult of acquisition from a medical treatise. Even the little exaggerations into which a lecturer is apt to be betrayed have the effect of impressing what is important, and showing what is subsidiary or trivial. A lecture may be illustrated by diagrams, figures, preparations, models, experiments, etc., as no book can be. Moreover, a good lecturer will not only keep you up to the standard of text-book knowledge, but will lead you beyond it.

But though it is well to say a word in favour of lectures, it is still more desirable to guard against over-estimating them. With many students the tendency is to rely too much on lectures and books, and to shape their course with far too exclusive reference to examinations. They think they can never have enough of the class-room and the manual, and become altogether bookish. The cause may be partly found in the character of the examinations themselves; for there can be little doubt that these compel students to cram their memory with many *minutiæ* which have little or no bearing on practice, and which might be profitably exchanged for increased practical knowledge. This is the more to be regretted because books are always at hand, whereas hospital opportunities, once past, never return, and clinical phenomena—

> "Like a snowflake on the river,
> A moment there, then gone for ever,"—

cannot be reproduced at will. However valuable, and even indispensable, lectures and books may be, they should never be allowed to usurp the place of the dissecting-room, the laboratory, and the ward. As much of your knowledge as possible should be personal, not derived. Anatomy, for example, which is the backbone of medical knowledge, cannot be properly learned from books and lectures alone. You require to dissect and see for yourselves. No doubt you need to be told what is to be seen, and how to display the objects to view; but external aids are merely signposts to direct, not carriages to convey you. You must trudge every inch of the road on your own feet. While medical teaching by books and lectures, if carried too far, enervates the best intellectual faculties, the direct study of nature ennobles and invigorates the mind.

Students, absorbed in their pursuits, and impressed with

the magnitude of the task they have to accomplish, are prone to overlook the fact that unremitting toil is not the most productive. When a man is fagged, his work is comparatively profitless as well as exhausting. Generally speaking, all labour should be suspended when real fatigue sets in. Each man requires to find out for himself what amount of time he can most profitably devote to work. Anyhow, to produce the maximum of result, the health must always be kept up to the requisite standard. In the curriculum of everyone there must be a certain amount of leisure time. A portion of this may be pleasantly occupied in learning the use of the various instruments of clinical research. Every student should possess a good microscope, and can amuse himself by examining different substances and textures. It is an excellent introduction to the practice of auscultation in the ward to familiarise the ear with the healthy breath- and heart-sounds at home. Two students can accommodate each other in this particular. The same is true of the ophthalmoscope, the laryngoscope, and the sphygmograph. The sense of touch can be educated by exercising it on one's own person. When all this is done there should still be sufficient time left for non-professional recreation.

To those who have a love for their profession there is abundant compensation for all their toil. On the other hand, men whose heart is not in their studies are sure to find their work distasteful and their progress slow. They who desire nothing more exalted than the making of money would attain their object with far less trouble in some other calling. Whilst Medicine is a noble profession, it is a mean and miserable trade. If you aim at success, you must even possess some degree of positive enthusiasm. Frequently the ardour of the student is chilled by anxious misgivings as to the beneficial effects of medical treatment. He is perplexed by present diversities of practice, and by past changes in the general treatment of disease. Fifty years ago, he says, doctors were perpetually bleeding, purging, and salivating, and vaunted the success of their bold measures. The doctors of to-day, he continues, discredit that system of procedure, and are yet equally satisfied with the results which they obtain by very different means. Is it not probable that within the next fifty years, or sooner, the therapeutics of to-day will in time be overthrown, and proved to be hurtful rather than beneficial?

Differences of opinion and of practice are inevitable whenever men come to think and act for themselves. In this respect Medicine is not in a worse position than other departments of learning. Conflicting opinions are to be found in theology and in law quite as much as in Medicine. Yet theologians and lawyers have the benefit of authoritative written standards —a boon which is denied to the medical practitioner. In Medicine, too, the differences of practice are often of much less extent and importance than they seem; for, happily, there are frequently more ways than one of procuring a good result in disease, and two different methods of treatment may prove equally successful.

To pass to the second objection, several considerations might be offered with reference to the changes which have occurred in therapeutics in modern times. For example, it may be legitimately pleaded that the treatment of our forefathers was largely dictated by theoretical notions concerning disease and the effects of remedies, while modern treatment is more and more based on actual results. Further, the theories on which treatment was formerly in great measure grounded were frequently erroneous. Mistaken views were entertained respecting the existence of peccant humours which could be purged out, depraved blood which could be let out, and ill-defined morbid processes and poisons which could be altered or eliminated by mercury. An increased and increasing knowledge of pathology has greatly corrected our ideas regarding the means capable of acting beneficially in disease. Thirdly, the treatment of bygone times was mainly traditional. We can have no assurance of the intrinsic merits of a system which has been handed down by tradition and adopted without question. In the older days of bleeding there was, in Medicine, comparatively little of that wholesome questioning spirit which prevails in our time. The fire of criticism has been ruthlessly assailing the hoary dogmas of the medical art, and bids fair to consume all in them that is false. We hail it as our best friend next to the faculty of construction; and we want to see it blaze yet more fiercely and widely among the remaining rubbish of therapeutics. A fourth reply is to be found in the fact that our predecessors of fifty years ago seldom dared to let diseases run their natural course, and so never discovered that, in many acute cases, the natural processes tend to bring about recovery. Finding that they could often relieve pain, dyspnœa, etc., by their heroic measures, they failed to perceive that the relief was usually procured at too great a cost, and that better recoveries, and more of them, could generally be obtained through the use of gentler methods of treatment. Till we know the natural history of a disease, we cannot form a sound judgment on the effects of treatment. Another answer is, that all the treatment of fifty years ago was not comprehended in unnecessary bleeding, purging, and salivating; and that in many things we can commend and usefully imitate our ancestors. Though they were wrong in certain particulars, we have found them right in many. Though we must sift and correct their results, all honour be to them for much good work accomplished. They laboured, and we who are entered into their labours owe them full acknowledgments. They not only accumulated an immense amount of knowledge of disease, but they also devised a great part of the treatment now in use. It is only when we put our own shoulder to the wheel that we discover the difficulties with which this department of Medicine is beset, and learn to duly honour those to whom our present position is attributable.

The mere fact of change is no proof that the foundation of medical treatment is insecure. Though every change cannot be characterised as a ringing-out of the false, and ringing-in of the true, yet absence of change means absence of progress. One is indeed free to confess that therapeutics has not yet made progress commensurate with its own importance or with the position of some other departments of Medicine. But the zeal and exactitude with which the physiological action of remedies is being studied, and therapeutic facts are being observed and recorded, at the present time, are eminently cheering. Though therapeutics is a lazy boy, who during a long childhood has always lagged behind his fellows, there are plentiful indications that, as the years of discretion have stolen upon him, he has been leaving off his early foibles, and that, feeling his gigantic powers stir within him, he has awakened to a consciousness of his high destiny. Already he has burst many of the shackles which contributed to retard his progress, and is eager for triumphs which will gloriously redeem his reputation. Innumerable therapeutic facts of priceless value have been ascertained, and, though we cannot as yet group these facts into a scientific system, we are now able to discern it in outline. In so far as we have learned the nature of those changes in structure, qualities, and function which constitute disease, and the conditions which favour of impede the natural processes and effects, we are in a position to treat disease scientifically. This knowledge is immensely in advance of the position it held fifty years ago. One highly valuable result of a better understanding of the pathology and natural history of disease is this—that we are thereby prevented from making mischievous attempts to perform the impossible.

As you investigate the growth, structure, and functions of the human body, and the reparative processes carried on in disease, you can scarcely fail to be struck with admiration and delight. The man is not to be envied who is so insensate that he can see no beauty in these exquisite structures and processes, and derive no pleasure from the study of them. It is exceeding strange that medical men, to whom, of all mankind, is vouchsafed the deepest insight into the matchless contrivances of Nature's masterpiece, should ever, as some of them do, persuade themselves that the universe is self-existent, or that, at best, we must be content with a materialistic Pantheism. Not a few, in the medical profession as well as out of it, seem to think that the theistic arguments advanced in former times have been all demolished by the Darwinian hypothesis. But it is surely as unreasonable to believe that the human body was formed by a course of *unforeseen* and *undesigned* development or evolution, as that it came into existence through a fortuitous concourse of atoms. No hypothesis, nor even fact, can rid you of a fact. Two facts may coexist, but the one can never annihilate the other. Would it disprove to you the existence of design in a steam-engine, if you learned that the machine grew from a germ or had been gradually developed by natural laws from an inferior sort of machine? On the contrary, would not this discovery exalt your estimation of the wisdom which could foresee what natural laws would be necessary for the production of such a result, and of the power which could set in action and uphold those laws? Does not the same reasoning apply to the human body?

If you analyse the idea of design, you will see that it does not rest on deductive arguments. The notion that a steam-engine should come into existence accidentally, involves no self-contradiction, and therefore it cannot be pronounced as, in the nature of things, absolutely impossible. Yet, as you

look at the combinations of metals, the furnace, boiler, condenser, pistons, valves, stuffing-boxes, and governor, and the action of the whole, you quickly perceive that the chances against the thousands upon thousands of adaptations concurring fortuitously dwindle into such insignificance as no arithmetic could represent. This inductive form of evidence is, in reality, quite as convincing as a syllogism, but it affords a loophole of escape for those who are willing to be self-deceived. In disputing about the existence of a Supreme Being men demand a kind of evidence which they ask for no other contingent truth—not content with an overwhelming abundance of inductive evidence which they would consider themselves insane to reject in any other question.

"The owlet Atheism,
Sailing on obscene wings athwart the noon,
Drops his blue-fringed lids, and holds them close,
And, hooting at the glorious sun in heaven,
Cries out, 'Where is it?'"

Some minds are captivated by the notion of scepticism, and fancy that it argues shrewdness and independence. A little reflection should convince them that disbelief after sufficient proof is just as weak and illogical as belief without sufficient proof. There is no more wisdom in blindness to palpable truth than there is in unmitigated credulity.

It will not diminish your interest in your work, nor your success, but the contrary, to acknowledge the Designer and Fashioner of our being, and to remember that in part He

"Doth with us as we with torches do—
Not light them for themselves; for if our virtues
Did not go forth of us, 'twere all alike
As if we had them not."

He has high purposes to serve with each of us, and one of those purposes, doubtless, is this—that we should turn to the best account the various capacities with which He has endowed us. It is, I think, in this direction that we obtain our noblest conception of the dignity of the profession of Medicine. While Christ directly refused to take part in either law or politics, He devoted much of His time to the healing of the sick, and He empowered many of His followers to cure diseases. No more noble work can be found than that in which the God-man so constantly engaged during His public life on earth. Nor can any encouragement be so inspiring as the assurance that in ministering to the sick we have the special sanction of Him who alone can render our efforts successful.

KING'S COLLEGE.

The Introductory Address was delivered by Professor W. Playfair, M.D., F.R.C.P. The lecturer commenced by some introductory observations on the importance of the step the student had that day taken, and on the nature of the profession of Medicine. He proceeded to say, "How you may best qualify yourselves for this high calling it is our place to teach you. What, then, is the ideal physician whom we in this College try to train? What should he unceasingly aim at being, and what should he as assiduously endeavour to avoid? More than two hundred years ago a writer gave us his definition on this very point in words so terse and so true that I feel sure we cannot improve upon it, and may safely adopt it as our own:—

"'Doctors or teachers they of physick are,
Whether by pen they do it, or in chair
With liveley voyce, who teach the way to know
Man's nature, health, and sickness, and do show
Diseases, cause, and cure; but they who spend
Their lives in visits, and whose labours end
In taking fees, and writing paper scrowls,
Factors of physick are, and none but owls
Do count such doctors."

"It will require no long experience, gentlemen, of Medicine in the nineteenth century to convince you that you have here clearly laid down before you two types of medical men constantly to be met with in everyday life. On the one hand you have the conscientious and scientific physician, thoroughly acquainted with the most recent advances of his profession, or as thoroughly, at least, as may be when the subject he has to deal with is in itself of such vast extent; who, humble in his wisdom, as all wise men are, gleans information from every source, seeks to be the guide and interpreter of nature, but makes no pretence at a knowledge he does not possess; who is not afraid to admit that the resources of his art are incapable of accomplishing more than they have done; and who never assumes that kind of medical infallibility which so often says to the patient, in fact if not in words, 'What a fortunate thing it is for you that you have placed yourself under my hands; for, thank God! I am not as other medical men are.' On the other hand, you have a practitioner whose claims to the confidence of his patient are based more on his own self-assertion than on any real knowledge of his subject; who is satisfied to go on from year to year with the small modicum of information, which long ago enabled him, with so much difficulty, to scrape through his examinations and obtain a qualification, content if only he can persuade others to believe in his skill, whether he possesses that skill or not; and who, careless of the terrible responsibilities of his calling, imperils and, it is to be feared, too often sacrifices to his own small and petty interests the precious lives which have been entrusted to his care. Many and many a man of this stamp there is, holding, it may be, even a high place in the estimation of the public, whose reputation is founded on some such rotten basis as a smooth and unctuous manner, an imposing equipage, or a specious use of pseudo-scientific terms, calculated to impose upon the ignorance and credulity of his clients; and who, in deed and in truth, is as blatant a quack as if he stood on a cart at the corners of the streets and proclaimed the value of his wares with the blast of a trumpet, as did the travelling empiric of old."

The lecturer then showed how the necessary uncertainty of Medicine—its want of tangible results, which could be judged of by those ignorant of its technicalities—favoured the success of men of this kind, and insisted strongly on the necessity of the student's depending, not on any false and adventitious aids, but on a sound and thorough knowledge of his profession.

He proceeded to defend Medicine from the charge of not advancing as other professions did. He illustrated what Medicine had done, and what it was capable of doing, by the subject of public health, which he discussed in relation to zymotic diseases, drainage, etc. He then showed that similar proofs of the reality of medical progress could be adduced in the more practical work of the profession, of which he gave various illustrations.

Talking of the objections frequently made to the time and labour devoted to the study of the more scientific branches of Medicine, he insisted that it was only by a due attention to these that a proper foundation of knowledge could be laid, and showed by various examples how many of the advances of practical Medicine could be more or less directly traced to a study of these subjects. He, however, strongly deprecated any intention of depreciating practical work, but insisted that the one must be the necessary supplement of the other, and to attempt to practise without a scientific foundation would be to land us in sheer empiricism. He proceeded to show that the progress of practical work had quite kept pace with that of scientific work, illustrating this by the great improvements made within the last twenty years in the means of detecting the physical changes connected with disease—as in the use of the thermometer, sphygmograph, ophthalmoscope, and laryngoscope—and he further dwelt on some of the more recent advances of Surgery. "Let no one say, then," he concluded, "that either the science or the art of Medicine is at a standstill or the cultivation of the former has hindered the progress of the latter."

The lecture was terminated by practical advice on the necessity of steady and continuous work, and on the best means of following out the curriculum laid down.

ST. MARY'S HOSPITAL.

The Introductory Address was delivered by Mr. A. T. Norton. After certain introductory observations, Mr. Norton said:—You must understand that by coming to a medical school you will not learn how to diagnose and to treat cases by rule. We cannot reduce Medicine or Surgery to a mechanical process. There are many similar symptoms associated with dissimilar diseases. There are many drugs, many varieties of treatment, available for the same disease. Again, a remedy successful in the treatment of an abnormal condition in one individual is not necessarily successful in the treatment of what is apparently the same condition in another individual. Your judgment is brought into requisition. It matters not whether you cause a wound to heal by means of lotions or ointments, or whether you cause it to heal by means of rest alone; both are the means to an end, and by each way the end may be obtained. In the one case, it may be preferable to employ a prolonged treatment rather than remove the patient from his ordinary avocation. In the other case, the chief aim of the patient may be to avoid pain. I instance these simple points in order to show you that you are about to enter a profession in which science and art are combined, in which ready judg-

ment is necessary, and in which, therefore, there must be grades of opinion, according to talent and experience. It must be a comparatively large mind at once to compass all the points which bear upon a case, however slight—the causes of the disease, the vocation, constitution, idiosyncracies of the patient, surrounding circumstances, and the treatment. You have chosen a profession in which there is no difficulty in becoming interested—a profession at once attractive and philanthropic. We can often promise recovery where despondency prevails; we can often with a word overcome all anxiety, all doubts, and fear. But from these ennobling ideas we fall to the remembrance that by these means we gain our livelihood; that such service is purchasable, and may be almost said to be at a market price, for if one will not do it another will. It seems degrading that science should be made a business, but the science of Medicine must be practised for the welfare of the nation, and men who practise it must live.

And now, when we descend to the business of our profession, we find that many are tempted to do things which tend to bring us into discredit, and you, like others, will find temptation thrown in your way. Advertising quacks, and a class but little better, whom I may term bloodsuckers, make wealth with strides. Industrious and honest practitioners make way slowly but surely. Let your course be upright, truly serving your patients, and you will have your reward. You will gain the respect and affection of those who know you, and you will find your returns sufficient to give you comfort and independence, if not luxury. But, on the other hand, if you yield to temptation, you will be marked in the private conversation of your patients and of your professional brethren, and, though for a time you may find yourself successful, the chances will be against you in the end.

How to educate you so that you may befit the profession you have chosen has given rise to great discussion. At one time, and that not long ago, no examination was held upon the subjects of general education. The consequence of such a condition I need scarcely refer to. Men totally ignorant of their mother-tongue presented themselves for the examination for the diploma. They were capable of passing that examination, and they became duly qualified. We cannot be surprised that such beings not only brought the profession into disrepute but also delayed its progress. Out of the mire the Apothecaries' Hall was the first to raise us. Probably conceiving that classics was a test of a moderate education, they held a simple examination in Latin, but clever coaches soon enabled men to translate Latin without being able either to write or to speak English. They then instituted a preliminary examination in classics, mathematics, history, etc. It was at first voluntary and without fee. Many thought that to make the examination compulsory would decrease the number of those seeking to obtain the licence of the Society, and would therefore affect the coffers of the Society. But in face of this the Apothecaries' Hall made that examination compulsory. It was the first great advancement made since 1815, and for this act we must ever owe a great debt of gratitude to that Society.

Now comes the question, Would it not be possible to add to the preliminary education several of those subjects which are at present taught in the medical schools? The time we have is too short to teach Medicine, and yet we have to work into that time several extra studies, any of which might occupy a man's life. You may remark that the primary education is now more than sufficient to occupy the time of a schoolboy, and that he is not capable of adding to his already long list those subjects which are at present taught in the Colleges of Medicine. I reply that the names of boys of 16 years of age appear in the first division, and in the honours list of the matriculation of the London University, and therefore it is but fair to suppose that if a proper method of instruction be adopted their capability of learning is greater than has hitherto been accredited to them; and, so far as pupils in Medicine are concerned, I would say, Let them add to their early education that time which many now unnecessarily occupy at the medical school. We do not want them to come to us at a too early age; we want their minds matured and ready for the calculating and deep-thinking studies which we require them to undertake. If this extra time were spent in the manuer I have referred to, we should not then have such a case, now common enough, as a man idling away from six months to a year, because he has attended all his lectures and is yet not old enough to go up for his examination.

Continuing upon this subject of medical education, I would have you at once set aside the idea that attending all the lectures, or that even passing the required examination, makes a man a physician or a surgeon. Obtaining a diploma to practise does no more than attest that the student possesses the least amount of knowledge with which one particular corporation allows a man to take the lives of his fellow-creatures under his care.

Now, men with good memories can possess themselves of an extraordinary amount of knowledge by reading, in an extraordinarily short space of time, and are thus enabled to pass examinations without great difficulty; but it must be a retentive memory to hold that knowledge over a period of six months, and it must indeed be a powerful and observant mind to be able to practically apply the knowledge so derived.

Reading, by itself, is not sufficient to teach Medicine or Surgery. A knowledge of disease can only be obtained in the wards of a hospital, where there is a teacher to point out, and where there are varieties of the same disease from which the teacher may instruct. If the practical work of the wards is neglected, the student has lost an opportunity which he will probably never recover. He has lost the opportunity of witnessing and comprehending cases which, from time to time, will be certain to occur in his own practice, and which, from inability to diagnose, he will either neglect or maltreat.

Whilst upon the subject of the wards, I shall take the opportunity to refer to the out-patient department. It unfortunately happens that the physicians and surgeons of the out-patient and of the special departments attend at the same time as the physicians and surgeons of the wards, and in consequence a very profitable form of instruction is neglected. The number of out-patients is probably ten times greater than the number of in-patients, and the variety of diseases perhaps ten times more common than in general practice. When occasions present themselves, take advantage of them to attend to those departments, but it is useless to go there now and again; it is necessary to attend for a while continuously, so that cases may be understood and followed through, and you will never regret the time so occupied. With regard to the specialities, I can assure you that they are a great introduction to practice. Many practitioners at the present time do not care to trouble themselves with specialities. If, then, you should be capable of using the ophthalmoscope, laryngoscope, and the various speculums, you will be able to detect and cure many diseases, the victims of which—poverty perhaps preventing them from obtaining further opinion—have long been concluded incurable. If you are able to cure the poor, the rich will seek your advice.

Now, the course of instruction at the Hospital extends over three winter and two summer sessions, during which time the subjects for the first examinations at the Colleges and at the Hall must be undertaken in addition to the diagnosis and treatment of disease, the lectures, and the wards. You will see, then, that it is impossible for a medical man to know his Profession on leaving the Hospital. If the question is asked, How is this evident error to be remedied?—it is difficult to make reply. I regret to add that it almost resolves itself into a question of money. If we lengthen the time at the medical schools, then medical education becomes so expensive that a large number would be prevented from entering the Profession.

About three months ago I had occasion to pass through a low neighbourhood near Euston-square, and I saw in a window of a barber's shop a placard, on which was printed—"Cupping, teeth extracted, hair-cutting, and shaving." The gentleman who kept this establishment evidently considered himself a barber-surgeon, and we have not to look many years into our history to find the two professions united. Surgeons formed a craft as early as the year 1492; but at the same time barbers practised Surgery. The two were therefore incorporated in the Company of Barber-Surgeons by Henry VIII., in the year 1541. By that charter they had the exclusive right of practising Surgery and of administering remedies for the cure of disease. Would that our present charters were as comprehensive. But, alas! surgeons were complained of for ignorance of their craft, and for extorting large sums of money, and for doing hurt to the people. It was therefore ordained, in the thirty-fifth year of the reign of Henry VIII., that it should be lawful for every person having knowledge and experience in the nature of herbs, roots, and waters, to practise and administer the same according to their cunning. We daily have opportunities of witnessing the amount of hurt to the people this law has been the means of producing instead of preventing; and at the present time our law-makers, though anxious to set matters right, seem not to have the power to do so. The surgeons were not separated from the barbers till 1745. Continuing our history from that time, we find that in the reign of George II. the question was raised in a court of law whether or not a

surgeon came under the head of "inferior tradesmen"; referring, of course, to a class described in one of the older statutes. In 1815 the examination at the Apothecaries' Hall was instituted, by which it was intended that none should practise Medicine or Surgery without a qualification; and from that time we have rapidly moved forward.

Now I would address a few words to you who are our advanced students. At the termination of this session many of you will become qualified to practise, and will take your departure from among us. I beg you to consider that—as I have endeavoured to prove—when you are qualified you are still by no means perfect. It will be necessary for you to continue your reading, and to keep yourselves, by means of the journals, *au courant* with the new theories and practice, and with all the latest improvements and inventions; and it will be well for you to make a note of every important practical point of which you may hear or read from time to time. In the month of April—the month of examinations—I find that those men who know but little invariably consider themselves certain to pass, whilst those who are well up have a lurking fear that they may be unfortunately examined upon something doubtful. It is a fact curious but true. The former set of men are totally ignorant of many things, and therefore have not the least suspicion that they will be examined upon them; whilst the latter set, who have read well, know the difficulty of compassing such extensive subjects. Curb, then, the feelings of self-satisfaction which arise within you on obtaining your diploma, and go to your new homes with the knowledge that you have not the experience of your seniors. If you differ in opinion from a neighbouring practitioner, deal leniently and carefully with the matter, recollecting that great men have erred, and that your opinion is not necessarily the right one.

Yet another point would I refer to, though I know that some may differ from me. If no cottage hospital exists within a moderate distance from your neighbourhood, endeavour to found one. I do not consider cottage hospitals false charity, for I myself have seen many patients who could be benefited in no other way. It would be the means of saving the life of many a cottager, who in his own residence has neither nursing nor nourishment, and it will lead you to investigate and improve your knowledge. If you are the *sole* medical officer it will give you a position above your neighbours; but to this I object. A cottage hospital should be truly a charity, and not a private speculation. All the surgeons around should have the opportunity of attending patients within it. I am convinced that if such institutions were more numerous, the general knowledge of practitioners would be increased, and the distance between the general practitioner and the consultant would be diminished. Such advice from a consultant may appear suicidal, but from another point of view it may appear associated with a selfish motive, for if all practitioners were fully alive to the results that can be effected by Surgery, there would be many—very many—cases transferred to the surgeon who are now left to linger in their discomfort.

MIDDLESEX HOSPITAL.

Dr. J. C. Thorowgood gave the Introductory Lecture. In it he said: A distinguished living physician, when on some of his extensive travels, was once asked in conversation, by a mighty potentate of the East, if he knew of any poison which, put into the mouthpiece of a pipe, or given in coffee, would slowly and silently kill, leaving no note behind? The prompt and decisive answer of the doctor to this distasteful question was—"As a physician I have made it my study to save life, not to destroy it."

Like this physician, it behoves us all to bear always high in our minds the recollection that the great aim of medical and surgical art is the saving of human life. Whether we call ourselves physicians, surgeons, obstetricians, or general practitioners, we all have this great end before us, and to its accomplishment we make subservient that knowledge of anatomy, physiology, chemistry, and other kindred subjects which you will have to gain during your course as students at this Hospital.

The earliest attainable history of China, Egypt, Greece, and Italy shows us that with each of these nations the medical art was of very early development. The Chinese date their medical code at 2000 years B.C. In the British Isles, Medicine was practised by the Druids, who used charms and mysterious incantations while they physicked their patients with mistletoe and vervain. In the medical code of the Hebrews, who were under the inspired teaching of Moses, we find an advance upon that of most other nations in the cultivation of preventive medicine, and what we nowadays call sanitary science. Much stress was laid on dietetic rules, on ablutions, separations, and destruction by fire of infected garments (Lev. xiii., 52). Here, then, we find the germ (1500 years B.C.) that, under increasing research and knowledge, has developed into what I have just called "sanitary science, preventive medicine, or hygiene"—so important that it now forms a separate branch of study in many of our schools, and in it may be found one of our great medical successes.

The patient, laborious, and often dangerous investigations of those who have given themselves to that most useful work—the study of epidemic and contagious diseases—have shown us how malarial fever is generated in marshy lands under certain conditions of temperature. Action is taken, the land drained, and the mortality from malarial fever and ague is, after a few years, reduced from 44 in 1000 to 27, and from 30 to 20, and even as low as 15. Take, again, an outbreak of typhoid fever in a country district. One after another falls sick; people get the impression that the fever is very contagious, and a reign of panic and terror is established. A sanitary inspector is sent down by H.M.'s Privy Council, and he and the local doctor soon prove that all the mischief is due to poisoning of the drinking-water by soakage into it of matter from a drain or cesspool. Probably the doctor may have warned the folk against certain polluted wells long before, but they pay little heed till they are struck down with sickness, and then their hope is in physic. By correcting the water-supply and disinfecting the excreta of the sick, how completely has typhoid fever been brought under medical control! and I believe I may venture to say the same of cholera in some degree.

To dwell further on the successes of preventive medicine and the good that has accrued, and is, we trust, going still further to accrue, to this country from our legislators paying heed to the teachings of sanitary medicine, would be easy, but I trust I have already said enough to prove that our position as preventors of disease and guardians of the public health is well established and good.

Now let me say a few words on some of our therapeutic processes, and on the science and art of drug-healing. The diagnostic knowledge of the ancients in the time of Dioscorides (A.D. 54) would hardly compare with that of the present race of physicians, and yet Dioscorides, in his Materia Medica, treats of the employment in disease of no fewer than 958 different substances. The man who, ignorant of the processes, effects, and tendencies of disease, yet asserts himself as great in active treatment, is a sad hindrance to therapeutic progress. He will treat a simple case of temporary constipation and pain in the bowels, when the patient has neither the pulse, the look, nor the position of one with peritonitis, with leeches, blisters, and salivation; and say he has cured a severe inflammation of the bowels! True inflammation of the brain and delirium tremens get at his hands exactly the same treatment, because there is some similarity in the symptoms. In the one case perhaps the patient recovers under active depletion, while in the other he pretty certainly dies, not because medical treatment is uncertain and fallacious, but because the doctor did not know how to distinguish inflammation of the brain from delirium tremens.

My belief is, that in the dark ages the majority of doctors knew but little of diagnosis and disease—they never saw how Nature would behave in acute disease if simply let alone—and by their active treatment they often killed when they might have cured. At one time they did so much mischief with antimony—a drug we now value highly in the early stage of many inflammations—that in 1566, by a decree of the Faculty of Paris, this drug was prohibited as a remedy, and so remained till 1650, when Sir Theodore Mayerne showed the true use of antimony as a medicine.

Men of note and repute two hundred years ago, like Sydenham and Radcliffe, we read, got their great success above their fellows, not by being so very busy with lancet and physic, but rather by watching and observing disease and seeing that Nature had room given her to help herself. Radcliffe often fell under the censure of the College of Physicians for the rude and unprofessional way in which he was apt to charge his colleagues with killing sick people by their violent methods of treating disease.

Knowledge of disease is that which, in all ages, has made the physician of enduring reputation—trusted alike by his Profession and the public. Look at Sydenham in 1660, and his great

success in treating that febrile disorder, small-pox, by allowing his patients to breathe pure air and to have cooling diet and drinks. Look, again, at that eminently practical physician, Dr. Radcliffe, who succeeded Sydenham, and who got such a name in this town for curing the sick, that they tell us his neighbour, Dr. Gibbons, used to make 1000 guineas annually from those who were unable to gain access to the great physician of the day. Radcliffe was no vaunter of specifics or propounder of a system; his practice consisted in observing nature in disease, and in carrying out sound principles of diet and hygiene. His patients with small-pox were allowed plenty of air and cooling drinks, instead of being rolled up in twenty yards of red flannel, drenched with heating cordials, and half-smothered by order of the physician. And with respect to physic, Radcliffe used to say, at the end of his life, that while as a young beginner he had twenty remedies for every disease, as an old physician he could find twenty diseases for which he had not one remedy. His skill in foretelling the issue of disease seems to have been singularly correct. If you look at men of later date than Radcliffe, who became great and honoured physicians, you will find their great study was to gain an intimate knowledge of disease as the basis of their therapeutic art. Thus were made the reputation and fame of men like Mead, Baillie, Graves, Alison, Hope, and numerous others of more modern date not hard to find. The writings of these physicians show that they were firm believers in the power of drugs to cure, the reason of their faith being that they well knew when to use a drug with prospects of curative effect.

Let me, then, urge upon you to avail yourselves of the great facilities afforded by a large hospital like this for gaining a sound knowledge of disease; you will then, in your practice, know how to give Nature room to help herself, while you will also know how with confidence to prescribe the right remedy at the right time, and so achieve results likely to add much to your repute. While we all know that human beings, when sick, naturally and almost instinctively crave after treatment, yet you need not on this account pander to popular ignorance by trying to find a drug for every symptom they describe; doing this will but complicate the case and embarrass you.

I wish time would allow me to dwell somewhat on the means of gaining knowledge of the actions of drugs. It is not difficult to understand how cold acts in reducing heat, but when we come to actual drug administration it is not so easy to explain the way in which cures are worked. Many of our best trusted medicines have been brought to notice by pure experiment,—take for example quinia and ipecacuanha; and if a drug cures, we gladly use it without waiting to find the scientific principle on which it acts. We use belladonna to dilate the pupil without troubling very much as to which of the three theories of its action may be the correct one. Of late years we have found out how iron acts as a blood restorer; but iron was used and valued as an invigorating tonic by Melampus 1398 years B.C. Lately we have got some knowledge of the way in which quinine acts as a remedy; but it does seem strange that chemists, physiologists, and physicians should yet be disputing about the mode of action of alcohol, a body as old as the days of the Deluge. Of the value of alcohol in disease there can be no question; how it acts is another thing.

Chemistry and botany, both important in a high degree, have done but little to guide us as to the effect of a chemical or drug at the bedside; and experiments on animals, already extensive and numerous, cannot be said to have advanced therapeutics much. I have seen Dr. Richardson give a pigeon enough opium to kill a strong man, and yet the bird was in no way affected; and I have heard of goats feeding on shag tobacco, and rabbits on belladonna leaves, without taking any harm; yet from these experiments to infer that belladonna and tobacco were innocuous to man would be a grave error. Probably calomel given to a healthy dog might cause a temporary irritation and congestive obstruction of the animal's biliary apparatus, thus showing that calomel has an action over the liver; but I cannot see my way to infer the action of mercury on a sick man from what we see of its action on a healthy dog.

Whatever may be the prestige attaching to some of the large medical schools in this city, it is clear that a small school has its advantages provided it be connected with a moderately large hospital. In a small school the student has more ready access to his teachers; there is less crowding in the wards, so that each can examine the patient in turn; moreover, the chances of being able to obtain office as house-surgeon or resident physician are greater, not to mention the increased probability held out to each individual of being able to obtain a prize or a scholarship.

Among the numerous liberal benefactors of the Middlesex Hospital was the late Francis Broderip, Esq., in memory of whom there have been recently established here by the governors two scholarships of the annual value of £30 and £20 respectively, each tenable for two years. The examination for these scholarships will test well your clinical and pathological knowledge.

There are also two entrance scholarships of the value of £25 and £20 repectively, to be competed for at the commencement of the winter session of 1872-73. Several competitors have already entered.

I trust you will make good use of your opportunities here, for you will not get the like again. Learn to observe carefully for yourselves, both in the wards and in the out-patient rooms, and compare your own observations with those of others that you find recorded in books. Don't think that all you have to do is to pass the examinations, and so enter upon practice with but scanty and imperfect knowledge. If you do this you will be always unhappy and disappointed; you will get to hate a profession of which you are sadly ignorant, and your career will be but a series of failures and vexations, for in your practice you will please neither yourself nor anybody else. That there is even in the most successful practice of Medicine much that is disappointing, toilsome, and distressing none can deny; and few are likely to gain distinction in its practice who have not in them an enthusiasm and love for the profession which will bear them over its drawbacks and its difficulties.

In the successful practice of every department of medical science you cannot fail to find happiness and satisfaction, and often wherever your lot may be cast you may be able to contribute some useful addition to medical knowledge. Keep yourselves, therefore, well up in the progress of Medicine, by reading, as time permits, the journals and periodicals. Cultivate, too, the gathering together of your brethren for the discussion of subjects of interest and importance in Medicine and Surgery, and now and then it is well to meet your fellows in a convivial way at dinner, as we, in accordance with custom, hope some of us to do this evening. These sort of meetings among doctors, if more generally and extensively carried out, would do much to extinguish animosity and small jealousies, and would cause us often to appear in a better light with the public.

ST. THOMAS'S HOSPITAL.

After thanking the treasurer, governors, and friends for their presence, Mr. Croft proceeded to welcome those for whom the inaugural address was more particularly designed—viz., gentlemen just entering on the student's career—reminding each that he becomes identified with St. Thomas's. The Hospital and College become his Alma Mater. He joins a "corps" as it were—a "corps" second to none for friendliness, sincerity, and loyalty. He said: "In what spirit are you prepared to enter upon the studies before you? You are to study nature in health and disease, that you may make a living—perhaps win honours and fortune—by alleviating and curing some of the ills that flesh is heir to. In what spirit do you approach this task? Do you come with the limited desire to accumulate in your memory only a store of knowledge of facts, which will enable you to practise to get a living, or are you inspired with an eagerness to find the *truth* in Nature, to understand her laws, and to be guided in your practices by the result of such researches? That is the spirit in which I would have you approach the study of the sciences which it will be your privilege to make your own. One of Lord Bacon's apothegms is this—'Nature is only conquered by obeying her.' You must *feel* that he is right. She is a grand and beautiful mistress, and her votaries must approach her reverently and humbly. She will lead them aright if they will follow closely and faithfully. The difficulty and the trial is to *obey*. To the manly heart and pure spirit she will yield her wonders and bounties, whilst these remain hidden from the view of the weak and idle. And now, gentlemen, whether you take this important step in your life with an eager spirit of industry, a listless sense of compulsion, or the ignoble mind of a trader, you must learn to work, and work to learn." He pointed out that in the first place they were to make themselves acquainted with the known facts of medical science and the inferences or inductions from them; and, in the second place, by observation and experiment, or

experience, to endeavour to understand the application of these facts and the theories built upon them. "With respect to facts, seek for *them;* make them your own; stick to them. . . . You will have to become the slave of these facts—to *obey* them; in time you may hope to conquer them. . . . It is one thing to learn the facts as facts—to make a collection of them in the memory. It is quite another to interpret them. Observation and experiment carried on with patience and accuracy are necessary for the interpretation of facts. . . . You will discover what your predecessors have experienced —that you have to learn how to learn, how to collect facts, how to observe, how to experiment." Passing to the special course of study incumbent upon them, he pointed out that the art of curing or mitigating the diseases and deformities of the body must be preceded by the study of pathological science, and that an inquiry of that nature could only be founded on a complete and accurate knowledge of the science of life in health, or the physiology and anatomy of the body; these latter must form the foundation on which the superstructure is to be erected. He urged the necessity for an early devotion to those sciences. They would be entitled to no higher position than the ignorant and despicable quack if they were content to be only superficial anatomists and physiologists. After enumerating the various methods by which they might learn, he dwelt on the special value of dissection in cultivating a habit of personal research, delicacy of touch, confidence and dexterity in the use of the knife. Quoting Sir Astley Cooper, formerly a lecturer at the Hospital—"That, sir, is the way to learn your profession. Look for yourself; never mind what other people may say; no opinion or theories can interfere with information acquired from dissection." He then paid a just tribute to the great merits of Mr. George Rainey, the senior demonstrator, whose singlemindedness and sense of duty, unsurpassed skill and sound intellect, were themes on which his old pupils were proud to dwell. He reminded the students of the respect they should observe to the dissecting-room, and turned to the subject of physiology. He informed them that without an adequate preliminary training in the elements of chemistry and natural philosophy they would not be in a position to attack this subject. He bade them learn all that the lecturers and demonstrators could teach them, and more than all, and then they would find that to penetrate and grasp the beautiful and no doubt simple truths of the phenomena of life there was yet a lifelong work before them. "Does this appear discouraging? It is said that Alexander the Great sighed that there were no more worlds for him to conquer. Had his conquests been carried on in the dominion of science, he would never have found cause to utter such a regret." He referred to the admirable and compact laboratory for practical physiology which had been fitted up under the spirited superintendence of the lecturers on physiology, etc., and then directed their attention to the study of comparative physiology, the science in which John Hunter was so great an observer, and to whom comparative anatomy may be said to owe its existence as a science. He advocated its study, not only because a knowledge of it is required for the higher medical and surgical degrees, but for the intrinsic value yielded by the philosophical pursuit and the personal pleasure it is the privilege of its votaries to enjoy. He passed over such topics as botany and Materia Medica, which would occupy them during the first summer session, to other courses of study for which chemistry, anatomy, and physiology were preparatory—Pathology, Medicine, Surgery, and Obstetrics. Pathology was stated to be "the keystone of the bridge which the mutually dependent medical sciences and arts combine to form. On the one side it is sustained by the anterior sciences of Anatomy and Physiology; on the other side by Medicine and Surgery. Take away the central science of pathology, and the bridge becomes at once impassable to the passenger whose aim is medical and surgical practice. But the relationship between these sciences and arts is even yet more intimate, for they mutually support and advance each other. Need I point out to you that the man who launches into the practice of this noble profession without an adequate appreciation of the *science of life in disease* is of no higher rank than the obsolete barber-surgeon or the present too fashionable charlatan." He mentioned the respective values of the lectures, the wards, the bedside, the out-patient rooms, the operating theatres, the post-mortem room, the museum, "containing specimens which are the substantial records of the labours and fame of such men among your predecessors as Cline, Tyrrell, Travers, and Sir Astley Cooper, etc., as fields for research;" and then adverted to the good which may result from the study of comparative pathology, and directed attention to the Brown Institute for the treatment of diseased animals.(a) Before relinquishing the subject of pathology, the lecturer cited the words of "one who, as a thinker, as a teacher, and as an author on this science deserves your especial attention—viz., Mr. Simon. Turning to what pathology has done, that author says (*vide* 'Lectures on Pathology,' p. 15, etc.)." Turning to Medicine, Surgery, and Obstetrics, Mr. Croft asked, "What is meant by the science and art, or, in other words, the principles and practice, of Medicine and Surgery?" He defined medical *science* as embracing all that *is*, that happens, in the human body in a state of health and disease, and the medical or healing *art* as consisting of a series of rules or directions for the guidance of the physician or surgeon in his practice. The principles of Medicine, Surgery, and Obstetrics might be learnt from the various lectures and books, of which there is no lack, but the *practical* knowledge can only be obtained by most diligent personal observation and care. He impressed that upon them, reminding them of Gibbon's statement, "that everyone has two educations—one which he receives from others, and one, more important, which he gives to himself." "To be proficient in the art of practice you must particularly cultivate skill in *observing*, skill in *reasoning*, and skill in *action*. The grand fields for this kind of self-education are the wards and out-patient rooms of this splendid Hospital." He felt bound to say, that though appreciated by some of the students, yet by too many of them those departments are sadly neglected. He referred to the various excuses alleged by students for non-attendance, and told them that they are wrong, and that the responsibility rests with the student as much as with the physician or surgeon, and he said, "I would impress upon those who in due course will receive the practical appointments (of dressers and clinical clerks), that in taking upon themselves the incumbent duties they become not mere functionaries as regards clerkship and dressing, but at the same time tenants of rare posts of observation and reflection; and if they omit to exercise and improve those faculties they will not be fulfilling the just expectations of the profession to which they aspire." He also reminded them of their obligations to the institution and to their patients. Referring to the wards and out-patient rooms as grand fields for observation and experience, Mr. Croft said, "It is true that in consequence of the monstrous rates now exacted from the funds of the charity the number of in-patients has been (temporarily it may be hoped) reduced to about 400, but it is also true that the *clinical* character of a hospital does not depend on the number of patients it can accommodate, but upon the classes of cases which are collected in its wards and out-patient rooms, and upon the industry and talents of its medical and surgical staff. This exaction and its results have given occasion for the repetition of certain reflections and criticisms; but is that to be wondered at? Royal hospitals in common with royal personages must pay the penalty of greatness." He next dwelt on the value of the power of observation, and on the necessity for acquiring early a habit of precision and accuracy, and enumerated the various instruments that have been invented as auxiliaries to observation in the art as well as to the science of Medicine. He briefly mentioned the habit of methodical observation and the practice of attending only to the material circumstances of the case in hand. With reference to skill in reasoning, he said "The man who neglects to employ and cultivate this talent sinks into the mere empiric, and from that time becomes a drag upon, rather than a promoter of, the art he professes." He advised his hearers to study logic as a system, and to read the illustrations of the vice of hasty conjecture and incomplete observation abounding in works on the method of inductive reasoning. He quoted an instance cited in Mr. J. S. Mill's work—viz., that of Sir Kenelm Digby's "sympathetic powder," and as a contrast "the patient, philosophical observation and reasoning of one man, in rank a physician, but justly claimed as the property of mankind —Dr. Jenner, the discoverer and promoter of vaccination." After some appropriate remarks upon "skill in action," the lecturer said that from whichever direction the student regarded it he "cannot but see that practical acquirements must contribute to assist and advance the pursuit upon which he is engaged." Botany and Materia Medica being briefly alluded to, opportunity was taken to express a trust that the elements of botany and chemistry will soon be included in the list of subjects for preliminary examination. Of what the lecturer termed the "aids to self-education," a few concise words of advice were offered—viz., on reading, note-making, intermutual examinations and discussions. He warned his hearers that the

(a) This Institution was established in 1871 in the Wandsworth-road. It is under the auspices of Dr. Burdon-Sanderson and Dr. Klein.

career before them was an arduous one, but encouraged them with the words of Charles Mackay—

"If thou canst plan a noble deed,
And never flag till it succeed,
Though in the strife thy heart should bleed,
Whatever obstacles control,
Thine hour will come. Go on, true soul,
Thou'lt win the prize, thou'lt reach the goal."

and of others. He bade them take example by noble lives. He reminded them of the inspiriting tale of the Hellenic hero Perseus, and repeated, in the beautiful language of the Rev. Charles Kingsley, the stirring address of Pallas Athené to Perseus, and added—"Are there not heroes still, and are there not Titans and monsters yet for heroes to fight? Alas! too many—epilepsy, hydrophobia, tetanus, cancer, consumption, small-pox, cholera, fevers, and the ignorance, supineness, and prejudice which help to breed and foster these odious monsters. These are some of the direful brood with which you will have to contend; generations before you have done battle with them, but still they live to scourge us. Much has been achieved by the noble lives that have been spent in the long and mighty struggle, but much remains to be done. Living men around us and amongst us are heroically pressing forward in the glorious, if arduous task, and are present testimony that the spirit of chivalry still flourishes."

In conclusion the lecturer said: "I appeal to you who are with hopes and fears this day launched amidst the temptations and charms of a student's life; to you who return to win fresh honours, or with gallant determination renew the contest; to you who have hitherto yielded too easily in the race, or preferred your pleasure to your duty; to you who are embarking in the calling which has been sanctified by the Great Physician, whether you employ your talents at home or abroad, in peace or war, among the poor or the rich: I appeal to you ever to remember that you have a widespread duty to fulfil—a duty to your friends and relatives, by whose love and care you are or have been fostered; a duty to the philosophical and beneficent profession to which you belong; a duty to the Alma Mater who bids you maintain the heritage of fame inaugurated by the great Cheselden; a duty to your neighbour, whether in the form of the sufferer who claims the assistance it is in your power to give, or in the form of a fellow-labourer in prosperity or difficulties; and lastly, and above all, a duty to the great Creator, who formed the noble work called Man, and endowed him with talents to be used in his Maker's service, and who, in placing him in the midst of disease and suffering, wills that he should be moved by the sight of them to the active exercise of that loving beneficence which is the creature's best approach to the divine perfection."

UNIVERSITY COLLEGE.

The Introductory Lecture was delivered by Mr. Christopher Heath, F.R.C.S. The lecturer began by quoting a report of a 1st of October lecture by Sir Astley Cooper, which appeared in the first number of the *Lancet* in October, 1823. In this the reporter noticed that the students present were "of the most respectable description; in fact, we never before witnessed so genteel a surgical class. The sight was most pleasing, for they all appeared gentlemen of cultivated manners and of good education." Mr. Heath ventured to think the reporter would have been equally gratified had he been present in University College on that day. After welcoming those students who were returning to their studies after the vacation, the lecturer proceeded to address himself specially to the first year's men, congratulating them on having already given proofs of a sound preliminary education, and remarking that they must now build for themselves upon the good foundation thus laid. Turning to the curriculum of medical study, Mr. Heath thought the alterations of recent years had been on the whole beneficial, the student being spared a tedious apprenticeship, and having the several subjects brought before him in distinct courses of lectures, the number of which had now been reduced from what it was a few years back. The introduction of courses of practical chemistry, practical physiology, and practical surgery were especially dwelt on as filling up the gaps in medical education which are inseparable from the professorial teaching of large classes. The improvement in the methods of examination for medical diplomas was also remarked upon, and Mr. Heath contrasted the present system of practical tests with that in force only a few years back, when the fitness of a youth to practice Surgery was decided off-hand in an hour's time. Whilst approving of the present division of medical examinations into "little" and "great go," the lecturer feared that this tended to confine the student's practical study of anatomy to the first two years, which he regarded as wholly inadequate for the future operating surgeon. He then proceeded to urge the importance of seeing as much hospital practice as possible while a student, and showed that all the time which could be spared during the first and second years should be devoted to seeing surgical practice, medical practice requiring the devotion of the last two years to its study. The students were congratulated on the existence in University College of a special chair of Clinical Medicine, now ably filled by Dr. Wilson Fox, of whose instruction in the art of physical diagnosis they were exhorted to avail themselves.

Speaking of the work before the student, Mr. Heath exhorted him to be careful of his own health and strength by keeping regular hours, and by avoiding excesses of all kinds, even of study. He deprecated economy on one point only, that of food, which is but fuel for the brains, and as regarded exercise ventured to doubt whether the very violent exertions now commonly known as "athletic sports" were an essential part of medical training. The lecturer begged the student not to be over-anxious for the possession of prizes and degrees. To sacrifice a session for the attainment of a single prize was short-sighted and wrong. As regarded degrees the student would be a good deal influenced by the time for study at his disposal, for to obtain the M.D. of London required several years, and a high degree of merit. Mr. Heath then proceeded to animadvert very strongly upon the authorities of the University of London for overlaying medical degrees with non-medical science, so that a great part of the time spent in reading for these examinations was thrown away. He quoted one of the twenty questions in mechanical and natural philosophy set before medical students during the past summer in illustration of the absurdity of the present system of examinations, and also quoted from an address of Professor Huxley, delivered in University College two years ago, the following remarks—"I entertain a very strong conviction that anyone who adds to medical education one iota or tittle beyond what is absolutely necessary is guilty of a very grave offence."

The lecturer was glad to know that he did not stand alone in protesting against the overlaying of Medicine with mechanical science, for four years ago a sub-committee of Convocation of the University of London reported very strongly against the recently established preliminary and scientific examination, but without effect. The practical application to those entering on medical study was that, things being as they are, a student must at least matriculate, and if possible pass the preliminary and scientific examination, before beginning the study of Medicine. Mr. Heath deprecated any intention of disheartening the future candidates for medical degrees, but he thought that a failure to pass any one of the four examinations set by the University of London warranted a withdrawal from the contest, and it was much better to devote one's energies to thoroughly learning a profession than striving after unattainable honours. Lastly, addressing himself to those who would shortly cease to be students and embark in practice, Mr. Heath begged them not to imagine that they could ever venture to cease to study.

Medicine was a progressive science, and moreover, in order to become sound practitioners, they required practice in the application of medical principles. The lecturer recommended those who had not as yet seen private practice to learn its routine by assisting some established practitioner for a time, and pointed out that for those who recoiled from the unintermitting labour of general practice the public medical services offered good opportunities. Upon any who aspired to become consulting physicians or surgeons Mr. Heath impressed the necessity of patience and, above all, industry; and he concluded his address as follows:—

"It has recently been laid down by a public writer that the 'profession of medicine, in all its branches, is one for which capital is imperatively necessary.' This is obviously true if the word 'capital' be taken in its largest sense; but I demur altogether to its truth if by capital is meant money only. In the first place, if money-making is a man's chief aim and object, he is very unwise to invest his 'capital,' whatever it be, in the medical profession, for he will get there a smaller return than he might obtain in many honest trades. If, however, he desires a profession from honourable motives, and has, fortunately, some funds at his disposal to help him through the first few years, so much the easier will be his lot. But, gentlemen, the proper capital for you is 'brains'; and if you have not this, no amount of money can make you successful practitioners. With brains and industry you may

accomplish everything you can desire, if you are careful not to place your ambition too high. The writer I have referred to draws a melancholy picture of men dropping out of the race, etc., and seems to attribute all these misfortunes to want of capital, whereas I am rather disposed to blame the possession of capital for a good many of the failures which undoubtedly occur in the upper walks of the profession. A young man with a few hundreds *per annum* is too apt to take it easy when his student days are over; to hold office at a hospital, it may be, but to show no energy in the work of the school attached to it, or interest in the students; and why? Because he is provided for without the labour of taking pupils; he has no need to earn his daily bread; and he does not, therefore, seek for openings for the display of zeal and increase of knowledge. Is it to be wondered at, then, that 'when our imaginary hero is forty years old,' and by force of seniority rises to positions of importance and responsibility, he is very soon found to be wanting in many of the requisites for success, and as it is graphically enough said, 'is seen to be practically out of the running'? The possession of money, too, begets not unfrequently an ambition for high things, not warranted by concomitant circumstances. Many a sound country practitioner has been spoiled in the making of an unsuccessful London physician or surgeon, and the 'capital' which has served to maintain a disappointed bachelor in so-called 'pure' practice, would have well provided for a wife and children if its possessor had been able to estimate his own powers more fully, and had exerted them in the sphere to which they were suited.

"But still the race for the high prizes is open to all, and no one can tell at the beginning which will be the successful competitor. A few only can win the highest honours, but all of you can win respect and esteem if, whatever your path in life, you are careful not to sully your good name by aught of trickery or dishonesty. The profession of Medicine is an honourable one to all who practise it, whatever their grade may be, provided they employ themselves in ministering to the wants of suffering humanity, without pandering to its vices or yielding to its follies. You, who are now students only, will, I trust, ere long add your names to the long roll of worthies who, wherever disease and death are to be found, strive manfully to resist their inroads; and believe me, though in the good things of this life some may appear more successful than others, you shall none of you lose your reward."

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, OCTOBER 5, 1872.

THE INTRODUCTORIES.

The Introductory Lecture at a British Medical School is a literary manufacture *sui generis*. It is neither moral, scientific, practical, theoretical, homiletical, poetical, or witty alone; but it is, or may be, all by turns; and the one thing which it should not be is—common-place. It has been the fashion in the present day to decry introductory lectures, and they have been omitted at one or two schools—in consequence, it is said, of the licence taken by the students on these occasions. But as such episodes are the exception, we may safely affirm that we know of no valid argument against the introductory lecture, unless indeed it be furnished by the portraitures in this week's *Graphic*, which we do hope will not be allowed to become a precedent. A good introductory lecture, like an oyster before dinner, sharpens the appetite for the work of the session. It is an opportunity generally afforded to one of the last-joined members of the staff of a school to give to his colleagues and the students some sample of his mental resources; its general tenor should furnish the students some acquaintance with the higher and more attractive aspects of the work before them; and it should always be made an occasion when the school invites its old scholars and supporters to an hour's intellectual entertainment, thus renewing and strengthening the tie between them. It is for these reasons that we continue to report year after year the introductory lectures, and to offer a passing comment on them.

The leading feature in Professor Playfair's address at King's College was the higher life, aims, and rewards of the scientific physician, compared with the degraded and mercenary career of the pseudo-scientific trader in Medicine, "whose reputation is founded on some such rotten basis as a smooth and unctuous manner, an imposing equipage, or a specious use of pseudo-scientific terms, calculated to impose upon the ignorance and credulity of his clients, and who, in deed and in truth, is as blatant a quack as if he stood at the corners of the streets and proclaimed the value of his wares with the blast of a trumpet, as did the travelling empiric of old." Such a lesson is a very necessary and important one, and could not be given except in an introductory lecture, for medical ethics enter into no part of the curriculum prescribed by the examining bodies. Cynical observers would say that scientific physicians who trust to science alone seldom succeed, but this is becoming every day less true. At least it is certain that the most polished address, the highest-stepping horses, and the most imposing exterior will not in the present day impose on the public unless there is below all a basis of practical knowledge of disease and success in its treatment. Given these, and the more polished gentleman will succeed in Medicine better than the clown, as he will succeed in every other profession better.

Mr. Croft's address at St. Thomas's reads like the work of a thoroughly practical and accomplished surgeon and anatomist. Quoting Lord Bacon's apothegm, that Nature is only conquered by obeying her, he applied it to the pursuit of Medicine. Facts were to be sought for by his hearers, to be made their own. They were to become the slaves of facts; in time they might hope to conquer them. He advocated especially the practice of dissecting, not merely for what it can teach, but as a means of cultivating the habit of personal research, delicacy of touch, confidence and dexterity in the use of the knife. But he did not prescribe the study of human anatomy and physiology alone. The philosophical pursuit and personal pleasure afforded by comparative physiology were the real inducements to its study, besides the fact that it was required for the higher medical and surgical degrees. In reviewing the different studies which make up the science of Medicine, he gave to Pathology the position of the keystone in the arch, sustained on the one side by the anterior sciences of Anatomy and Physiology, on the other by Medicine and Surgery. Take away the central science of Pathology, and the bridge becomes at once impassable to the passenger whose aim is medical and surgical practice! Mr. Croft's definition of medical science and art strikes us as a happy one: medical science embraces all that *is*, that happens in the human body in a state of health and disease—the medical or healing art consists of a

series of rules or directions for the guidance of the physician or surgeon in his practice. Mr. Croft, therefore, does not seem converted to the modern idea of separating Physiology from Medicine; he rather looks upon it in the old-fashioned way, as a component part of medical science; and practically we believe that, at all events in England, it will continue to be so. One point more: Mr. Croft has restored to Gibbon the oft-quoted aphorism about the best education being the one a man gives himself. Brodie has often been credited with it, but we suspect he only borrowed it. Mr. Croft's address, which was marked throughout by good sense and ability, was exceedingly well delivered, and "told" on his audience thoroughly.

In University College Mr. Christopher Heath had the courage to tell the truth about the University of London and its medical examinations; and for doing so he deserves all honour. He quoted the absurd questions in natural philosophy and mechanics which are placed before candidates for medical degrees, and denounced, as it deserves, the way in which the examinations are overlaid with non-medical tests. The fact is that a much larger proportion of non-medical than of medical knowledge strictly so called is required from the student of the University of London, who proceeds from the Matriculation to the final degree of Doctor of Medicine. Professor Huxley, as quoted by Mr. Heath, said well—"I entertain a very strong conviction that anyone who adds to medical education one iota or tittle beyond what is absolutely necessary is guilty of a very grave offence." That this is the offence committed by the University of London is clear to everyone who is acquainted with the extent of subjects over which its examination papers range. In this way a University, supported by Parliamentary grants, and intended for the education of the people, becomes limited to the few whose mental organisations befit them to undergo the Chinese process of cramming. Mr. Heath exhibited no less praiseworthy boldness when he denounced the sacrifice of time and other subjects to the attainment of special prizes, which used to be, and perhaps is now, the besetting temptation to the student at University College.

Dr. Black, who is best known, perhaps, as the editor of one of the volumes of Sir James Simpson's posthumous works, delivered a philosophical and eloquent address at the Charing-cross School, which we this week print entire. The lecturer was particularly happy in dealing with the temptation to scepticism both in therapeutics and in higher matters which beset the student of Medicine. He did full justice to the work of our ancestors in erecting their system of therapeutics. There are more ways than one of treating a disease with success, and if we have discarded some of their measures, they, at least, not only accumulated an immense amount of knowledge of disease, but also devised a great part of the treatment now in use. With regard to the influence of the advance of pathology upon the therapeutics of our own time, he with equal truth and sagacity put a high estimate upon it; if for no other reason than because a better understanding of the pathology and natural history of disease must prevent us from making mischievous attempts to perform the impossible. The peroration of the address, dealing with the effect which the study of the human body in its structure and in its processes should have in strengthening belief in the high veritics of Theism and Revelation, and the impotence of evolutionary doctrines of creation to shake the cumulative proof of design afforded by the exquisite machinery of the animal body, was to our mind not the least valuable part of Dr. Black's lecture. The principles he enunciated are sanctioned by the highest reason, and afford an anchorage for the most reverent faith.

Dr. Thorowgood in his address travelled over much ground, over which the limits of our own space will not permit us to follow him. He discoursed on the history of Medicine, on the triumphs of modern preventive Medicine as personified in the Inspectors of H.M.'s Privy Council, on operative surgery, obstetrics, materia medica, and therapeutics—about which he had much to say, and said it pleasantly and well, interspersing it with references to Sydenham, Radcliffe, Sir Theodore Mayerne, and the physicians to H.R.H. the Prince of Wales; and in the latter part of his lecture he told the students of their Hospital and School, and of the recent changes, additions, and improvements which had been made in it. Nothing struck us more in the lecture than the downright blow given to the so-called study of therapeutics by experiments on animals. It was most telling and unanswerable. Dr. Thorowgood said he had seen as much opium given to a pigeon as would kill a man, and he had heard of goats enjoying shag tobacco, and rabbits belladonna; but were these grounds for expecting no innocuous effects from these substances on man? In like manner, because calomel produced a certain effect on a dog, does it follow that it produces the same or a similar effect on man?

Our limits will not allow us to notice any more of these addresses this week. Taking them as a whole, we can speak in high terms of praise of them. They are all more or less marked with thought; several of them are eloquent; and all have a healthy, thorough, earnest tone about them, which, if caught by the hearers, cannot fail to help them to be good students now, and in after life good practitioners and good men.

DR. EDWARD SMITH AND BARON VON LIEBIG ON FOOD.

Dr. Edward Smith's paper on Food, read at the Brighton meeting of the British Association, has called forth a rejoinder from no less distinguished an opponent than Baron Liebig himself. It must be allowed that the veteran chemist is sufficiently unsparing and aggressive. He does not content himself with defending the character of the extract of meat which bears his name, but he attacks Dr. Edward Smith wherever he is assailable, and seeks to weaken the effect of his opponent's criticism of the product in which the Baron is interested by proving him ignorant or mistaken on nearly every other point of which his paper treated. Baron Liebig's letter, which occupies a whole column of the *Times*, commences by the assertion that Dr. Smith expresses opinions which are incompatible with the present state of science. The next paragraph, however, certainly weakens the effect of this assertion, inasmuch as the writer asserts that the leading ideas upon nutrition and food are the same as were made known by him twenty-five years ago. No doubt the classification of foods into the albuminous, the fatty, and the saccharine originally made by Baron Liebig still holds its sway, but observation and experiment have led to the belief that a much more extended part in the alimentation of the body must be ascribed to the fatty, saccharine, and gelatinous principles than was first assigned to them by Baron Liebig. The latter, indeed, falls into a palpable fallacy when he says that because the chemical composition of meat and potatoes is perfectly well known, it is therefore easy to calculate the proportion in which they must be mixed in order to obtain the maximum of nutritive value for every individual at every stage of life. If this be so, it would certainly be the duty of philosophers to inform mankind in general the exact proportion of different articles of diet of which the chemical composition is known, a mixture of which would for every period of life afford the maximum of nutrition. We thought that this was the very point at issue, and that not only the chemical composition of the aliments but the chemico-physiological processes involved in digestion, alimentation, waste, and repair must be studied and known before science was in a position to give mankind better advice than instinct and the habits of civilised social life have furnished. Much more is to be said in favour of the next proposition in Baron Liebig's letter, that "in the selection of food, which is influenced by necessity or want, the

instinct and experience of the million are infallible, and a far better guide than the theoretic speculations of men who have remained ignorant of the composition of food, as well as even the simplest laws of nutrition." This is certainly a truism, only we may observe that instinct in diet, if infallible, is by no means unchanging either as to time or locality. Why, under very similar conditions of climate and soil, the Irish should eat potatoes, the Scotch oatmeal, and the English wheatflour and beef, if it were merely a matter of instinct, seems difficult to determine. The truth is that necessity, custom, and convenience have had far more to do with national diet than has instinct.

Dr. Edward Smith, however, has distinctly laid himself open to the attacks of his adversary by depreciating fish as an article of diet, and by his denunciation of tea and coffee as waste. Of fish, Dr. Smith said that it was rather a relish than food, and contains little more nutriment than water! Of course, Baron Liebig tells Dr. Smith that the flesh of salmon and herrings contains scarcely more water than beef, and that soles are as rich, weight for weight, in nitrogenous substances as wheaten flour. But had Dr. Smith ever seen the family of a Cornish fisherman—the robust, hale father, rosy, good-natured, stout missis, and from ten to eighteen curly-headed, strapping children, all bred, born, and subsisting (as far as animal food goes) on fish, and mainly on pilchards—he would not have said that fish contains little more nutriment than water.

Dr. Smith laments the waste of money on tea, because the amount of nutriment contained in an ounce of tea is infinitesimal. Tea and coffee doubtless are not nutriments in the sense to which Dr. Smith would restrict the word; but they will often do what nutriment will not. They will stimulate a jaded brain and nervous system to supply the very influence which shall enable the stomach to digest the food necessary for their repair. Baron Liebig is right when he says that the part which tea and coffee play is that "of serving the healthy man for the preservation of his health." "They strengthen the internal resistance of the body to the most various external injurious influences which combine to disturb the general vital processes, and they adjust these latter." To say that the poor man wastes his pence when he buys an ounce of one of these sweeteners of existence, because they are not convertible into muscle or fat, is not science but fanaticism.

Baron Liebig puts the value of his meat extract on a level with that of tea and coffee. He says—"Neither tea nor extract of meat is nutriment in the ordinary sense." This is a fair and honest statement; but it is not the popular view held by the advocates of Liebig's extract of meat. Liebig states that the extract of meat containing the soluble component parts of the meat is valuable, inasmuch as when added to a purely vegetable diet it will give to that diet the effect of a meat diet; and also that its addition to a mixed diet lessens the necessity for a large quantity of fresh meat. In proof of this he quotes the testimony of an African traveller, Dr. Schwemfurth, who found in his own person the good effect of adding extract of meat to a purely vegetable diet; and of a Russian chemist, Dr. von Schneider, who found the extract of meat valuable in his household for making soup with "bone fat and vegetables." To this view of the value of Liebig's extract we do not take objection. It no doubt contains animal extractive matters and salt; it has the flavour of meat, and is a useful addition to other aliment. But it is confessedly only as a supplement that it should be used; it cannot be made with safety the chief nutriment. Whether it is sufficiently nutritious to be used as a common article of food, either in health or sickness, is a question which is to be decided by experiments of two kinds, analytical and physiological. Dr. Smith's investigations have led him to form a very low estimate of its value. On this account Baron Liebig politely suggests that Dr. Smith is not possessed "of even a faint notion of the science of chemistry"—a personal amenity which leads one to ask whether the writer is attacking his antagonist from a commercial or from a scientific standpoint.

THE REAL DUTIES OF THE MEDICAL STUDENT.

It is to be supposed that the student of Medicine has, on entering his studies, accepted the duties and responsibilities of a practitioner of Medicine. What these duties and responsibilities are perhaps it is unnecessary for us to enlarge upon in our pages. They are, however, grave and onerous, and can only be treated of in that light. It is too much the fashion of the student of Medicine to regard as the chief aim and end of his labours the passing of those examinations which legally qualify him to practise. But this is an error, the evils of which cannot be overrated. "The child is father to the man," and in no profession or calling is this aphorism more applicable than to our own. The real business of life commences when the student enters upon the duty of treating disorder and disease on his own responsibility. Unless he obtain a good practical knowledge of his profession he can scarcely expect to succeed in a competition in which he will have able and well-informed men to contend with. In no pursuit, certainly amongst the learned professions, does the pursuer owe so much to his own exertions as in that of Medicine. In this there is no "royal road" to distinction. A "booby" by family influence and money has become a bishop. A lawyer, deficient in high legal learning, may by the same influences rise to what is called "distinction." But the doctor has no such adventitious aids; *he* must depend upon himself. It is consolatory to know that he can scarcely fail of reaping his reward if he pursues his calling with earnestness, diligence, and integrity. The Hunters, the Coopers, the Brodies, the Listons were hard-working students, and up to the last were industrious and even laborious, not only in respect to practice, but in their acquisition of knowledge. "I should never be contented," said Sir Astley Cooper before the Parliamentary Committee in 1830, "however laborious the day's work may have been, unless I had done something, before retiring to rest, in dissection or in experiments in physiology." Brodie, whilst mounting to the zenith of his practice, performed those experiments in physiology which have given a new lustre to his otherwise illustrious name. It was in the dissecting-room, the laboratory, and at the bedside when they were students that these great men acquired those habits of industry which they practised to the last. It would be wrong to assert that they had not more original genius than ordinary men; but without application, without a careful and judicious spending of their time in early life, that genius would have been but of little or no avail. When Sir Joshua Reynolds was asked the road to eminence for a painter, he replied, "Constant application of his powers to his art, and a thorough knowledge of its details." He seemed altogether to ignore "genius," as it is so called. If this was an error, it was a venial offence. The medical student, in the address which he hears at the opening of the session at the institution to which he has entered, will be told of the "noble profession" of which he is about to become a member. He will also properly be told of its difficulties and its labours. He will be urged to diligence, consistency, and a careful study of his health; but it is to be feared, in some instances at least, that the *ignes fatui* of prizes to be obtained will be held out to him as allurements to over-study in some particular department or departments. Under wholesome restrictions we have no desire to run down the prize system: it has a good as well as a bad side. But we are bound to confess that our experience, with respect to the most distinguished prizemen, is not in favour of the system. How many of them have we seen broken down by over-work, by paralysis, by softening of the brain! Those who escape these calamities have not been men who in after life have done justice to their

antecedents. As "practitioners" they have failed to obtain their just eminence. Like meteors, they dazzled for a time, and then sank into insignificance or oblivion. The real object of the medical student is to fit himself not simply for the "common exigencies" of his Profession, but to obtain a competent knowledge of disease in all its bearings, and of the treatment which he should pursue to cure or relieve it. This knowledge is only to be obtained in the dissecting-room and at the bedside. It is in these places that he will have the opportunity of exercising those powers of observation which will be of the last importance to him when he comes to practise for himself. One prominent evil of the present mode of teaching is the importance which is attached to minute points of anatomical detail—what used to be known as "French Anatomy." These are all very well

> "To show the stretch of human brain—
> Mere curious pleasure or ingenious pain;"—

but of what practical value are they to that vast mass of gentlemen who form nineteen-twentieths of the surgeons in "general practice" who have to administer to the wants and necessities of the multitude? And yet, if we are rightly informed, the majority of the rejections which have taken place in one, at least, of our leading Colleges have resulted from an ignorance on the part of the candidates of such refinements. By "the study of such minutiæ," said Sir Astley Cooper, "the landmarks of real practice are obscured and made foggy." "Success in practice," said Baillie,—himself the most successful practitioner of his time,—"is due to a competent knowledge combined with adequate powers of observation." Once again, then, we reiterate to our young friends the importance of obtaining that "competent knowledge" and of exercising those "powers of observation" which they can obtain if they pursue their studies with ordinary diligence and earnestness in the dissecting-room and at the bedside. There is another point upon which we consider it our duty to say a few words. A doctor should, above all things, possess good health and a strong constitution. Observers, and especially practitioners, of Medicine have found that, if men break down in their "struggle for life," this has arisen, as a rule, from physical, not from mental, incapacity. How many a man has succumbed to the want of bodily energy! How many

> "By the roadside fell and perished,
> Wearied with the march of life!"

Whatever, then, may be the responsibilities of the medical student, the preservation of his health and strength should be the foremost. It is not necessary that he should be an athlete, that he should jump over hurdles, or run a race against time, but that he should so preserve his physical energies as to fit him for those important duties which in practice he will be called upon to fulfil.

THE WEEK.

TOPICS OF THE DAY.

A UNIQUE case of manslaughter by pepper has lately been made the subject of trial in the Central Criminal Court. A man killed a nurse-child which was under the care of his paramour by throwing a quantity of pepper in its face and down its throat. According to the prisoner's own account, in order to stop the child crying, he took the pepper-box off the table and began to sprinkle a little pepper in the child's mouth, when the top of the box fell off and deluged the face and mouth. The child was 14 months old, and the man was not sober at the time of committing the offence. Dr. Parker, of 47, Earl's-court-road, who was called to the child, proved that on his arrival the child had been dead half an hour. "There was pepper all over the face, on the eyeballs, and in the nostrils. A lump of pepper was on the tongue, and in the mouth and cavity of the throat there was a considerable quantity. The air-passages were choked up with it, and the child had died from suffocation. About half an ounce of pepper had been administered." The jury, although they credited the prisoner's story that the top of the pepper-box had fallen off, found that he was guilty of gross and culpable negligence, and therefore of manslaughter, and he was sentenced to six months' hard labour.

Another of those wretched instances of persons in dying circumstances being taken to the station-house as drunk by the police has been reported in the papers. The unfortunate man was a Sheffield Irish labourer, and was found lying insensible in Russell-street. The man had been sick, and was taken to the police-station, where he was locked up and died. The post-mortem showed extensive fracture of the skull. Certainly we require an enactment that everybody found insensible in the streets by the police should be examined by a surgeon before he is locked up.

Hydrophobia must be very prevalent in the Manchester district of Lancashire, for Mr. F. Price, the coroner, stated that there had been five deaths from that disease in the district in the last twelve months, and four deaths in the adjacent one. The case which drew forth these remarks was one produced by the bite of a mad cat. The coroner, at the first sitting of the inquest, made some remarks about no cure for the disease having been discovered; and, of course, at the next sitting was able to announce that he had received two infallible specifics, one from a clergyman and one from a schoolmaster. He sagely said it seemed a pity these remedies were not better known. We think it is a pity that a coroner should display his want of acquaintance with the subject by leading people to trust in vaunted specifics, which only induce them to neglect the sole treatment likely to be successful—immediate and deep excision and cauterisation. We see the coroner recommends sucking the wound. Is this always a safe proceeding?

It is some proof of the progress of religious toleration amongst us that a Roman Catholic Archbishop has been requested to preside on the occasion of the distribution of the prizes at a large metropolitan medical school. Dr. Manning, however, filled this office on October 1 at the London Hospital, and did so with conspicuous grace and good taste. He said—

"He came among them without any acquaintance with medical science, but he presumed that the fact of inviting a stranger gave him perfect liberty of speech. He felt much happiness in coming there, because he thought they owed a great debt of gratitude to the medical profession. One and the same ministry was committed to them and to the clergy. They had the same mission in attending to the wants of the sick and afflicted, and in the visitations of the clergy it will often be found that the medical men were standing on one side of the bed and the ministers of religion on the other. There were three aspects of science—God, man, and the world. There were the moral feelings, the mental organisation, and the material fabric, all of which must be trained, developed, and corrected when they were disordered. Among the cultivators of Medicine he would reckon nurses and also clergymen. The inculcation of patience in trouble, of fortitude in bearing pain, was peculiarly their province. They knew that calmness of nerve, absence of excitement, and endurance were necessary—often, indeed, essential—for the well-being of their cases. He was not one of those who had always held that there was a close connexion between morals, mind, and matter, and that as a large proportion of involuntary actions were transmitted through our organisation, we were furnished with the means of accounting for many crimes. But although there were many crimes which might be called involuntary, yet a large amount of crime was due in the first instance to a voluntary act. The man who took more alcohol than was good for him, and who had lost control over himself, had perfect control at the commencement. Hence the necessity of disciplining the will; and it was part of the clerical functions to aid them to anticipate and prevent the worst forms of crime and disease. The clergy had no fear of science. Science was the cultivation of human reason. Lord Bacon said it was a hierarchy. There might be many lines and veins in science, but there was no

contradiction. It was like the lines of a railway, which might run parallel to and even cross over each other, but which never came into collision. Will in man was that of which we can give no other account than that we are conscious of it. In the lower animals there was spontaneity, in man both spontaneity and will. Reason in man acted on a deliberate choice, which was wanting in the lower creation. This reason and choice it was for them to cultivate and improve in connexion with the objects of their pursuits. Around them was a large world full of phenomena, of which they were engaged in giving an account; but there was equally, they must remember, another world of which no scalpel could give any account whatever. St. Augustine, whom they would pardon him for quoting, said, 'The greatness of God was seen in the least of His works.' The life of the rotifer, equally with the life of man, was a thought of the intellect of the Creator. Whence came that type of man? We saw it beginning as a speck of organic matter, and gradually developing into a marvel of engineering skill, and we were able to recognise in each stage of the fabric the mind of the Deity. He was an old man, and in his youth he was not a very good student, but he had undergone some experience, the result of which he would impart to them. In all their career they should remember that their studies would depend upon what they were in their moral character. All would depend on their will. If their will was wasted by injurious habits of life, which enfeebled them in mind and body, they might be sure that what they would achieve would be comparatively valueless. If they cultivated their will by reason, and applied their reason to their profession, there was nothing which they were capable of attaining which they might not attain. There were three words which he was in the habit of inculcating on students—intention, attention, and intensity: intention, because they must form some idea of what they were going to do. Many men failed in every profession, and they failed because they had never made up their minds what they were going to do, and consequently wasted their time and abilities by diffusion over an indefinite field. Attention was like the lens which converged the rays of light to a focus—the bull's-eye which could be turned on any object to illuminate it. Intensity was the force and vigour of application of the mental powers. All these—intention, attention, and intensity, for he returned to his text—depended upon the will. They should cultivate and discipline their will in the pursuit of their profession. And now to conclude. There was one thing which especially arrested his attention, and that was the hearty round of cheers with which each one of their officers was greeted as he entered. He said to himself, 'That is a good regiment; when a regiment greets its officers like that it is a compact body, and can do anything.'"

The Archbishop was heartily cheered by the audience, and a vote of thanks, proposed by Dr. Meymott Tidy, was carried by acclamation.

THE HERTFORD BRITISH HOSPITAL.

THE foundation of a new hospital—liberally endowed, complete in all its parts, and owing its origin to the enlightened and single-minded benevolence of one man, not to the ambition of a medical clique, and designed not to create pauperism but to relieve existing distress—is a fact so rare that its history deserves to be put on record. From an introductory statement prefixed to the Laws and Regulations of the Hospital, now just published, we learn that—

"The Hertford British Hospital grew up, so to speak, during the two sieges of Paris. In its origin it was an appendage to an ambulance, and a temporary expedient: within a year it became a distinct and permanent institution.

"Early in January, 1871, during the most distressing period of the German siege, to supply the urgent want of hospital accommodation for poor British subjects, Sir Richard Wallace, Baronet, opened wards for their reception immediately adjoining the hospital for the wounded which he maintained in the Rue d'Aguesseau. Non-resident patients received at the same place gratuitous advice and medicines every forenoon, except Sunday, from January till the end of July.

"On August 1 the patients, civil and military, were transferred to a commodious house hired for their reception at Levallois-Perret; whence, on November 15, 1871, removal to the present Hospital took place. At that date only one wounded soldier remained under treatment. He resided till his recovery was complete at the Hertford British Hospital, which is now maintained exclusively for British subjects unable to pay for medical attendance.

"On October 2, 1871, Sir Richard Wallace invited to his residence, 3, Rue Taitbout, Paris, Falconer Atlee, Esq., H.B.M. Consul, Sir John Rose Cormack, M.D., and the Hon. Alan Herbert, M.D., to receive from him, in a more formal manner than he had formerly submitted it, a communication to the effect that he had resolved to build and endow in Paris a hospital for the medical and surgical treatment of poor British subjects, to be called the 'Hertford British Hospital,' in memory of the late Marquis of Hertford.

"Sir Richard intimated that as a considerable time must elapse before a suitable site could be obtained, and permanent buildings be constructed, he wished to place a temporary hospital, with the least possible delay, at the disposal of those for whom the proposed institution was destined. With this object in view, he had taken the house, garden, and dependencies, No. 5, Route de la Révolte, which could be got ready by November 15 for the reception of from twenty to twenty-four patients, and the necessary resident staff. A bath-room, pharmacy, and dead-house would also be ready about that date.

"Sir Richard Wallace at the same time intimated his desire to give the management of the Hospital and the appointment of its officers and servants, resident and non-resident, to a committee of four, consisting of himself, Mr. Atlee, Sir John R. Cormack, and Dr. Herbert, the two latter constituting the medical and surgical staff. The committee of management was forthwith constituted in accordance with Sir Richard's proposition; and a formal minute to that effect was drawn up and signed by those present. The consent of Sir John Rose Cormack and Dr. Herbert to undertake the medical and surgical care of the patients was likewise recorded. On the proposition of Sir Richard Wallace, Dr. Shrimpton was appointed Honorary Consulting Physician.

"The Hertford British Hospital was, as appears from the preceding statement, definitively instituted on October 2, 1871, and opened for the reception of patients on November 15, 1871."

The staff consists of Dr. Shrimpton, as Consulting Physician; Sir J. R. Cormack and the Hon. Dr. Herbert, as Physicians; Mr. Cormack, Resident Clinical Assistant; and Mr. Watson, Dentist.

"Chapter VII.: The Physicians" begins thus:—

"1. To be two in number, British subjects, and legally qualified to practise Medicine in France.

"2. Each to receive £100 a year.

"3. To conduct the treatment, medical and surgical; and to regulate everything affecting the health, diet, exercise in the garden, conduct, and general well-being of the patients under their care," etc.

This honorarium to the Physicians is a sample of the good sense, good taste, and liberality with which the establishment is marked; and we may add that the founder takes the warmest personal interest in the house, the staff, and the patients.

TESTIMONIAL TO DR. BASHAM.

IT is gratifying to record that a meeting was held at the Westminster Hospital on Tuesday last to present a testimonial to this distinguished physician. Dr. Basham had been teacher in the medical school attached to the Hospital, and for many years Physician to the institution. He was painstaking as the teacher, and punctual as the physician. He was a favourite with the students; and he had conferred services to the profession by his elaborate and able work on "Dropsy." The testimonial consisted of a silver candelabra and stand, with an address engrossed on vellum by the past and present pupils of the medical school in connexion with the Hospital, as well as by his colleagues, on the occasion of his retirement from the chair of Medicine, which he had filled for more than twenty-two years.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A SPECIAL meeting of the Irish members of the above Association has been summoned to be held in Dublin on the 9th inst. in the King and Queen's College of Physicians, Kildare-street (which has been kindly granted for the purpose), to consider

the subject of holding provincial meetings statedly in Ireland, as is the practice in England and Scotland, as well as for deliberating on various matters more particularly affecting the interest of the Irish Associates in official connexion with the public institutions for the insane in the sister kingdom.

PUBLIC AND PRIVATE PRACTICE.

We observe that some of the speakers at the recent meeting of Poor-law Medical Officers spoke of the difficulties attending the execution of public functions by medical men in private practice. We would observe that the line between public and private practice may be drawn somewhat too tightly. If private practitioners accept "public" appointments, and then decline sanitary functions—which are the most important work that can be done for the public—on the ground that their private affairs will be injured, the question may fairly arise whether any public duties are compatible with private practice, and whether we must not have a new order of "public" practitioners. We cannot think such a plan a good one; and it were better to keep out the thin end of the wedge.

ADULTERATION OF FOOD.—PUBLIC PROSECUTION.

It is not to be expected that any law will be completely effective in preventing the adulteration of food and drinks; but legislation, we have always contended, may do much. Liverpool has set us a good example, and one worthy to be followed, not only in large towns, but throughout the length and breadth of the land, wherever there is a public analyst. Dr. J. Campbell Brown, the public analyst for Liverpool, has since his appointment had eight applications for analyses—chiefly milk and bread, and in one case a prosecution resulted in the destruction of a large quantity of rusks which were unfit for human food. The Liverpool Health Committee intend to institute a prosecution in every case of proved adulteration injurious to health.

SUPPLY OF BODIES FOR DISSECTION.

There have of late been fewer complaints respecting the supply of bodies for dissection at the great schools of anatomy. The supply, however, has not, we believe, equalled the demand. We are glad to record that the Norwich Board of Guardians have resolved upon granting the dead bodies of paupers dying unclaimed in the workhouse to the anatomical school at Cambridge for dissection, unless the paupers before their death should state their objection thereto. When the supply is short in the metropolis, why should not bodies be obtained, if possible, from extra-metropolitan districts? This is an important question now that the session has commenced, and well worthy the attention of the authorities. We know that there are some objections to this proceeding, but we think these might be easily overcome.

FALSE ECONOMY.

In the densely overcrowded parish of Clerkenwell, where there is good reason to believe that adulteration is carried on to a very great extent, the Vestry has decided not to appoint an analyst; the excuse offered is, that the appointment would involve expense, and this the Vestry is not prepared to incur. In the interest of the public we hope the Local Government Board will exercise the power they possess, and compel them to make the appointment.

THE MEDICAL SERVICES IN INDIA.

There is still some hope of a better arrangement of medical matters in India—at all events, the *Bombay Gazette* states that a definite scheme for the better arrangement of the relations between the Royal and Indian Medical Services is now under the consideration of Government.

INFANTILE MORTALITY.

That there is an enormous amount of mortality amongst infants and young children is a well-known fact, and it ought to be as well known that a considerable proportion is due to easily preventible causes. The Chief Bailiff of Burslem made what he justly regarded as a "startling" statement at a recent meeting of the Local Board of Health. Referring to the deaths in the town, he said that, out of 787 deaths in the year, 421 were of children under 5 years of age. We fear that there are many towns, larger and smaller than Burslem, in which the mortality of the young is in as great a proportion to the entire death-rate of all ages.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

At the annual meeting of this Society, held on September 30, 1872, the following gentlemen were elected officebearers for the session 1872-73:—*President:* Dr. Philipson. *Vice-Presidents:* Dr. Burnup, S. W. Broadbent, Esq., Luke Armstrong, Esq., and Dr. Peart. *Honorary Secretary:* H. E. Armstrong, Esq. *Committee:* Dr. Page, Dr. Arnison, Charles Carr, Esq., John Hawthorn, Esq., Dr. B. Bramwell, Dr. Humble, John Russell, Esq., Dr. Denham, and C. S. Jeaffreson, Esq.

FROM ABROAD.—INSANITY IN FRANCE DURING 1870-71—COPIOUS DILUENTS IN CHOLERA—THE MEDICAL CONGRESS AT LYONS.

At the meeting of the Academy of Medicine, September 24 M. Lunier, who, as Inspector-General of Lunatic Asylums has a vast number of documents pass through his hands, contributed an interesting paper on "The Influence of the Events of 1870-71 on the Movement of Insanity in France." From his investigations it results that the number of admissions into the French asylums from July, 1870, to July, 1871 (the year of the war and the Commune), was less by 12 per cent. than those of the year 1869-70. Of the 10,243 lunatics admitted between January 1, 1870, and January 1, 1871, 1322—that is, about 13 per cent.—became insane in consequence of the events of 1870-71, the proportion being 15·60 per cent. men, and 9·40 in women. During the second semester of 1871 there were also admitted 400 patients rendered insane in consequence of political events—viz., 8·04 per cent. men, and 5·98 per cent. women. On January 1, 1871, the asylums contained 38,100 inmates, or 64 fewer than January 1, 1870. On January 1, 1872, they contained 713 fewer than in 1870, or, according to what would have been their number, had the increase continued at the same ratio as in former years, 3268 fewer.

Thus these events seem to have given rise to two results of a somewhat contradictory nature. They have determined the outbreak of nearly 800 cases of insanity, while there has been a diminution of 3268 in the number of lunatics admitted. This diminution, M. Lunier believes, may be attributed to various causes, and especially to the disturbed state of the services of the asylums produced by the invasion, the greater severity in the admissions, the diversion of ideas produced by the events in a certain number of persons predisposed to insanity, the temporary diminution of excess in alcoholic drinks in certain parts of the country, and finally by the rapid termination by death of cases of insanity determined by the commotions of this disastrous epoch.

At the same meeting of the Academy Dr. Netter brought forward his mode of treating cholera, which he states on several occasions has been successful. It consists in giving enormous quantities of diluents (of which he prefers a decoction of veal), *coup sur coup*, so that as much as twenty litres or more are taken in the twenty-four hours. The diluent should be given at the surrounding temperature; for while warm fluid is very repugnant to the patient, when cold it may arrest the vomiting prematurely. In the author's view of the pathology of the disease, vomiting and diarrhœa are necessary evils, having for object the elimination of the choleric poison. But as such

evacuations, when excessive, lead to a great loss of the serum of the blood, an exhaustion of the humours, and a desiccation of the tissues, the deficiency should be supplied by the rapid and forced introduction of enormous quantities of aqueous drinks. Unfortunately the cases which the author adduces of the successful employment of his method are neither numerous nor conclusive.

The Congrès Médical, which commenced its sittings at Lyons under the presidency of M. Diday on September 18, seems to have been a success as far as numbers went—more than 300 members being present. There were, however, few persons of any professional distinction there, Professors Verneuil and Le Fort being the only persons of note from Paris, while of the few foreigners present there were none whose names carry any weight except Dr. Lombard, of Geneva. The various discussions seem to have been vigorously maintained, and many interesting papers and facts were brought forward, to some of which we hope hereafter to advert. Small-pox and vaccination occupied more than one of the meetings, and others were devoted to wounds from firearms and their treatment. Important communications were made by MM. Sarazin and Le Fort concerning military medical organisation and the management of military and international ambulances. The cattle plague, and the effects of alcohol, each occupied a *séance;* while a lively discussion ensued on the various causes of the depopulation in France and on the mortality of nurse children. In this Dr. Drysdale, one of the few visitors from London, took part, and must have been considerably surprised at finding that the panacea for all social ills, which he is so fond of ventilating—the artificial limitation of the number of births—and to which he attributes what he calls the comparative prosperity of France, was altogether repudiated by the Congress, which, on the contrary, seemed only anxious to find the means by which the number of the inhabitants might be most rapidly multiplied. The Congress wound up its labours by unanimously agreeing to a petition to the National Assembly that teaching should be rendered entirely free, and that the granting of degrees should be in the hands of the State.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

TUESDAY, OCTOBER 1, 1872.

Dr. J. ROGERS, President, in the chair.

A GENERAL MEETING was held for the purpose of expressing regret at the abandonment by the Government of the dispensary clauses in the Public Health Bill of last session; to make suggestions for the revival of the measure next year, which, if adopted, would secure for the rural districts the advantages now derived from the establishment of Poor-law dispensaries in Ireland and this metropolis; and to call attention to the recent action of the Local Government Board in reference to the appointment of lay or legal inspectors only to control the medical service, and to carry out the provisions of the Public Health Act.

Among those present were—Dr. Lush, M.P., the Drs. Young (of Aldershot), Dr. Dowse, Dr. Viuall (of South Hackney), Mr. Harry, Mr. Barnes, Dr. Smith, Dr. Henry, Dr. Fleming, Mr. King, Mr. Napper, Mr. Martin (of Crawley), Dr. Welch, Dr. Chas. Foster, Dr. Richard Grimbly, Dr. Joyce, Dr. John Vance (of Plaistow), Dr. F. C. Killand (of Plaistow), and Mr. Henry Dalley.

The CHAIRMAN, in commencing the proceedings, said he had received letters from Sir Dominic Corrigan, M.P., one of the members for the city of Dublin; from Dr. Lush, M.P. for Salisbury; from Dr. Dalrymple, member for Bath; Mr. Corrance, M.P. for East Suffolk; and Mr. Seely, of Aylesbury—expressing their cordial concurrence in the objects of the meeting. He described the political work of the Association during the last session of Parliament and the recess, and complained that it was slighted by the Medical Corporations in London. He feared that unless legislation was taken up by independent members of Parliament, they had no chance of accomplishing anything, and to attain that end all their efforts must be directed. Dr. Acland, the Regius Professor of Medicine in the University of Oxford, recommended delay. But he never went among or mingled with the poor, nor was he aware that the remuneration paid to a medical man as an inspector in the town of Middleton was £5 a year, and in Scarborough—a rising and prosperous bathing summer resort—it rose to the munificent sum of £20 per annum. But what else could they expect? The Local Government Board was nothing more nor less than the old Poor-law Board, and they all had some idea of the traditions connected with that institution. (Hear, hear.) But the greatest hardship of all was to appoint legal and military men to superintend and control the medical officers engaged in the carrying out of this Bill. In law no man was appointed a judge, nor, in point of fact, to any office of importance, unless he had been in practice for at least seven years; but on the present occasion an ex-lieutenant of artillery and a crowd of lawyers—ten in number—were appointed to control the medical profession in the discharge of most onerous and important duties. It was said that these appointments would expire on March 24 next. They all knew what excitement was created some years ago when the Earl of Devon appointed his own nephew and the son of Mr. Fleming to offices for which they were not fit; but now that Mr. Stansfeld had followed the example by nominating ten briefless barristers for a similar reason, the Liberal press were silent. He trusted, however, that such would no longer be the case, and believed with Mr. Seely that to place the hospitals of the country under the management and control of military men and lawyers was simply ludicrous.

Mr. BARNES (Secretary to the Association) read the minutes of the last meeting of the Council, the majority of whose members, he said, were in favour of Mr. Stansfeld's Bill. Those placed in authority hitherto over the Medical Officers of Health had given great dissatisfaction; and for his own part he confessed he would rather have a legal man or a military man placed over him, who would have nothing to do with medical matters, than the authorities that had hitherto existed. He believed Mr. Stansfeld meant well, and that his Bill ought to have a fair trial, because, in his opinion, if the medical officers themselves were consulted it would be found that five-sixths of them were in its favour.

Dr. LUSH, M.P. for Salisbury, said he attended on the present occasion at some inconvenience, but he felt it was a critical period for the medical profession, and therefore he felt it his duty to do so. He had himself been for many years a Poor-law Medical Officer, and felt convinced that the Act of last session would greatly militate against that class of the Profession. From his own experience, their position generally, especially in the neighbourhood of large towns, was very painful indeed, in consequence of the hard work they had to perform, and the fact of their being so badly paid. In finding fault with the Bill, however, he was conscious of the difficulties which Mr. Stansfeld had to contend with, and he should on that account give him credit for good intentions. He could not do so for his good acts, because this Bill was a miserable failure. His own opinion was that if medical men united and pulled together, they would succeed in ameliorating and improving many things which concerned their Profession; but unfortunately they did not, and were thus exposed to many evils and inconveniences that might be avoided. He hoped the meeting would offer a strong protest against the recent appointments. He had also hopes that the recent Act would be considerably modified, and vitality be imparted to it.

Dr. VINALL, of Hackney, proposed—"That in the opinion of this meeting the salaries of the Poor-law Medical Officers have been arbitrarily fixed by the guardians and sanctioned by the central department without regard to any uniform standard or rate of remuneration; that they have not been raised in proportion to the increase of population, the ratio of pauperism, or the diminished value of money, and that in the large majority of instances they are a very inadequate payment for the onerous and responsible duties which the medical officers are called upon to perform. And that this Association regrets that the Public Health Act, 1872, constituting the new local sanitary authorities and districts, should contain no provision for the establishment of public dispensaries on the model of those at present existing in the metropolis and in Ireland, and which have worked so efficiently in that country."

Mr. GRIMBLY, of Banbury, seconded this resolution, and urged the members of the medical profession to greater union among themselves.

The resolution was put, and carried unanimously.

Mr. JOYCE, of Rolvenden, Kent, proposed the next resolu-

tion:—"That this Association protests against the imposition of new duties under the Public Health Act, in addition to those which they are called on to perform under the Diseases' Prevention Act, and especially the part which they may have to take in connexion with the registration of diseases, and which this Association believes will not only be exceedingly onerous, but absolutely impracticable, if such dispensaries are not generally established, so as to relieve the district medical officers from the expense and labour of supplying medicines, and enable them by such means to check more promptly the first outbreaks of disease, and thereby diminish the principal cause of our enormous expenditure on pauperism."

The resolution, having been seconded by Mr. Frost, was carried without dissent.

Mr. Young, of Aldershot, moved—"That for the moral support and protection of district medical officers in the discharge of the difficult and often invidious duties which they will be required to perform under the Public Health Act, it is considered by the Association to be highly desirable that chief Medical Officers of Health debarred from private practice should be appointed by county authorities, and in towns containing a population of more than 200,000, to whom the district medical officers might make their returns and reports, and on whom would devolve the responsibility (so damaging to gentlemen in private practice) of initiating proceedings under the new Act."

Mr. Vance seconded.

After an amendment had been proposed by Mr. Barnes, but lost, the resolution was passed.

Dr. Lush, M.P., moved the last resolution, which, he thought, expressed the views of country medical officers. It was to the effect that such appointments were needed to give the medical officers' reports weight with the local authorities, seeing that the most recent appointments by Mr. Stansfeld of inspectors to carry out the Public Health Act had been such as to give the public no confidence whatever in the administration of the Act.

This resolution was seconded by Mr. Joyce, and carried; after which the meeting terminated with a vote of thanks to Dr. Lush and to the Chairman.

REVIEWS.

The Preservation of Health; or, Essays explanatory of the Principles to be adopted by those who desire to avoid Disease. By Thomas Inman, M.D. Lond., late Physician to the Royal Infirmary, Liverpool, etc. Third Edition. London: H. K. Lewis. Pp. 402.

The Restoration of Health: being Essays on the Principles upon which the Treatment of many Diseases is to be conducted. By the same Author. Second Edition. London: H. K. Lewis. Pp. 567.

These two volumes contain much information communicated in a quaint, easy way, though the former is perhaps the more interesting of the two. Their contents are varied, and of a certain though very unequal value, for Dr. Inman, though crotchety, is undoubtedly a man of ability. The greater part of the books has been written *con amore*, and so there is a certain amount of pleasure in reading even those portions with which you may disagree. Both volumes are intended for the public rather than the Profession, yet we do not hesitate to say that many practitioners would be the better for reading them. The present period in the history of Medicine is a momentous one. Many are throwing off the trammels of educated prejudice, and trying to inquire for themselves. Many more listen greedily to those who are known to be sceptical. Unfortunately the word sceptic has so long been used in a bad sense that it is difficult to eradicate the evil impression which attaches to it. But if a man is dissatisfied with the grounds on which such and such a dogma is held, and then fairly, and to the best of his ability, endeavours to find out if the dogma rests on good foundation, that man is a sceptic in one sense, but certainly not in an unfavourable one.

Now, it is for men who try to think for themselves, to get rid of the old doctrines which are untenable, but to hold fast those which are good, still more to reject the new and crude theories which are everywhere being presented as sound and enlightened—it is to such men, who are trying to educate themselves in the highest sense, that these volumes, trivial though they are, in many ways may prove useful. We do not commend the views herein contained for acceptance, but they are certainly worth listening to, expressed as they are with energy and ability. Dr. Inman has very effectually emancipated himself from the chains of authority, and so may well help others to do the same; but beyond this point we should be chary in having him for a leader in everything.

But as to the contents of these works: we encounter in the former such articles as—feeding and food, the use of tobacco, the drink we consume, is alcohol an aliment? the house we live in; married life, the wife a mother, the mother growing old, the father getting into years, the infant just arrived; and so on through other stages—baths, exercise, change of air, aperients, the use of a doctor, etc.

In the work referring to the restoration of health, which of course is more strictly medical, we encounter such chapters as the treatment of headache, convulsions, epilepsy, palsy, sleeplessness, insanity, cold, sore throat, croup, bronchitis, consumption, pneumonia, pleurisy, heart disease, vomiting, dyspepsia, jaundice, constipation, obstruction of the bowels, peritonitis, diarrhœa, diabetes, dropsy, inflammation, fever, rheumatism, gout, myalgia, neuralgia, sciatica, hysteria, exanthems, malaria.

Of them both we say, by all means read them, only do as Dr. Inman has done—use your judgment; go with him where right, reject his guidance where wrong.

NEW BOOKS, WITH SHORT CRITIQUES.

The Royal Guide to the London Charities for 1872-73: *showing in alphabetical order their name, date of foundation, address, objects, annual income, chief officials, etc.* By Herbert Fry. R. Hardwicke, 192, Piccadilly.

This is a very useful little *brochure*. It is a complete guide to the London charities; and we unite with Mr. Fry in expressing "a hope that this guide may continue to direct as it has already several times done during the ten years now gone by, many a thousand pounds to the exchequers of different institutions and many a sick and helpless one to the place where relief and succour are to be obtained."

GENERAL CORRESPONDENCE.

MEDICAL MAPS FOR ENGLAND.

Letter from Mr. Alfred Haviland.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a leading article which you published on June 29, 1867, entitled "Rain and Disease," you made the following remarks:—"We feel convinced that meteorology and *geology* are not sufficiently studied in connexion with disease. We should like to see published a good map of the British Isles, showing distinctly their rainfall, watershed, and geology, for the use of independent observers, who would then be enabled to superadd their own facts relating to the appearance of diseases, and thus afford a valuable aid to the registration of disease." I rejoice to inform you that such a map is now in the course of construction, and that two goodly instalments are nearly ready for delivery to subscribers; these comprise the South-East of England and the Basin of the River Thames. The latter, I believe, is a commission from the Society of Arts. They are geological models in the widest and best sense of the term, and reflect the greatest credit on the gentlemen who have been engaged in their construction—Mr. W. Topley, F.G.S., of the Geological Survey of England and Wales, who supplied the data from which the contours have been made; and Mr. James B. Jordan, of the *Mining Record* Office, who moulded and coloured them.

When all the parts are finished, and the physical and geological model of England complete, it will be one of the finest works ever produced, and its usefulness incalculable; and I feel convinced that a large majority of our profession, especially those who take an interest in the public health, the natural history and distribution of disease, will hail with peculiar satisfaction such a splendid work of art.

As for myself, who for the last five years have felt an especial craving for such a groundwork whereon to work out the many problems involved in the study of medical geography, I candidly confess these models fully realise my *beau ideal* of a map.

Their horizontal scale is four miles to the inch, and their vertical 2000 feet, so that the perpendicular exaggeration is reduced to the lowest scale compatible with usefulness. The entire map of England will, when finished, be about 10 by 9

fect. Those who may wish for further particulars will obtain them by applying to Mr. James B. Jordan, 11, Grafton-square, Clapham. The model of the south-east of England, including the whole of the Wealden area and part of France, which was lately exhibited at Brighton, and received so favourably by the British Association, may be seen at the School of Mines, in Jermyn-street.

Those who will have the guardianship of the public health under the new Act will find these maps of essential service, and especially so should at some future time a rearrangement of the registration districts be decided upon, and a natural system adopted in accordance with the plan I proposed in a paper read before the British Association at Liverpool in 1870, when I endeavoured to show that, were our country divided into districts regulated by its watershed and river system, we should then have in every district a natural area which would admit of the greatest possible precision in all our scientific investigations.

If once such a system were adopted, our vital statistics would then assume an importance which is now denied to them; each district would became a focus for scientific inquiry, its rainfall and temperature, the prevalence and strength of its winds, its agricultural statistics, the produce of its fields, its mines, and rivers,—all could then be hopefully studied in connexion with the health and diseases of its inhabitants. I say hopefully, for now there is ever a feeling of distrust in whatever we do in this respect, and however carefully; for the artificial boundary-line is the bugbear now before us, marring our work at every step, and in some instances creating a feeling akin to despair.

If, therefore, this splendid work should ever induce Government to carry out the natural system, the country will owe its authors a deep debt of gratitude, and all lovers of science, whether for science sake or the sake of the public health and wealth, will heartily and thankfully acknowledge such a material aid in their researches.

I am, &c.,

London, October 1. ALFRED HAVILAND.

OBITUARY.

JAMES CHATTERTON, M.D.,

ELDEST son of George Chatterton, Esq., J.P., born August 9, 1844, was educated at Sandwich School, Kent, and entered the Queen's College, Cork, in 1862. During his Arts course he obtained scholarships in mathematics, chemistry, and modern languages; took the degree of B.A. in 1865; studied Medicine in the Queen's College, Cork, for two years; was resident pupil in the Whitworth Hospital, Dublin; took the degrees of M.D., M.Ch. of Queen's University in Ireland in 1868; he also became a Member of the Royal College of Surgeons of England, and a Licentiate in Medicine and Midwifery at King and Queen's College of Physicians of Ireland. The same year he took first place at the autumn examination for the Army Medical Service on entering Netley Hospital, and in 1869 retained the first place in coming out; he was appointed to the staff, from which time to 1870 he did duty with several regiments, including the 1st Lifeguards. In January, 1870, he was sent to Canada, and appointed one of the Surgeons to accompany the Red River Expedition, on his return from which to England he was gazetted in January, 1871, Assistant-Surgeon to the 2nd Battalion Scots Fusilier Guards, and he served with them until his death at the Tower, September 21, 1872, aged 28 years. The cause of his death was pyæmia following facial carbuncle.

DR. ROSCOW,

WHO died lately, was a native of Huslingden, in Lancashire, and the eldest son of the late Mr. William Roscow, a surgeon of some repute as an oculist. He was educated at the Edinburgh, Dublin, and London hospitals, and after completing his studies he assisted his father. In 1842 he proceeded to Cambridge, where, after the usual terms, he obtained his degree in Arts, and in 1848 he took the M.B.; subsequently he attended the Paris hospitals. He then settled in Brompton, and was Visiting Physician to the Dispensary there. Whilst in London he suffered from rheumatism, and, in consequence, he had to give up his practice, and travelled on the Continent for the benefit of his health. He finally settled in Brussels in 1864, where he gained an excellent practice, and was highly esteemed and is regretted by a large circle of friends.

THE General Council at Geneva last week decided to create a Faculty of Medicine.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 26, 1872:—

Clark, Frederick Checsman, Croydon.
Martin, John, West Bromwich.
Shaw, Josephus, Lees, near Manchester.
Whitaker, James Scaley, Hampstead-road.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Barnard, Charles Edward, Guy's Hospital.
Churchward, Albert, Guy's Hospital.
Medcalf, Ernest Sexton, Guy's Hospital.
Robinson, Richd. Edward, Leeds Hospital.

At the Preliminary Examination in Arts, held at the Hall of the Society on September 27 and 28, eighty-eight candidates presented themselves, of whom thirty-four were rejected, and the following fifty-four passed, and received Certificates of Proficiency in General Education, viz.:—

In the First Class, in Order of Merit.

1st. Alfred Chawner.
2nd. Thos. Arthur Richardson and C. L. M. Taylor.
4th. George Thornton Cape, William J. Cobbin, Wm. Wood Cuthbert, and F. M. Sandwith.
8th. W. S. Andrews, W. T. Jackman, Lawrence Mahony, Herbert J. K. Moberly, Frank Newcombe, and Sidney Skerman.
14th. Owen Bowen, Richard Lyddon, Philip Stocks, and Frank John Wells.

In the Second Class, in Alphabetical Order.

Aldous, Robert.
Battams, John.
Benington, Robert C.
Birt, Louis F. H.
Bowles, Sholto S.
Brett, James.
Clapp, Robert.
Collier, George Walker.
Colt, Thomas Archer.
Dean, Charles Percy.
Douglas, Arthur Baird.
Dowding, Alexander W. W.
Dunlop, James Hay.
Edgelow, Samuel Henry.
Fletcher, Frederick Alex.
Ford, John Chubb.
Goulder, Frank Samuel.
Greensill, Edward M.
Grimwood, John.
Haisne, William C.
Hawkins, Frederic Mortimer.
Hollingworth, John.
Hope, Robert Charles.
Instone, Samuel V.
James, James.
Jones, Vincent Alexander.
Lacey, Charles Wm.
Pye, Walter.
Robey, Jesse W.
Roche, Eugenius A.
Schön, Charles.
Sheppard, Walter.
Sugden, Joseph W.
Sykes, John E. G.
Webb, William Henry.
Wilkinson, John Cooper.
Zimmerman, Benjamin F.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ALDER, JAMES W. B., M.D.—Medical Officer for the Town District of Alverstoke Union.

BROWNE, Dr. VALENTINE—Assistant-Physician to the Mater Misericordiæ Hospital, Dublin.

COCKCROFT, JOHN, M.D.—Medical Officer for the West Leyburn District of Leyburn Union, Yorkshire.

DAVIS, JOHN, M.B., M.R.C.S., L.S.A.—Medical Officer for the Llangonoyd District of Neath Union.

DEANS, JOHN, M.R.C.S., L.S.A.—Medical Officer for the Northtawton District of the Okehampton Union.

DUNSTAN, ROBERT, M.R.C.S.E., L.A.S.—Medical Officer for District No. 3 of the Penzance Union.

HARRIS, HENRY, registered Chemist—Out-door Dispenser to the Infirmary and Dispensary, Tunbridge Wells, *vice* E. F. Woodward, resigned.

MOADE, WARREN, M.D.—Medical Officer of the Country District and Workhouse, Alverstoke.

RAVERTY, JAMES, L.A.H. Dub.—Apothecary to the Boyle Workhouse, co. Roscommon.

WALKER, THOMAS OSBORNE, M.R.C.S. and L.S.A.—Certifying Factory Surgeon for Crick, Northamptonshire.

WATFORD, ALFRED RUDYARD, M.D., L.S.A.—Resident Medical Officer to the St. Pancras School, Leavesden.

BIRTHS.

FAIRBANK.—On September 25, at Windsor, the wife of Thomas Fairbank, M.D., of a daughter.

HEFFERNAN.—On September 25, at 25, Upper Berkeley-street, Portman-square, the wife of J. J. Heffernan, Surgeon Madras Army, of a daughter.

HILTON.—On September 26, at Hedingham House, Clapham-common, the wife of John Hilton, F.R.C.S., F.R.S., etc., of a son.

HOCHEE.—On September 26, at East End House, Finchley, the wife of James Hochee, M.R.C.S. Eng., L.S.A., of a daughter.

PITTOCK.—On September 24, at 23, Cecil-square, Margate, the wife of G. M. Pittock, M.B., of a son.

MCSHEEHY.—On September 21, at her father's residence, Mount Cross, Bramley, Yorkshire, the wife of E. Louis McSheehy, F.R.C.S.L., Surgeon 12th Regiment, of a daughter.

WORTHINGTON.—On September 27, at 7, The Parade, West Worthing, Sussex, the wife of George F. J. Worthington, L.K.Q.C.P.I., M.R.C.S. Eng., L.F.P.S. Glasg., of a daughter.

MARRIAGES.

AVENT—O'HARA.—On August 6, at St. Mary's Church, St. Kilda, Australia, Nicholas Avent, surgeon, formerly H.M.'s 66th Regiment, elder son of the late N. B. Avent, surgeon, Modbury, Devon, to Louise, fourth daughter of the late Henry O'Hara, Esq., of Mansfield, co. Cork.

BROICHER — KOEPPEL.—On September 26, at New Strelitz, Frederic Broicher, Esq., of Tulse-hill, to Pauline, daughter of Dr. Koeppel, Physician to H.R.H. the Grand Duke of Mecklenburg-Strelitz.

COWDELL—SMITH.—On September 27, at St. George's, Hanover-square, Alfred W. Cowdell, solicitor, Chesterfield, fourth son of the late Charles Cowdell, M.D., of Dorchester, to Alice Maud, second daughter of Thomas Henry Smith, Esq., of 13, John-street, Berkeley-square.

CRUICKSHANK—MACDONELL.—On September 25, at St. Stephen's, Paddington, James Alexander, eldest son of the late Alexander Cruickshank, Esq., of Edinburgh, to Annie Margaret, only daughter of the late G. B. Macdonell, Superintending Surgeon of the Madras Army.

DALTON—MOBBERLEY.—On September 19, at Christ Church, Hampstead, Francis B. Dalton, Esq., late Surgeon-Major 1st or Royal East Middlesex Militia, son of the late Captain Dalton, formerly 1st Lifeguards (Waterloo), to Mary, third daughter of the late William Mobberley, Esq., The Hall, Cradley-heath, Staffordshire.

EVANS—EVANS.—On October 1, at St. Mary's, Tenby, Herbert Norman Evans, M.B., of Hampstead, to Mary Elizabeth, second daughter of Evan Evans, Esq., of Tenby, South Wales.

FOULDS—JOHNSON.—On October 1, at Christ Church, Streatham, Samuel Foulds, L.R.C.P. Lond., M.R.C.S. Eng., Chesterfield, to Eleanor, eldest daughter of Edward Johnson, Esq., of The Laurels, Gravelly Hill, near Birmingham.

HATCHELL—POTTER.—On October 1, at St. Luke's Church, Sheffield, Charles Hatchell, Surgeon Indian Army, to Jane Elizabeth Potter.

PILKINGTON—WOODBRIDGE.—On September 26, at St. Thomas's Church, Bishopwearmouth, Edward Pilkington, M.R.C.S., eldest son of the late Edward Pilkington, Esq., of Tullamoore, and grandson of the late Henry Pilkington, Esq., J.P., of Tore, co. Westmeath, to Eliza Mary, eldest daughter of the late Henry Woodbridge, Esq., formerly of Camberwell, Surrey.

SHORTT—HALL.—On September 24, at the parish church, Modreeny, co. Tipperary, Thomas Henry Howard Shortt, Esq., Bengal Civil Service, second son of William Shortt, M.D., to Elise, second daughter of the late Robert Hall, Esq., of Merton Hall, co. Tipperary.

WHITEHORNE—HEWITT.—On September 26, at St. George's, Hanover-square, James Charles Whitehorne, Esq., of the Middle Temple, barrister-at-law, to Ann Elizabeth, eldest daughter of Graily Hewitt, M.D., of 36, Berkeley-square.

DEATHS.

GILLEM, ISAAC JOHN, M.D., second son of the late Rev. Isaac Gillem, Vicar of Northleigh, and incumbent of St. Michael's, Liverpool, at South Lodge, Ham, from exhaustion, on September 21, in his 54th year.

HASTINGS, EMILY, the beloved wife of John Hastings, M.D., of 14, Albemarle-street, London, at Brent Lodge, Hanwell, Middlesex, on Sept. 30.

LIVINGSTONE, R. HAMILTON, M.D. Edin., eldest son of William Livingstone, M.D., suddenly, at St. John's, New Brunswick, on September 11, aged 36.

MACRAE, JOHN, L.R.C.S. Edin., at Lewes, on September 27, aged 61.

NIELL, JOHN, M.D., late of Aldersgate-street, London, at his residence, Sydenham Villa, Croydon, on September 30, in the 66th year of his age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

HOSPITAL FOR DISEASES OF THE THROAT.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of England, and must produce evidence of having acquired skill in the use of the laryngoscope. Applications, with testimonials, to George C. Witherby, Esq., Honorary Secretary, on or before October 22.

PARISH OF ST. GEORGE'S, HANOVER-SQUARE.—Medical Officer of Health. Candidates will be required to strictly carry out the duties as laid down in the 132nd Section of the Metropolis Local Management Act, from time to time to test the gas, and to analyse the water supplied to the parish, to carry out the duties of Analyst under the Adulteration of Food Acts, and to superintend the Inspector of Nuisances in the exercise of his duties. Applications, with testimonials, to the Vestry Clerk, at the Board-room, Mount-street, W., on or before October 16.

TRINITY COLLEGE, DUBLIN.—Professor of Anatomy and Chirurgery. Candidates must have taken medical degrees, or possess a licence to practise from the King and Queen's College of Physicians in Ireland. All candidates are requested to send in their names, with the places of their education, the Universities where they have taken their medical degrees, and the places where they have practised, to John Toleken, Registrar, Trinity College, Dublin, and J. Magee Finny, Registrar, King and Queen's College of Physicians, Ireland, on or before October 5.

WESTMINSTER HOSPITAL.—House-Surgeon. Candidates must be qualified to practise under the Medical Registration Act of 1858, and must produce certificates of having served the office of Surgeon's Dresser to the in-patients for a period of not less than six months in some recognised hospital. Candidates will be subjected to a competitive examination, and must send in their names to the Secretary before October 14.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—House Surgeon. Candidates must possess both medical and surgical qualification. Applications, with testimonials, to the Secretary, on or before October 16.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

VACANCY.

Blackburn Union.—The Billington District is vacant; area 5963; population 1717; salary £15 per annum.

APPOINTMENTS.

Ampthill Union.—Henry F. Holland, M.D., M.R.C.S. Eng., L.S.A., to the Silsoe District.

Anglesey Union.—Evan Williams, M.R.C.S. Eng., L.K. & Q. Coll. Phys. Ire., to the Llangefin District.

Clitheroe Union.—Joseph J. Smithies, L.F.P. & S. Glasg., L.R.C.P. Edin., to the Workhouse and the Slaidburn and Gisburn Districts.

North Bierley Union.—Richard Field, M.R.C.S. Eng., to the Fourth District.

Nottingham Union.—John O'Connell Hynes, L.F.P. & S. Glasg., L.S.A., to the Second District.

Sculcoates Union.—Wm. Holder, M.R.C.S. Eng., L.S.A., to the Sutton District.

Uttoxeter Union.—James Cooke, L.K. & Q. Coll. Phys. Ire., M.R.C.S. Eng., to the Rocester District.

DR. HALL has been elected Chairman of the Newtown Local Board.

THE number of deaths registered in London last week was 1279, which was 137 below the average.

WE understand that the formation of a medical section of the Quekett Club is now abandoned.

THE Report of the Colliery Inspectors for 1871, just published, gives the number of male persons employed in our coal-mines as 370,881. There occurred 826 fatal accidents, from which there resulted 1075 deaths.

THE total number of deaths from small-pox in the German Army during the recent war was 263. This small mortality is attributed to the system of compulsory vaccination, which every man who enters the army must undergo.

THE *Melbourne Argus* of August 13 states that small-pox, which was introduced last month into Victoria (New South Wales) and New Zealand from Honolulu or San Francisco, has practically disappeared.

THE Danish Government have declared Alaud to be infected with cholera, and in consequence all vessels arriving in Danish ports from that island will be subject to quarantine inspection.

Two surgeons, one an American, the other a German (says a despatch from Cuba to the *New York Herald*), were lately found serving in the insurgent hospital in the Tacajo Mountains. They were captured by a detachment of the Matanzas battalion, and immediately executed.

THE Academy of Sciences of Bologna has resolved to give in 1874 a prize of 1200 fr.—Prix Aldini—for the best scientific experimental essay on galvanism or dynamic electricity. The competition remains open till June 30, 1874.

AT Inverness last week, Mr. Thomas Black Webster, a medical practitioner at Duirinish, Isle of Skye, who held the office of public vaccinator, was sentenced by Lord Neaves to four months' imprisonment for fabricating a number of false certificates to the effect that certain children were successfully vaccinated.

DR. FRANCIS HOGG, Royal Horse Artillery, who has for a double term of ten years filled a staff appointment at Woolwich, is now about to be removed to Netley Hospital, Southampton; and a meeting of officers and ladies connected with the various garrison charities has been held, to express their thanks to him for his valuable services both in connexion with the Female Hospital and in the homes of the soldiers, and their regret at his departure.

M. CHEVREUL, the distinguished chemist, it is stated, has been honoured by the Academy of Sciences with the gift of a medal struck in his name. M. Dumas delivered a speech on this occasion of historical interest. M. Chevreul is in his 86th year. His courage saved the Museum of Natural History from destruction during the bombardment of Paris by the Prussians.

Dr. BARCLAY, in his report to the Chelsea Vestry, says—"The death-rate for Chelsea during the past fortnight was only 17 per 1000 for the first week, and under 11 per 1000 for the second week." He adds, "It is a curious fact that the averages of the last fifteen years have always placed this week, the thirty-eighth of the year, as the healthiest in Chelsea."

UNIVERSITY OF CAMBRIDGE.—Professor Humphry gives notice that the course of lectures on Practical Anatomy will commence on Monday, October 7, at 9 a.m., and be continued daily at the same hour. The course of lectures on Anatomy and Physiology will commence on Tuesday, October 22, at the New Museums, at 1 p.m., and be continued on Tuesdays, Thursdays, and Saturdays at the same hour.

ADULTERATION OF WHISKY.—The *North British Daily Mail* of September 30 states that out of thirty specimens examined only two proved to be the genuine article.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN SEPTEMBER, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	...	...	...	...	...	...
West Middlesex	17·97	0·043	0·147	0·001	14·0	3·3
Southwark & Vauxhall	17·37	0·097	0·128	0·003	13·5	3·4
Chelsea	...	...	...	...	...	...
Lambeth	...	...	...	...	...	...
Other Companies.						
Kent	27·77	0·011	0·235	0·000	20·0	5·4
New River	18·30	0·031	0·147	0·000	13·6	3·5
East London	17·77	0·059	0·181	0·001	13·0	3·3

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 116,677,579 gallons; and the number of houses supplied was 498,116. This is at the rate of 35·7 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 23·8 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

The returns of the Grand Junction, Chelsea, and Lambeth Companies have not been received.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

West Derby shall have an answer by post.

Constant Reader.—Most probably. Excessive differences are not common.

R. W. T.—By all means send.

Inquirer.—Messrs. J. and A. Churchill's "Red Letter List" gives the book as "just ready."

Nonplus.—Yes. Dr. Henry Stubbe, a physician, of Warwick.

W. T. M., Aberdovey.—The trial took place on January 6, 1843. Verdict for the plaintiff—damages £250.

Chas. Gymer.—Dr. Sakharoff is the author of the new system of field hospitals for Russia at present under Government consideration.

G. W., Chesterfield.—Yes. The Faculté de Médecine of Paris. We believe but few women have had the courage to face the curriculum of the Paris School.

Newcastle Dispensary.—In the report of this institution it is stated that the death-rate of small-pox has been in the vaccinated 9·6 per cent., and in the unvaccinated 41·6 per cent.

H. B.—A good suggestion, frequently acted on in cases of nervous disease, but not new nor original. We refer to moderate and legitimate remedies. St. John Long managed to inflict such serious injuries on certain individuals under pretence of curing them as to cause death. His practice is at all times dangerous, and should not be employed by any wise individual.

Hospital Physician, Dunedin.—1. If there be no regulation to the contrary, a Licentiate of the Royal College of Physicians of Edinburgh is eligible for the position of physician to a hospital. 2. The holder of the above diploma is entitled to call himself "physician" in its full sense. 3. "Doctor of Medicine" is a title only to be borne by graduates in Medicine of a university. He has no further especial privilege.

St. George's Hospital School.—Mrs. William Brown, the lady who made such munificent donations to this School for the foundation of prizes, is the widow of Mr. Wm. Brown, who was a student at St. George's Hospital, and subsequently practised in Piccadilly. Mr. Brown was the medical attendant of the Baroness Coutts, and married the lady who was her chief friend and companion. Mr. Brown died some years since.

Sunderland.—The Sub-Committee appointed at the general meeting of the subscribers to the Hospital for Sick Children met on Wednesday last "to consider the present state of the Hospital and the difference between the medical officers." Dr. Mordey Douglas told the Committee that, if Dr. Pyle continued in the staff and did not apologise to him (Dr. Douglas), he should resign. Mr. Lawson then stated that Dr. Pyle had called upon him that afternoon and had requested him to state that he would retire from the Hospital. The Committee approved of a suggestion by Dr. Douglas, that there should be four medical officers instead of two. It is to be hoped now that the institution will go on peacefully and prosperously.

Plymouth, Stonehouse, and Devonport.—We certainly do not agree with Mr. Bulteel's position that Medical Officers of Health should not be Poor-law Medical Officers, should be debarred private practice, and should necessarily be public analysts. Neither do we know any reason—and we speak from some local knowledge—why Plymouth, Stonehouse, and Devonport should be formed into one huge sanitary district. The fact is, the Poor-law Medical Officers have now an opportunity which they have never had before, and will never have again. If they despise the office of Sanitary Inspector, clergymen, schoolmasters, and Poor-law Inspectors will take it. It will add comparatively little to the duties of the Poor-law Medical Officers, but add considerably to their emolument and their influence.

M. G. F.—Yes, there is a Vaccination Act in New Zealand. The clause to which our correspondent refers is as follows:—

"If the teacher of any school which is supported wholly or in part by grant, or from rates or any public funds, or by any endowments, whether colonial, provincial, or parochial, shall have reason to believe that any child attending such school has not been vaccinated, he shall give notice to the nearest public vaccinator, and such vaccinator shall examine the child; and if, upon examination, he shall be of opinion that such child has not been successfully vaccinated, he shall thereupon vaccinate such child. Provided that in the case of persons above the age of 16 the examination shall be conducted by a legally qualified medical practitioner, and the person, if necessary, be vaccinated by him."

The clause is good as far as it goes, but we think it would have been far better that in all cases the examination should be made by a legally qualified medical practitioner.

RECREATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Too busy to leave, too anxious to eat or sleep, knocked altogether out of time visiting a picture gallery, may do good and drive out impending gout—truly the only enemy we do not wish to have at our feet. Virgil, Ovid, Horace, and Juvenal knew this aristocratic complaint; so did Queen Anne; so do medical editors—which may *partially* account for certain beloved bantlings of the pen being burked and buried in the basket. Suffering the tortures of the damned, soldiers have taken the field in slippers, statesmen eloquently debated, and comedians tickled audiences. To-day, in the interval of business, a pilgrimage is made to Bethnal-green Museum: where, amidst the bright sunny landscapes of Hobbema—the dark foliage, the fragile bridge over the rapid-rushing waterfalls, the white-crested foam surging so angrily against the rugged rocks, characteristic of Ruysdael—the moonlight skating scenes of Vanderneer—the cottage interiors and homely subjects of Teniers, Metzu, and Gerard Dow—the lovely faces of Greuze and Ary Scheffer—the life-like portraits of Rembrandt and Sir Joshua—we throw physic to the dogs. Here are gems of Murillos, lovely Madonnas, battle pieces, and, of course, no collection is complete without the temptation of St. Anthony, and Joseph's interesting—and to sceptics incredible—little affair with Potiphar's wife. Notice under the "Dead Trumpeter," the last sickness of Cardinal Mazarin by Delaroche. Although the cunning diplomatist knew from the opinion of twelve liberally paid physicians that his days were numbered, he has rouged his wrinkled ghastly face, trimmed his moustache, and insists on transacting business. Reclining on a soft bed with red silk curtains and golden tassels, the four posts topped with pompous feathers, the doomed invalid looking over the hand of a card-playing beauty, foolishly, *impotently* defies death. Observe the soft velvet pile of the warm-coloured carpet, the costly tables at which gaily dressed lords and ladies are amusing themselves, the antique carvings, the noble chandelier, and the painted ceiling. The Cardinal, who left millions to relations, died altogether unregretted. From this sermon turn to another painting by the same master—the "Repose in the Desert." What a lovely child! with rosy tints, curly hair, and such a shapely head; the dimples, the well-proportioned limbs, the rounded elbows, the supple thighs—in fact, the healthy appearance generally—catches every envious mother's attention. Instinctively looking round from the canvas at the real children, who are here in shoals, what miserable, pallid, wizened little features. Stunted, and suffering from thrush, diarrhœa, and hooping-cough, they tell tales of poverty and misery in cramped-up lodgings; so do the faces of the pale, anæmic mothers, worn and pinched through over-nursing. Wandering about Bethnal-green, a number of gigs racing by constantly appeared to contain nothing but general practitioners: the experienced eye even on the darkest night can diagnose the craft. Perhaps, sir, your opinion of an erratic correspondent runs similar to that which Quilp had of Mr. Sampson Brass—"You are a *nice* doctor," evidently one of the "above all things no zeal" type. Be it so. And, changing the subject, would it surprise you to hear that 50,000,000 gallons of sewage are daily emptied into the Thames at Crossness—in other words, £1200 daily wasted, let alone the pollution which increases malaria at Tilbury and other places? "In our Fort at Tilbury be there confined" (*vide* the *Critic*); and let me add—contract remittent fever after delivery. Fortunately, on a minor scale, the A B C process—in active operation—shows how this pollution may be averted; and, what is equally important, the money realised. Having neither shares nor interest in the matter beyond the curiosity of the thing, the impression conveyed to my mind is that the process only requires to be known to be universally taken up. Half a million gallons of sewage daily treated with alum, blood, and charcoal, the water runs off eventually as a clear, bright, sparkling cascade—so pure, that the liberty was taken of drinking the health of your staff, reminded of the journal by the presence of a special correspondent, whose detailed scientific article will eclipse and precede this jerky sketch. The water flows off, the black mud sinking to the bottom of the tanks; afterwards collected, pressed, dried, and, disintegrated, resembles the grey powder of the nursery; and, sold at £3 10s. a ton, constitutes the native guano, whose astounding effect on crops, vegetables, and flowers appears marvellous. For instance, under this treatment lettuces become enormous, roses and geraniums simply magnificent. There is no bad smell, otherwise ladies would not implore for a croquet ground adjoining the works; and, excepting endemic ague, resident workmen and their families are healthy. London washing-days are well known at Crossness, and occasionally a tremendous collection of corks raises suspicion of extra conviviality. Why myriads of lucifer matches came down last week rather puzzles the courteous manager, who, amongst other stories, alluded to the custom that, dining out in China, an excretory *quid pro quo* is expected from guests; and that, dreading worms and parasites, the Celestials inquire of Europeans—Why not cook

water as well as other food? The splendid pumping engines named after the Royal family—for instance, "H.R.H. Albert Edward" was hard at work, his vibrations shaking the building; but with deep and loyal regret it was noticed that "H.R.H. Prince Arthur" was damaged, out of repair, and on the sick-list. Returning across the marshes to the station, hear that the Moors are a very fine, active, temperate race, thinking nothing of walking forty-three miles in seven hours; hear, also, there are only six cows at Gibraltar, the goats are fed on aloes, the children die. In the train, for old Nabobs at Cheltenham, book a curry recipe—namely, coriander 5 ounces, black pepper ½, turmeric 1½, cayenne ½, dill ½, mustardseed ½, cumminseed ½, fœnugreekseed ½, salt. At a tedious case that night read in the life of Brassey about the Crimean Railway. They sent out twenty-five steamers, containing men, horses, engines, and stores, and in twelve days seven miles of line were constructed—eventually thirty-nine miles and a half, on which seventeen locomotives were engaged. Beatty, the patriotic engineer, for three weeks took no sleep, and killed himself. Almost forgetting the wish expressed that Professor Parkes would drop in at Crossness and take a friendly glass—as others did—of sewage, and judge for himself of the process, which is as simple as A B C.

COMMUNICATIONS have been received from—

Mr. Sidney Coupland; Dr. J. R. Hardie; Mr. J. Chatto; Professor Playfair; Mr. Christopher Heath; Mr. Croft; Dr. J. C. Thorowgood; Mr. B. P. Morrison; Dr. F. R. Hogg; Dr. Watt Black; Dr. Hughes; Anxitas; H. B.; Major Stehelin; Dr. Sansom; Dr. Douglas; A Constant Reader; Dr. G. H. Phillips: Dr. Letheby; Mr. G. Perry; Mr. A. T. Norton; Mr. Bracey; Dr. R. Stewart; Mr. T. H. Morton; Mr. E. Hughes; Dr. Tilbury Fox.

BOOKS RECEIVED—

The Anatomy and Development of Rodent Ulcer (a Boylston Medical Prize Essay for 1872), by J. Collins Warren, M.D.—Boston (U.S.) Tables of Zoology, indicating the Tribes, Sub-Orders, Orders, and Higher Groups of the Animal Kingdom (in three large sheets), by J. Reay Greene, M.D., Professor of Natural History in the Queen's University in Ireland—Thirteenth Annual Report of the Newcastle-upon-Tyne Convalescent Society—Two Cases of Calcareous Infiltration of the Muscular Fibre of the Heart, by Joseph Coats, M.D.—Contribution des Tumeurs du Testicule, par le Dr. G. Nepveu—Archives of Ophthalmology and Otology, vol. ii., No. 2—A Yearbook of Therapeutics, Pharmacy, and Allied Sciences, edited by Horatio C. Wood, jun., M.D., Professor of Medical Botany in the University of Pennsylvania—The Principles and Practice of Surgery, by Frank Hastings Hamilton., A.M., M.D., LL.D., Professor of Surgery in Bellevue Hospital Medical College—Hysterology: a Treatise, Descriptive and Clinical, on the Diseases and the Displacements of the Uterus, by Edwin Nesbit Chapman, M.A., M.D., late Professor of Obstetrics, etc., in the Long Island College Hospital.—De l'Electrisation Localisée et de son application à la Pathologie et à la Thérapeutiques, par le Dr. Duchenne, troisième édition.

PERIODICALS AND NEWSPAPERS RECEIVED—

Medical Temperance Journal, No. 13—The Anti-Game Law Circular, No. 4—Pharmaceutical Journal—Journal of the Gynæcological Society of Boston (U.S.), August—Monthly Microscopical Journal—Science Gossip—Mental Journal—British and Foreign Medico-Chirurgical Review—Medical Press and Circular—Popular Science Review—North British Daily Mail—Practitioner—Western Daily Mercury.

APPOINTMENTS FOR THE WEEK.

October 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

7. *Monday.*

Operations at the Metropolitan Free. 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

8. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free. 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Mr. W. B. Dalby, "On Non-purulent Catarrh of the Middle Ear." Dr. Tracy (of Melbourne), "On Ovarian Dropsy operated on during an Attack of Acute Peritonitis."

9. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

10. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

11. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Clinical Society, 8½ p.m. Dr. Southey, "A Case of Acute Rheumatism with moderately high Temperature and Cerebral Symptoms, treated unsuccessfully by Cold Affusions." And other Papers.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 28, 1872.

BIRTHS.

Births of Boys, 1094; Girls, 997; Total, 2091.
Average of 10 corresponding weeks, 1862-71, 2035·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	668	611	1279
Average of the ten years 1862-71	649·4	637·8	1287·2
Average corrected to increased population	...	...	1416
Deaths of people aged 80 and upwards.	...	...	32

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	...	...	1	4	...	3	...	8
North ...	751668	2	...	3	2	7	2	7	2	20
Central ...	333887	...	1	1	...	6	1	1	2	5
East	638928	1	3	5	...	10	1	3	1	26
South	966132	6	8	8	2	11	...	3	...	33
Total	3251804	9	12	17	5	38	4	17	5	92

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·571 in.
Mean temperature	49·0°
Highest point of thermometer	65·0°
Lowest point of thermometer	34·5°
Mean dew-point temperature	43·2°
General direction of wind	W.
Whole amount of rain in the week	0·84 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 28, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Sept. 28.	Deaths Registered during the week ending Sept. 28.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2091	1279	65·0	34·5	49·0	9·44	0·84	2·13
Portsmouth ...	115455	12·1	62	54	62·4	33·0	49·1	9·50	1·18	3·00
Norwich	81105	10·9	37	45	63·0	32·0	46·4	8·00	1·28	3·25
Bristol	186428	39·8	134	66	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	47	44	61·5	35·1	46·9	8·28	0·62	1·57
Birmingham ...	350164	44·7	253	169	61·7	36·8	48·0	8·89	0·85	2·16
Leicester	99143	31·0	80	66	61·7	35·0	47·0	8·33	0·85	2·16
Nottingham ...	88225	44·2	47	45	60·8	35·0	47·0	8·33	1·21	3·07
Liverpool	499897	97·9	348	272	62·7	42·4	49·8	9·89	1·95	4·95
Manchester ...	352759	78·6	261	185	62·0	33·5	46·4	8·00	2·15	5·46
Salford	127923	24·7	95	75	62·5	34·1	46·3	7·94	2·61	6·63
Oldham	84004	20·2	59	64	...	...	...	...	...	...
Bradford	151720	23·0	127	76	61·8	33·5	47·4	8·55	1·10	2·79
Leeds	266564	12·4	321	196	64·0	38·0	47·7	8·72	0·94	2·39
Sheffield	247847	10·9	211	143	61·0	37·0	46·9	8·28	1·34	3·40
Hull	124976	35·1	87	65	60·0	32·0	45·8	7·66	1·31	3·33
Sunderland ...	100665	30·4	61	35	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	123	79	...	...	...	...	...	...
Edinburgh	205146	46·3	98	64	54·0	35·7	44·5	6·95	1·25	3·17
Glasgow	489136	94·8	338	215	53·5	35·4	46·1	7·83	1·34	3·40
Dublin	310565	31·9	159	149	61·5	33·0	48·9	9·39	0·77	1·96
Total of 21 Towns in United Kingd'm	7393052	34·0	5039	3386	65·0	32·0	47·2	8·44	1·27	3·23

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·57 in. The highest was 29·91 in. on Thursday evening, and the lowest 29·20 in. on Tuesday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D.,
Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

Lecture II.

(*Continued from page* 346.)

There is a third form of melancholia, of which it behoves me to give you some account. It is termed *melancholia attonita* or *mélancolie avec stupeur*. In these cases the patient is often perfectly helpless and passive—conscious, indeed, of what is going on about him, but having no power to *will* or execute. He stands in one position, or moves only in one unvarying manner. He is indifferent to the calls of nature; he requires to be fed, dressed, and undressed. His countenance is fixed, and he seems to be in a deep reverie. This state of passivity may alternate with occasional paroxysms of excitement, when desperate attempts are made at self-mutilation or self-destruction. Dr. Bucknill has well painted the differential characteristics of those suffering from this form of melancholia and acute dementia. From the latter they may be distinguished—"First, by the expression of the countenance, which in melancholia is contracted and marked by an intense although immovable expression, and in dementia is relaxed and expressionless. Second, in abstracted melancholy the patient resists being moved, sleeps badly, and often refuses food; in dementia he complies with the wishes of his attendants, has a good appetite, and sleeps well. Third, in abstract melancholy the bodily functions are more seriously affected than in dementia—the body is emaciated, the complexion is sallow, the skin is harsh, and the secretions generally deranged; whereas in dementia the body often retains its plumpness, and the secretions are little altered from a healthy standard. Fourth, after recovery the patient who has been afflicted with abstracted melancholy is found to have retained his consciousness through the whole period of his disease. When recovery takes place from primary dementia, the past is found to have left no traces in the memory."

The prognosis of melancholia, when it does not attain the intensity of the *cum stupore* form, or the wild frenzy of the acute disease which allies itself to mania, may be regarded as favourable; but the two latter forms are highly dangerous, both to reason and to life. Not inclining towards death, they have a tendency to run into that "tomb of human reason"—dementia.

The treatment of these cases when of the most aggravated kind is a matter of great difficulty, which will at times tax all your patience and resources. On the first manifestation of melancholic symptoms it is of much importance to get your patient away from home, but under proper observation. Change of air, scene, occupation, are essential. You must endeavour to divert the mind from the things which oppress it; all the associations must be cheerful; light and pleasant reading must be substituted for books of a serious kind. I do not hesitate to tell a patient who has a morbid craving for depressing literature that I cannot allow him the use of his Bible, because he only misapplies its teaching. It is everything to discourage mental introversion and self-scrutiny—to take the sufferer *out* of himself, himself being a deranged and emotional chaos.

Light and nutritious diet, regular habits, walking and riding exercise, bathing—these are essential. I will enlarge upon the two latter subjects, for they have a great bearing upon a successful issue. A little brisk exercise, which sends the blood swinging through the capillaries, and produces that glowing sense which is so thoroughly enjoyed by a healthy subject, will do more good than three times its amount more slowly conducted. Of course there are many to whom this is an impossibility by reason of age and various infirmities coincident with the melancholic state; but, when it is possible, make this sharp and brisk exercise a *sine quâ non*. To promote the free action of the skin is of the first importance, for it is frequently dry and harsh—nay, it is almost invariably so. This is one of the reasons why bathing is so valuable an auxiliary in our treatment; for it is certain that there is a defective dermal action in the insane which gives rise, I suspect, to that peculiar odour so common in rooms frequented by them. The existence of this odour has been doubted by some; but I have no doubt of its existence myself, both among the upper and lower classes. Indeed, I am almost prepared to endorse the inelegant saying, that you may "smell a madman anywhere." The time for bathing should be regulated very much by the taste and habits of the patient; but where he has neither, I would recommend an occasional warm bath at night when the disposition to restlessness is very marked. Shower-baths and cold sponging generally are to be highly estimated; but their adoption when the circulation is languid, on getting out of bed in the morning, is in my judgment a mistake. The conventional idea as to the value of bathing at this period leads to the adoption of a system which tells unfavourably upon certain constitutions. I have seen men and women hours in recovering their equilibrium after this cooling process, when the blood-current is not coursing by any means at its highest force. Cold baths of all kinds are most acceptable and serviceable after an amount of exercise which has pumped the blood into the capillaries, developed animal heat, and unloosed the pores of the skin. The greater your body temperature when you have a cold bath the better can you bear it, and the greater is the thrilling reaction which follows. This is why the Turkish bath is so valuable an agent. Its importance in the treatment of melancholia cannot be overrated, and I am certain that the duration of that state is much shortened by it. It fulfils all the desired conditions above spoken of. The hot chamber produces abundant elimination; the manipulations of the shampooer rid the skin of an immense quantity of dead epithelium, rendering the muscular system supple and pliant; and the concluding processes of hot and cold water complete a renovation which constantly astonishes the patient himself.

You will find, I think, that attention to these matters of bathing and exercise will more or less rectify any abnormality of secretion, and indeed of excretion likewise. Women are more prone to a costive habit of body than men, and you must try and put them right in this respect. But it is a very difficult matter, for so many of them have acquired, from indolence and the use of drastic purgatives, a confirmed habit of constipation. The functions of the uterus must, obviously, not be neglected; and you know the general principles upon which we assail that capricious organ—the nursing-ground of embryotic life.

Sleep, "tired nature's sweet restorer," must be courted by every possible means, for the nights of the melancholic are generally worse than their days, and you find them in the morning unrefreshed and unsatisfied. Often better than any opiate is a glass of sherry on going to bed, with some warm and digestible nutriment—arrowroot or sago. Dr. Conolly used to speak of the good effect of this nocturnal stimulant; and, like most of the things which he said, it was wise and prudent. Failing this, you had better give a dose of the hydrate of chloral, twenty or thirty grains. But you must be careful about this remedy. Some are intolerant of it, and I would advise you not to repeat it if any bad symptoms follow. Formerly I used to give occasional doses of one drachm; but I am persuaded that it is not safe—more, that it is highly dangerous. Heretofore, as you know, opium was the great remedy; but it has been greatly overrated, and it is not to be compared to chloral as a hypnotic. The former depresses and vitiates the secretions, often producing nausea, headache, and costiveness. Chloral is free from these objections. Indeed I regard chloral and digitalis (whose use I shall point out to you by-and-by) as the great weapons of our therapeutic armoury in attacking the diseases which are recognised as insanity.

But what are you to do if (as often happens) your patient will not take what you prescribe for him? He may clench his teeth and refuse to take any drugs. In such case you had better inject a third or half of a grain of one of the salts of morphia by the skin. This is much easier in a patient who resists and is violent than throwing up chloral by the rectum—a practice which some speak of highly, but of which I have had no experience. Digitaline may be also hypodermically injected; but remember this alkaloid is highly dangerous and rapid in its action. I had a case of chronic mania where as much as one grain was borne easily. Less than this produced greater excitement.

When the type of melancholia is simple and passive, unaccompanied by panic or paroxysmal excitement, you may be able to treat the patient at home, though change of air and scene is always desirable; but when the graver symptoms appear, and food and medicine are resisted, and suicidal tendencies manifest themselves, you must resort to an asylum. There only can you insure that organised vigilance and care which are the patient's best protection, and free yourselves, as private practitioners, from enormous responsibility. Obstinate refusal of food is one of the trying and embarrassing

complications of the aggravated form of melancholia. You must resort to artificial feeding. A mixture made of Liebig's extract of meat, eggs, milk, and wine or brandy may be thrown in by the stomach-pump. Sometimes a single feeding will be enough, the patient finding the operation so unpleasant that he will not by continued refusal invite its repetition. At other times there is great persistence of refusal, and violence withal; but a little manœuvring and taking the enemy unawares will almost invariably succeed. There have been various suggestions as to the best mode of artificial feeding—some use the ordinary stomach-tube (as I do), affixing a funnel to the top and pouring in the food from a jug; others say it may all be done gradually by a spoon process; others, again, introduce a small flexible tube by the nostrils, through which the food is injected from an indiarubber bottle. *Chacun à son gout.* As long as a man has got a mouth and it can be opened (and I have never seen one that could not be opened), I shall continue to regard it as the legitimate highway to the stomach. The irritation produced by the nasal tube is terrible. The stomach-pump, when dexterously introduced, seldom irritates, and it enables you rapidly to accomplish what you desire; the whole thing may be done in a couple of minutes. Sometimes patients get an idea that they cannot swallow, and invite you to feed them artificially. I had a tall, scrofulous, nice-looking youth under treatment for delusional mania, whom we had, with occasional short intervals, to feed artificially for nearly two years. Ultimately he died, as might be expected, from inanition.

In all cases of melancholia, from the simplest to the most aggravated, it behoves you, as I said before, to be on your guard against suicide. Be vigilant against surprises before the deed, and not surprised into vigilance afterwards. Knives and sharp instruments must be out of reach. Pegs, hooks, and prominences which invite the suicidal to slip a noose over them must not be available for his purpose. By rivers and ponds he must not walk alone. The roar of the panting locomotive must not be too near him, or he may rush impetuously beneath its iron and remorseless wheels. Occasionally he will try to strangle himself by his neckhandkerchief, or to suffocate himself by stuffing up his mouth and nose, or to break his neck by driving with his head at full speed against a wall. In the latter case your patient must be under the strictest guardianship by day, and at night he must sleep in a padded room; in the former the safest and most charitable thing you can do is to fasten his hands to a leather strap or girdle attached to his waist. This is a better form of restraint than the watching of two or three attendants, with whom there may be constant struggles, and consequent liability to falls and bruises. Considering the amount of cruel mechanical restraint which was employed at the beginning of the century, and that it is our pride and boast that we have emancipated ourselves from a system which, giving no trouble, involved gross neglect, you will naturally enough be reluctant to employ any means which savour of an exploded system. To show you how little familiar we are with such things at the largest asylum in Europe, I may mention that at Colney Hatch we have never had such a thing as a strait-waistcoat. But there are cases, beyond a doubt, where some form of mechanical restraint is called for as the best protection for the patient.

In reference to the suicidal acts of the insane (for you must not assume, as some do, that a man is necessarily insane because he attempts suicide), it may be desirable at once to point out to you their twofold character, because the matter may be brought under your notice by cross-examining counsel in criminal trials. This actually occurred to myself in the trial of the Rev. Mr. Watson in January last, when, pressed by the counsel for the defence on the coincidence of the murder and the suicidal attempt as strong evidence of insanity, I stated that much depended on the character of the suicide. As a rule the suicidal attempts of the insane are intensely cunning and crafty, and "contain no element of clumsiness." This is an undoubted fact, and led me to believe that, apart from the question as to whether Mr. Watson was or was not insane at the time he killed his wife, the attempt upon his own life was that of a man in his right mind—that is, of a man fully responsible for his actions. No insane person contemplating suicide would *deliberately and coolly* have told his servant that he might want medicine in the morning, and that the doctor was to be sent for.

You will not infer from this that *all* the suicidal attempts of the insane are free from "clumsiness." Those which are done under "impulse," like all acts which are executed without thought, are often essentially clumsy. For instance, an insane person, in a sudden frenzy, will throw himself out of a window, with a view of terminating his life. Nothing can be more clumsy. I saw one of my own patients, habitually quiet, suddenly rush under the wheels of a butcher's cart that was driving by furiously. Nothing could be more clumsy as an attempt at self-destruction, because it was impulsive—that is, thoughtless—and done without any idea of the proper adaptation of means to an end. If Mr. Watson, under the same impulse which led him to kill, had immediately rushed upon self-destruction by cutting his own throat, or blowing out his brains, or throwing himself over the banisters, it might have been valuable confirmatory evidence (which was much needed) of insanity. But he set his house in order, methodically arranged his affairs, and drew the attention of his servant to the fact that he *might*, at a certain time, require assistance.

It is well for you to bear in mind this important difference between the impulsive and non-impulsive suicidal acts of the insane, as illustrated in one of the most remarkable trials of modern times.

In concluding this lecture I wish to point out to you that both in that form of derangement which is associated with depression (melancholia), and in that which is characterised by exultation (mania), there is a liability to relapse which constitutes the most trying and discouraging of difficulties. You will have already learned that, except in fevers, the liabilities to what we term relapse, and a periodical exacerbation of the symptoms, are by no means usual. In all diseases persons may vary in some sense from day to day, at one time feeling better, at another worse, even when they are unmistakably on the highway to recovery. But in these terrible maladies which fasten upon the supreme centre of life, you will, as you proceed in your study of them, learn to experience the most cruel disappointment. You have conducted your patient safely through (as you imagine) all the stages of his affliction, and may be congratulating yourself upon his satisfactory convalescence, and the prospect of his speedy return to the outer world. You will have him at night calm, rational, grateful, and sanguine in the prospect of that home where he shall renew his affections, and be solaced once more by his wife and children. In the morning you are summoned to him to find that he has attempted suicide, that he is again in a state of extreme depression or maniacal excitement. He may have destroyed his bedding, daubed himself with his own fæces, or (in the language of Scripture) "pissed against the wall." Again he recovers; again he relapses—maniacal symptoms alternating with melancholic, constituting the *folie circulaire* of French writers.

The prospect of ultimate recovery, you need scarcely be told, is in an inverse ratio to the frequency of these recurrences. Consider yourselves fortunate if you can lead your patient through the shoals and quicksands of cerebral disturbance without any renewal of those graver symptoms which may be said to constitute complete relapse. But remember, at the same time, that too speedy a recovery is very often only a so-called recovery—the symptoms being only suspended to break out again with renewed vigour.

LECTURES
DELIVERED IN THE
COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

Purulent Ophthalmia in Adults.

Gentlemen,—This is a more severe or intensified disease than the catarrhal ophthalmia, being more of an exudative inflammation, and is apt to damage the eye and even to destroy it.

It is common and most severe in hot climates. When it occurs in temperate latitudes, it is more acute in the army, in the navy, in workhouses, in prisons, and in pauper schools, rather than in private life.

Development of Symptoms.—There is itching and a sensation of dryness about the eye, particularly in the inner corner; or suddenly there may be a sensation of dust or sand being in the eye. The tarsal edges are stuck together in the morning, and the eyelids are a little puffy, and a thin secretion is seen on the surface of the eye. The palpebral and oculo-palpebral portions of the conjunctiva, the caruncle, and the semilunar fold are swollen and inflamed; the ocular conjunctiva is reddened. Any part of the inflamed surface readily bleeds. This, the purely inflammatory stage,

may last only twelve hours, and it rarely exceeds thirty. It may be so mild and short as to be disregarded. Considerable mucous secretion, yet thin but viscid, and becoming semi-opaque, soon follows. It accumulates at the inner corner of the eye. It may be highly coloured with blood. Till now there is scarcely more than inflammatory mucus, which curdles. Pus forms in more or less abundance, so that the secretion is suppurative, and the mucus and the pus are dissolved in the tears. These excretions overflow the eyelid and pass over the cheek, which is soon irritated and reddened. The palpebral conjunctiva swells more, and looks sarcomatous and velvety. The ocular conjunctiva, which at most has been merely hyperæmic, is now decidedly inflamed. The surface of the eye is dark red, and the individual trunks of vessels are no longer seen. The eyelids are more swollen, and their edges are a little everted. The temperature of the conjunctiva, and of all the ocular appendages, is much increased, and continues high until the period of relaxation occurs. There is pain also, which lasts while the inflammation is sthenic. It may be confined to the eye, or extend to the temple and the forehead, and sometimes to the whole head. The latter state indicates implication of the eyeball in the inflammation, and is attended with intolerance to light and blepharospasm. There is a copious incrustation about the margin of the eyelids, and the cilia are matted together.

The intensity of the inflammation may decline, while the purulent discharge continues for weeks or months, and produces but little suffering, although much discomfort.

Both eyes may be attacked at once, or one after the other. When one is affected it is generally the right.

A worse state of things may ensue by the ocular conjunctiva getting more inflamed and thickened, with the addition of spots of extravasated blood in it, and raised by chemosis, which more or less overlaps the cornea. It may almost conceal it, even protrude beyond the eyelids and stand out to the extent of three-quarters of an inch. Now, this chemosis arises from two causes—inflammatory infiltration of the conjunctiva itself, and inflammatory infiltration of the sub-conjunctival tissue by pure inflammatory effusion (liquor sanguinis), the amount of which varies with the intensity of the inflammation. I speak of it as hard chemosis, to distinguish it from the soft chemosis of catarrhal ophthalmia, the result of serous effusion. It is most marked at the lateral sides of the eyeball, where it is scarcely pressed on by the eyelids. Hard chemosis is indicative of a high degree of inflammation, which includes in its effects some of the arcolar tissue of the orbit, together with the tunica vaginalis oculi, so that the eyeball is a little protruded. The excretion is more decidedly purulent, and is very profuse. The eyelids swell more, and the upper is so enlarged as to overlap the under one. It is very prominent, very red, and shines. Such tegumentary effect may not be developed for days, or it may rise up within a few hours. The disease is now at its height. All these extremely violent symptoms are not necessarily attended by pain, and rarely by acute pain.

The chemosed and protruding conjunctiva always everts the under eyelid, but it may evert both; and the everting effect is still more decided when the tumefaction of the eyelids subsides a little. Its villous appearance is never so marked as now. In the first instance, the protruded part has its volume increased by serous and sanguineous effusion, through the strangulation produced by the eyelids.

So far the eyeball may escape being diseased. The purulent discharge may continue with little change for several days, till the chemosis declines, when it gets less purulent and thin. The chemosis may quite disappear, while the caruncle, the semilunar fold, and the palpebral conjunctiva remain vascular. The palpebral papillæ may have undergone morbid changes, called granulations, which mechanically irritate the cornea, affecting its transparency and rendering it vascular.

Still more unfavourable effects may follow through the eyeball becoming secondarily affected by extension of the primary inflammation—the chief source of danger in the complaint—and the organ much damaged or altogether spoiled for the entrance of light, mainly through morbid alterations in the cornea,—a contingent result never to be forgotten. This non-vascular texture may, then, suffer by the direct action of many pathological forces, singly or combined. It may be rendered opaque, in part or entirely, by interstitial changes. An abscess may form in any part of it, preceded or not by superficial opacity and much disorganisation of the epithelium, and which is invariably followed, when untreated, by ulceration and penetration. The abscess appears as a yellow spot between the corneal laminæ; it is usually called "onyx." Its surface may throw out herpetic efflorescence, followed by one ulcer or more, which may leave opacities, varying from the thinnest film to the densest leucoma, or end in penetration in one or more spots. Its lower half may be opaque, while the higher is clear. Large transparent ulcers may form, which, on healing, leave a flattened and irregular surface, and interfere with refraction.

It may be affected besides, I suspect, in consequence of its nutrition being impaired by the unhealthy condition of the circulation—the condition of stasis. That the long contact of pent-up or stale pus is injurious to it, and causes superficial ulceration, cannot be doubted. Pus corpuscles seem to have the property of more or less absorbing the tissues with which they come into contact, or at least of causing softening and disintegration. That it is influenced by the pressure of the swollen palpebral conjunctiva, is very likely. The tumefaction of the palpebræ, with the swelling of the integuments of the temple and of the cheek, by which the eyelids are closed, may prevent all power of inspection. But severe pulsatory paroxysmal pain in the eye, more severe at night, or intense continuous pain aggravated by pressure, extending as well around the orbit, and involving, too, the temple and the cheek, tolerably surely declares that the cornea has suppurated. Sloughing, or ulceration of it at the centre of suppuration, by which it is opened, is now certain, and either may occur according to the rapidity of the acute symptoms, from the third to the eighth day. Such events are seldom longer delayed. That rupture has occurred is known by the patient feeling that something has happened, with the accompaniment of a discharge of hot fluid (aqueous humour). Immediate relief invariably follows, and the acute inflammation subsides.

Farther Symptoms of this Ophthalmia.—If the breach which is made in the cornea from the abscess be large, the lens and its capsule may be seen, both quite clear, covered or not by the posterior elastic corneal lamina. So much sight may be temporarily restored that the patient thinks he is getting better. The lens may be expelled by the natural pressure on the eyeball; and whether this happens or not, the iris always prolapses, swells into a reddish fungus-like tumour, and a total corneal staphyloma is formed.

There is a form of ulceration more imminent and dangerous than that which I have mentioned, not arising out of any inflammatory condition of the eyeball, for it occurs while the cornea is yet bright and vision is unimpaired, while the inflammatory symptoms are not high, and the purulent discharge not in excess, while pain has scarcely been felt, and constitutional symptoms have not appeared. It is a circular grooving ulcer, sometimes clear, sometimes with opaque edges and bottom, which forms at the margin of the cornea, from a fourth to a third, or even to half of its circumference, and nearly always penetrates, and damages or destroys the eye by the same process as that which I have already described as following ordinary ulceration or the penetration of the cornea by abscess and ulceration. It is, I believe, produced by hard chemosis, which invariably adheres to the cornea; pus cannot, therefore, collect between the two. All of the ulcer may be hidden by the chemosis, and concealed till the chemosis is declining; or a part may be covered, while a part extends a little beyond it. When penetration ensues the cornea flattens in about twenty-four hours, and the acuteness of the local symptoms subsides; but in a few days pus is deposited between its layers, and a farther protrusion of the iris takes place, before or after which occurrence the lens may escape. In any of the terminations of the disease in which the lens has escaped, the vitreous humour may flow out sufficiently to cause immediate collapse of the eyeball. I will speak next of the treatment.

(*To be continued.*)

Small-pox in New York.—Dr. Macdonald, from the examination of the statistics of the Charity Hospital for the last twenty years, arrives at the conclusions that persons of foreign birth more easily contract the disease than those who are native born, but that they are less apt to die of it; also, that males are more subject to it than females, and die of it in a larger proportion. In coloured people, too, the ratio of mortality exceeds that of any other class of patients. He believes that his figures conclusively prove that, of the population of New York, the foreign element more than the native manifests the vigour of constitution necessary to preserve life through the course of an exhaustive disease like small-pox. (He furnishes no information of the condition of any of these patients as regards vaccination.)—*New York Med. Record*, September 1.

ORIGINAL COMMUNICATIONS.

NOTES ON THE

PATHOLOGY OF PULMONARY PHTHISIS.

By T. HENRY GREEN, M.D. Lond., M.R.C.P.,
Senior Assistant-Physician to Charing-cross Hospital, and Lecturer on Pathological Anatomy in the Medical School.

I.—Introductory.

Tubercle and Acute Tuberculosis—Different senses in which the term "Tubercle" is used—What is Tubercle?—Lesions met with in the Lungs in Acute Miliary Tuberculosis—The Grey and Yellow Nodules—The intervening Pulmonary Tissue—Microscopical Characters of the Grey Nodules.

It is proposed in the following "Notes" to describe the structural changes met with in the lungs in the several varieties of pulmonary phthisis, to examine into the nature of the morbid processes upon which these changes depend, and to endeavour to draw some general conclusions respecting the pathology of the disease. In describing the various anatomical changes, I shall state what I have myself observed, illustrating my descriptions as far as possible by drawings made by the artist from my own preparations.

The subject will be treated under the following heads:—

1. Tubercle and Acute Tuberculosis.
2. Anatomical Changes met with in the Lungs in Phthisis.
3. Nature of the Morbid Processes upon which the various Anatomical Changes depend.
4. Varieties of Phthisis.
5. General Conclusions respecting the Pathology of the Disease.

1.—*Tubercle and Acute Tuberculosis.*

The part which tubercle plays in the production of pulmonary phthisis is perhaps one of the most vexed questions in the pathology of the present day. The older views based upon the teaching of Laennec, that phthisis is essentially a tuberculous disease, have undergone various modifications during recent years; and now many, in accordance with the advocacy of the late Professor Niemeyer, regard tubercle as being only an exceptional element in its causation. These adverse doctrines respecting the tuberculous nature of the disease have obviously, in great measure, resulted from the different senses in which the term "tubercle" has from time to time been employed. In the time of Laennec all caseous products were regarded as tubercular, and phthisis —in which caseation plays so prominent a part—was consequently regarded as a tuberculous disease. When the application of the term "tubercle" became limited by Virchow and his followers to the grey granulation or miliary tubercle, it became evident that in many cases of phthisis at all events no tubercle existed, and that in those cases in which it did exist a large proportion of the consolidation was of such a nature that the term "tubercle" in this limited signification was not strictly applicable to it. Even at the present time much difference of opinion exists on this head. By some tubercle is still regarded as the most important element in all cases of phthisis; others, again, maintain that it is only an *accidental* accompaniment of the disease; whilst a third class of observers tell us that some cases of phthisis are tubercular, and that others are not. The subdivision of the disease into tubercular phthisis, pneumonic phthisis, and fibroid phthisis, which perhaps represents the tendency of the teaching at the present day, indicates that tubercle is looked upon as by no means an essential element in the disease. As in former days, so now, much of this difference of opinion is, I think, to be ascribed to the want of agreement which still exists among pathologists as to what constitutes tubercle. It will be advisable, therefore, before proceeding to consider the pulmonary lesions met with in phthisis, to endeavour to answer this question.

Whatever views may be entertained by different observers respecting the nature of tubercle, I presume that all will admit that it is met with in its most typical form in the disease known as acute miliary tuberculosis. To whatever other morbid products we may apply the term "tubercle," the minute disseminated growths met with in the lungs and in other organs in this disease have certainly the first claim to be thus designated. Let us, then, examine somewhat minutely the lesions met with in the lungs in acute miliary tuberculosis. We will confine ourselves to the lungs, because it is with these organs that we are now especially interested. The consideration of this subject will not only help us to define tubercle, but it will contribute very materially towards the proper understanding of phthisis itself.

When the lungs of a person who has died from acute miliary tuberculosis are examined, they are found studded more or less uniformly throughout with small nodular growths which are universally known as miliary tubercles. These growths are of two kinds—the *grey* and the *yellow*. The grey are semi-transparent nodules of a greyish-white colour, varying in size from a small pin's head to a hemp-seed. They are firm, almost cartilaginous in consistence, somewhat spherical in shape, and possess a well-defined outline. The yellow are for the most part larger than the preceding, many of them much so; some being as large or larger than a pea. They are also much softer in consistence, much less defined and regular in outline, and they pass more insensibly into the surrounding tissue. Many of them possess a greyish-white translucent margin, which may be pretty firm in consistence, but never hard and cartilaginous like the grey nodules, whilst their central portions are opaque, yellowish, and caseous. These nodules, both the grey and the yellow, although generally scattered, are sometimes confluent in groups.

So much for the general naked-eye characters of the growths. There are, however, certain points connected with the manner in which they are associated, and with the condition of the surrounding pulmonary tissue, which it is important to bear in mind, as they help us to understand the pathology of the disease. Firstly, with regard to the manner in which the two kinds of growth are associated. Both kinds are very frequently found in the same lung, some of the nodules being small and grey, others larger and of a yellowish colour. It is, however, perhaps equally common to find nothing but the smaller grey nodules, the yellow growths being entirely absent. In a less frequent class of cases nearly all the growths are of the yellow variety. Secondly, with regard to the condition of the surrounding pulmonary tissue. This may be perfectly normal, more or less congested and œdematous, or it may present varying sized tracts of granular friable consolidation, which exhibit all the physical characters of hepatised lung. Which of these conditions obtains appears to partly depend upon the variety of the miliary growth. When only the grey nodules are present the whole of the intervening pulmonary tissue is often found *perfectly normal*, the lungs are crepitant throughout, and there is a complete absence of congestion, the organs being simply thickly studded with the firm grey nodules. This condition is certainly exceedingly common in the child. In other cases more or less congestion, or even pneumonic consolidation, is associated with the grey growths. In all those cases, on the other hand, in which the larger yellow nodules exist either alone or associated with the grey, there is, I believe, invariably a varying amount of congestion or consolidation of the intervening pulmonary tissue. This difference it is important to keep in view, as it helps, I think, to elucidate the pathology of the disease.

We proceed, in the next place, to consider the constitution of the two kinds of growths. What are the microscopical characters of the grey and yellow nodules? They present some marked points of difference. We will examine the grey first.(a) The most striking general feature, perhaps, of the small grey nodules, as seen with a low magnifying power in thin sections of the lung, is that most of them appear to be situated between the alveoli. The little spheroidal growth is seen *between* the alveolar cavities, and often pushing aside the alveolar walls (see Fig. 1). Frequently the nodules are seen to be in the immediate vicinity of minute bronchioles, sometimes around small bloodvessels; but in most cases they appear simply as growths situated between the alveoli, such as is represented in the figure. The alveoli adjoining the growths usually appear perfectly normal, and there is no accumulation within them. If the growths be examined with a somewhat higher magnifying power, in order to determine their structure, they are found to consist for the most part of small spheroidal elements resembling lymph cells (lymph corpuscles). These elements are not in perfectly close apposition, but are separated from one another either by very fine lines of homogeneous,

(a) The method of examination adopted both in miliary tuberculosis and phthisis consisted in placing small portions of the fresh lung for about two weeks in one-sixth per cent. solution of chromic acid, and subsequently for about twenty-four hours in absolute alcohol. In some cases the chromic acid solution was gradually injected into the bronchi. Thin sections were then made with a razor, stained with carmine, and either rendered transparent with oil of cloves, and mounted in dammer, or at once mounted in glycerine. In two cases the vessels were previously injected with Berlin blue.

transparent-looking material, or, more commonly, by a very delicate tissue, which forms a more or less distinctly fibrillated network, within the meshes of which the elements are grouped (see Fig. 2). In some of the nodules the fibrillation of the

Fig. 1.

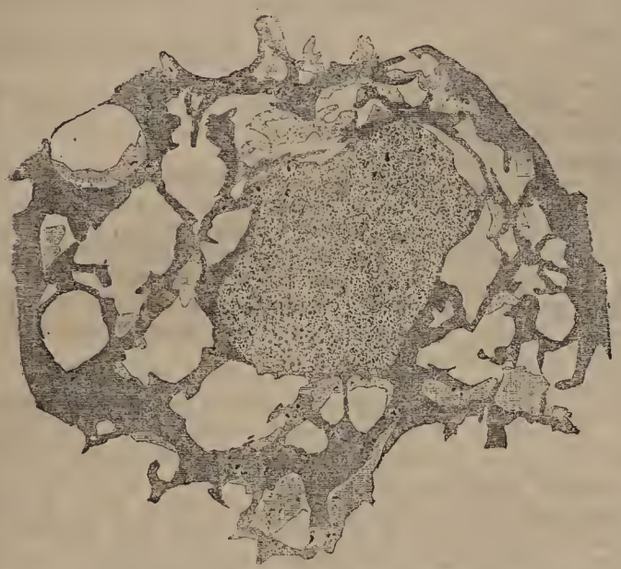


Fig. 1.—A thin section of one of the small, firm, grey nodules from the lung of a girl, aged 13 years, who died from acute miliary tuberculosis (a grey miliary tubercle), × 50, and reduced to two-thirds, showing the situation of the nodule *between* the alveoli, the latter presenting a perfectly normal appearance. Both lungs were thickly studded with similar growths. There was a complete absence of yellow nodules, and also of any congestion or consolidation of the pulmonary tissue.

Fig. 2.

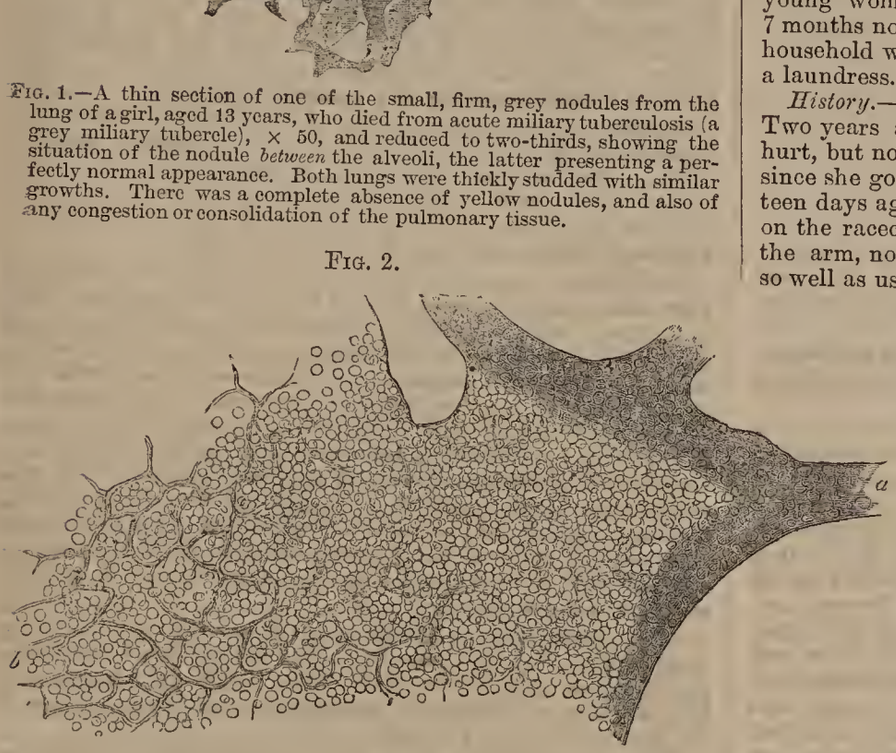


Fig. 2.—A small portion of the most external part of the grey nodule represented in Fig. 1, × 400 and reduced to two-thirds, showing the structure of the nodule, and its incorporation with the alveolar walls. Towards the centre of the nodule, *b*, the fibrillated network is well seen, and at *a* the nucleated growth in the alveolar wall.

network is well marked, whilst in others it is completely absent. The central portions of some of the grey nodules consist simply of minute granules, the elements having evidently undergone retrogressive changes. My own observations, however, would lead me to believe that more or less fibrillation of the *grey* nodule is much more common than the retrograde metamorphosis of its component elements. As has been stated, the nodules appear simply as growths situated between the alveolar cavities. When, however, they are examined with a higher power, it is seen that they are actually incorporated with the pulmonary tissue, the walls of many of the alveoli which are immediately adjacent to the nodule being thickened by a new nucleated tissue precisely similar to that of the nodule itself (see Fig. 2, *a*). This thickening of the alveolar walls may extend for some distance beyond the confines of the nodules. In some of the larger grey nodules the conformation is not quite so simple. The new growth extends by a progressive implication of the alveolar walls, and thus encroaches upon, and gradually obliterates, the immediately adjacent alveolar cavities. In these larger nodules, also, it is exceedingly common to distinguish several centres, around which the cellular elements of the growth are concentrically grouped, indicating the existence of separate centres of development.

(*To be continued.*)

CASES OF ACUTE SPINAL MENINGITIS, COMPLICATED WITH MYELITIS;

WITH CLINICAL REMARKS UPON THE DIAGNOSIS OF THAT DISEASE.

By WILLIAM STRANGE, M.D.,
Senior Physician to the Worcester Infirmary.

The following cases appear to present various types of a disease, which derives, perhaps, as much interest from its insidious and deceptive mode of invasion as from its generally fatal issue. Their publication may therefore serve the double purpose of corroborating what is considered to be the true pathology of the disease, and of warning the young or inexperienced practitioner to keep a watchful eye upon every case in which disorders of sensation or motion are intermingled with what may appear to be only rheumatic or neuralgic symptoms, by which the real nature of the attack is often masked until it is too late to remedy the error.

Case 1.—*Acute Spinal Meningitis passing into Myelitis—Fatal.*

C. G., aged 20, admitted a patient of the Worcester Dispensary, November 18, 1871. She is a large, fine-grown young woman of fair complexion, married, with a child of 7 months now at the breast. Has worked hard at cooking and household work, and has occasionally carried heavy weights as a laundress.

History.—As a child she was weakly, especially in the legs. Two years ago had a fall on the ice by which the coccyx was hurt, but no apparent permanent injury resulted. Two months since she got wet feet, and has not felt quite well since. Seventeen days ago—viz., on November 1—she again got damp feet on the racecourse. Next day first felt some loss of power in the arm, noticeable by her inability to cut bread from the loaf so well as usual. On the 6th there was numbness and tingling in the fingers of left hand, for which she sought the advice of a very careful and observant practitioner. The symptoms as observed by him were pains simulating those of rheumatism in the left arm, with inability to raise it, and some stiffness about the neck and shoulders, which caused her to carry her head a little to one side. The nerves of the face were unaffected, as were also the breathing, speech, and mental powers. She walked with some difficulty as to the left leg; otherwise she made no complaint with respect to the lower extremities. Ordered hot fomentations to the arm and neck, and some aperient medicine, the diagnosis being rheumatism from cold and wet.

On visiting her at home on the 8th she was found sitting up, but the condition of the left side had become paralytic. Some rigidity of the left arm when motion attempted, but no paralysis of bladder. Ordered hip-baths with diaphoretics, and the affected limbs to be ironed with a hot flat-iron.

9th.—Patient in bed in a state of profuse perspiration from diaphoretic medicine, which continued for the next two days. The pulse quiet; tongue clean; appetite failing; is unable to rise from bed. Continue the remedies.

From the 9th to the 18th she had but little medical attendance. The friends took the case into their own hands, and tried faradisation, to which, they said, the limbs only slightly responded. During this period the symptoms appear to have steadily increased in gravity until the eighteenth day of her illness, when I first saw her. The following symptoms then presented themselves:—Complete paralysis of sensation and motion of the whole body below the neck. In some parts just below the neck she can just feel when touched; but, if the eyes are closed, she cannot tell on what part of the body she is touched, nor how many outstretched fingers are used. Formication and tingling have disappeared, the paralysis being too profound for these. No reflex movement induced by tickling the feet or abdomen. The respiration is quite free. Tapping the spinal column sharply throughout its whole length produces no pain, nor does forcible raising and extending the limbs, which fall again like logs. The sphincter vesicæ is quite paralysed, the urine escaping continually. Bowels obstinately constipated; some slight stiffness about the jaws, but the speech and cerebral functions are unaffected, the patient expressing herself with clearness and precision. The tongue is dry and glazed; pulse 70, strong and regular; no cardiac bruit; skin looks white and healthy, but feels cold, as though

the patient had just been removed from a cold bath. The mammæ, which are large, contain abundance of milk, and the child sucks as usual, although the patient is not aware of its presence unless she looks at it.

20th.—Condition, as regards the paralysis, unaltered. Skin much cooler than natural, but its colour is good; pulse quiet; respiration more laboured; and there is now, for the first time, the feeling of constriction across the chest which ushers in the fatal issue. She still suckles her infant. The urine dribbles away; bowels unmoved; the features look heavy and fallen, but she swallows beef-tea and brandy when placed well back in the mouth. In the evening of the same day respiration more laboured, there being no respiratory movement of the diaphragm, and but little of the ribs. Pulse still full and steady. The lacteal secretion, for the first time since her illness, shows diminution. She speaks with difficulty, and gasps for breath—in fact, death is imminent.

Died at 5 a.m. the following morning, the twenty-first day of her illness.

Post-mortem.—Spinal column removed *en masse* on 24th; examined on 25th, 100 hours after death, there having been the greatest difficulty in obtaining leave to open the body. The dura mater was enormously congested throughout the whole extent of the cord, but most so at the lumbar and cervical enlargements. Scarcely any spinal fluid present. The vessels of the pia mater were also highly injected and tortuous, and there were many small effusions of blood in parts of it, more especially opposite to the fifth and sixth dorsal spines. The arachnoid membrane was *quite clear and transparent*. The cord itself looked externally *white and healthy*, and was only slightly softened by lapse of time since death, being nowhere diffluent. When cut into, some pinkish spots and bloody puncta appeared in places, and the distinction between the white and the grey matter was not very perceptible. Microscopic examination with a two-inch power showed numerous distended vessels in the cord itself, and the white and grey matter were easily distinguishable; numerous red points and vessels running throughout both substances, which were somewhat more granular than usual.

At the post-mortem, tho limbs had already lost their cadaveric rigidity, and the tissues of the back were highly suffused, and of a dark purple colour.

Case 2.—Acute Spinal Meningitis, passing into Myelitis—Recovery.

A. H., servant, a well-grown girl of 22, was admitted into the Worcester Infirmary on February 6, 1871. Having been in good health up to December 31, 1870, she caught cold at a ball given by her mistress to the servants on the evening of that day,—she thinks by drinking cold water whilst heated by dancing, menstruation being present at the time. On the sixth day after, she fell ill, with pains in the limbs, but continued her duties, although under great suffering. This state continued until the 14th, when she was obliged to take to her bed. Pain now felt along the course of the spine and in the hips and thighs; no shivering. The family medical attendant ordered a blister to each hip, under the idea that the case was one of sciatica, but little benefit resulted, and she was brought to the Infirmary on February 6, thirty-seven days after taking cold.

On admission the condition of the patient was as follows:—Great prostration, fever, with a quick pulse and furred tongue; pain all along the spine, aggravated by any motion of the body or limbs. Pain in the head, which, she says, feels hot. Articulation difficult, owing to some stiffness about the jaws and throat. Is unable to swallow solid food without the addition of liquid to wash it down. The arms are rigid, and contracted at the elbows. The forearm cannot be flexed beyond a right angle with the upper arm, the attempt to raise the hand to the level of the head causing excruciating pain in the arm. The sphincter of bladder partially paralysed, the urine coming away in gushes when about to make the effort to pass it. From the hips downwards all motion is abolished, and sensation nearly so. The lower extremities are becoming œdematous, which condition is rapidly extending to the trunk. The bowels obstinately constipated.

It was clear from this aggregate of symptoms that the case had all along been one of acute spinal meningitis, the pains in the hips having led to the mistake in the first instance of the case being one of sciatica. It being now five weeks from the onset of the illness, abstraction of blood was not deemed advisable. Ordered alkaline medicines in camphor mixture every four hours, with Dover's powder at night (the hospital treatment for acute rheumatism), with fluid diet, and a small quantity of wine.

February 8.—Condition altered somewhat for the worse. Nearly all power over the bladder having been lost, the catheter had to be used. Œdema of legs increased; any motion of the body below the waist causing intense pain in tho back, she has to be moved in bed like a log. The arms are still very rigid. Castor oil ordered for the obstinate constipation.

On the 9th an enema administered, as the oil had produced no effect.

12th.—No improvement. Twenty-five grains of chloral at night to subdue the restlessness.

14th.—Diarrhœa set in, with partial loss of power over the sphincter ani. Ordered starch and laudanum enemata for diarrhœa, and the salines to be omitted.

15th.—General condition the same. There is now very great pain in the dorsal region of spine, more so than elsewhere. Ordered a blister of seven inches to that region, to be dressed with Savine ointment. The arms are still contracted, and she cries out with pain when any attempt is made to flex the forearm or the upper arm. Articulation difficult, with some hebetude of mind and countenance. To take ten grains of the hydrate of chloral every four hours.

19th.—No better. Condition of patient very critical. Has pains in the stomach and bowels, with a sharp, small pulse of 120. The œdema of legs and thighs so great that punctures have to be made in them, of which, however, she has no sensation, nor of pinching, and tickling produces no reflex action. The paralysis is therefore now complete, both as to sensation and motion, as well as of the sphincters of the bladder and rectum. Ordered to be placed on her stomach for two or three hours at a time to relieve the posterior congestion. To take five grains of the iodide, with ten of the bromide of potassium, in calumba, three times a day. The diet, hitherto entirely fluid, to consist of chicken, fish, eggs, and milk.

22nd.—The pain in the bowels being severe, to omit the iodide of potassium and take a mixture of bismuth and prussic acid, with fifteen grains of chloral every night.

On March 6, one month after admission, and sixty-five days after taking cold, she first showed signs of amendment. The symptoms, both of the meningitis and also the later ones, denoting inflammation of the substance of the cord itself—viz., complete paralysis of sensation and motion—are less severe. She can move the legs a very little, and has some control over the bladder and sphincter ani. Can move the arms a little better, although the contraction remains. The œdema is abating, but there is great emaciation of the parts of the body not œdematous. Pulse small and quick, and the skin rough, harsh, and shrivelled to the last degree. She was, in fact, like a living skeleton with water in it. Ordered an increase of the nourishing diet, with more wine, and five grains of citrate of quinine and iron three times a day.

11th.—Improvement slowly progressing. There are troublesome bedsores over the sacrum, and numerous small sloughing pimply sores all over the back. The iodide and bromide of potassium to be again tried, omitting the other remedies, and a blister to be applied to either side of the dorsal spine. To get at the back the body has to be rolled over in one mass, any separate movements of a limb still giving great pain.

25th (seven weeks after admission).—Can now manage to get out of bed by moving both hips and legs together. There is now perfect control over the bladder and rectum, and the anæsthesia is disappearing. Arms still contracted, and flexion still gives great pain. To resume the iron and quinine in place of the iodide and bromide of potassium. To lie frequently on the stomach for relief of the bedsores, which are not yet healed. Emaciation of the body extreme.

April 8.—The report is—"Patient walks about the ward tolerably well now, and can move her arms freely. The tenderness over the spine is gone, as well as the œdema of the lower limbs, which are now as emaciated as the rest of the body. The skin still rough, dry, and harsh, like that of a starved person. The countenance has resumed its natural bright expression." From this time improvement went steadily on, but it was not until May 2 (twelve weeks after admission, and seventeen after catching cold) that she could be safely discharged.

June 27.—Six months after the onset of her illness, she writes from home that she has regained much of her flesh, the colour has returned to her cheeks, and she has menstruated scantily once. She still feels great difficulty in stooping, owing to the stiffness of the muscles of the spine. The legs feel contracted on first rising, making it difficult to put the heels to the ground. Does not yet feel strong enough to take another situation, although otherwise in good health.

Case 3.—Rapid Softening of the Spine, or Spinal Hæmorrhage(?).

The following case presents such a puzzle that I think anyone may be excused for failing to come to an exact diagnosis, and it is much to be regretted that its doubtful points were not cleared up by a post-mortem examination:—A gentlemen, aged about 40, a fine, muscular fellow, had led a somewhat dissolute life, both as to drink and as to venereal excesses. He was fond of field sports, especially fishing, often standing in the water for many hours together. Without any apparent alteration in his health or in his habits, he was observed, on November 28, 1871, whilst walking, to drag one leg, as if partially paralysed; but so little conscious was the patient of this that he attributed his gait to fatigue, and was with difficulty persuaded to seek medical advice. On the next day he was ordered warm applications and frictions to the spine, with strychnia. His appetite failed him, but he swallowed well, and took wine freely. When his medical attendant called me in to see him, on the third day of his illness, I found the patient sitting in a rocking-chair, able to move his limbs freely as he sat, but quite unable to walk, or to get into or out of bed without assistance. There was some little numbness of the legs and thighs, and some stiffness at the back of the neck, with total loss of appetite. The regular and quiet pulse, with cool skin, indicated a complete absence of fever. Speech somewhat slower and more deliberate than usual. There was no loss of power over the bladder, and pressure along the whole course of the spine gave no pain whatever. Under the idea, gathered from the report of his habits, that this was an aggravated form of anæmia of the spinal cord (he had been in the habit of taking strychnia to restore failing sexual power), I ordered him to lie upon the back, to take a nutritious diet, and to have hot sponges applied continually to the spine. No improvement took place, and on December 4, being the sixth day of his illness, on visiting him a second time, I found him sitting in his rocking-chair as usual, able to move his legs, which still felt benumbed, and to feed himself. He now complained, however, of a feeling of constriction across the chest, impeding the respiration, with great difficulty in swallowing. To the astonishment of us all, he died asphyxiated, within four hours of this visit, the senses and intellect remaining perfect to the last.

It will have been noticed that the three cases related above differ greatly both in their objective and subjective symptoms. The signs and symptoms of inflammation of the spinal membranes, and of the substance of the cord itself, are, no doubt, laid down with great precision by our systematic writers. Yet, when in practice we fail to see them so distinctly and distinctively defined, we become puzzled, and apt to conclude, from the irregularities observable in almost every case, in some part of its course, that we have to deal with a disorder which is quite different to what we at first instinctively supposed it to be. In the case of C. G., for instance, which was undoubtedly one of acute inflammation of the membranes, rapidly involving the substance of the cord itself, we ought to have had a group of symptoms something of this kind:—After shivering (which was absent), febrile excitement (absent also), intense pain in the back (absent), aggravated by every movement of the patient; spasms of the muscles of the back being also commonly present, even to the degree of opisthotonos. So far were these symptoms absent, that the patient was able to walk to and from the doctor's surgery on several days, complaining of scarcely any of them. Yet, from the rapid access of complete paralysis afterwards, and from the post-mortem appearances, we are forced to conclude that meningitis, and even myelitis, had been progressing rapidly from the first.

In the case of A. H., on the other hand, we had most of the orthodox symptoms following each other in the ordinary march of the disease, and we could tell when the inflammation, which had for weeks affected the membranes, penetrated to the deeper structure of the cord itself. Nevertheless, there is often difficulty not only in fixing the period when this transition takes place, but of saying how much of the symptoms, especially the paralytic ones, is due to the meningeal affection, and how much to that of the marrow itself. One of the latest and most lucid writers on diseases of the nervous system—Dr. Hammond, of New York—lays it down that spinal pain is characteristic of meningitis, but that tenderness on pressing or percussing the spinous processes is met with *only* when the marrow (and *not* the membranes) is the seat of inflammation. Yet, in C. G.'s case, which proved rapidly fatal, and in which post-mortem examination showed that the very highest degree of inflammation both of the membranes and of the cord itself had existed, there was no appreciable pain in the back from the first; and when the paralysis had become absolute, showing that the nervous substance had become involved, there was absolutely no pain or sensation caused by percussing the vertebral spines. And, as in the other case, there were no distinctive symptoms to reveal the passage of the inflammation from the membranes to the nervous substance of the cord.

In fact, if we take case No. 3 to have been one of spinal inflammation (of a low type, perhaps), rapidly disorganising the cord—and I do not know what else it could have been—it appears quite possible that all the subjective symptoms, such as pain on tapping the spine or on moving the limbs, fever, shivering, and the like, may be entirely absent, the nature of the case only revealing itself when the objective and fatal symptom of paralysis has attacked some vital organ, such as the heart or diaphragm, through the phrenic and pneumogastric nerves.

The fact that the two most distinctive cases (1 and 2) had been mistaken for rheumatism or neuralgia—a mistake which caused much loss of time in each case—must not be passed over. Unless a careful examination be made when the patient is first seen, complaining only, perhaps, of some local pains and stiffness, or slight tingling, what more likely than for the busy practitioner to diagnose rheumatism or some form of neuralgia? The lesson we may draw from these cases should teach us never to be satisfied with this cursory examination whenever the patient complains either of numbness, tingling, or formication in any of the limbs, accompanied either by pain or by some loss of motor power in them. A careful examination made early will doubtless generally reveal pain somewhere in the course of the spine; but, whether it does or no, we should take careful note of the previous history of the patient, even from infancy, especially as to his having had a blow on the spine, or lain upon the wet ground, or been put into a damp bed. We shall do well also to inquire into his habits as to drink and venereal excesses, too often concomitant vices—twin brothers, in fact; and, like twins, very often disagreeing, and blaming each other for failures for which each is equally in fault. In short, it is only by extreme care in the early diagnosis of actual spinal disorders that we shall be able to detect a group of very varying symptoms, which, even when discovered, will tax all our powers to avert from heralding a fatal issue.

ON EXTRACTION OF CATARACT BY PERIPHERAL SECTION OF THE IRIS

WITHOUT INVADING THE PUPIL.(a)

By CHARLES BELL TAYLOR, M.D., F.R.C.S.E.,
Surgeon to the Nottingham and Midland Eye Infirmary.

In spite of the almost universal performance of an associated or preliminary iridectomy, as a part of the modern methods of extraction for cataract, I think it is evident that no operation will be permanently retained that involves a mutilation of the pupil. The cosmetic defect, the dazzling and the defective accommodation occasioned to a greater or less degree in all cases by the sacrifice of a portion of iris—though perhaps little to be considered when we appreciate the comparative safety of modern methods of extracting—are still defects which leave something to be desired on the part of both patient and operator; and so long as this is the case we must always expect a restless aspiring after improved methods and a constant effort to save the pupil.

The existence of this feeling is evidenced by an observation emanating from Professor Stromeyer, who, in his lectures on the surgery of this country, called attention to the efforts made in this direction by Professor Liebreich and Mr. Critchett, remarking "that it was evident that we ought to save the pupil"; and a similar sentiment is manifest by the constant reversion to the old flap method, with all its attendant dangers, by many of the most distinguished operators of the present day.

Before the adoption of Von Graefe's, Mooren's, my own, and other modern methods of operating, prolapse of the iris was always considered the bugbear of extraction. We have got rid of this danger by the sacrifice of a segment of iris; and the question that presented itself to my mind was whether the same end might not be attained at less cost by merely sepa-

(a) A paper read before the Ophthalmological Congress, held at the Royal College of Physicians, London, July, 1872.

rating that membrane from its periphery, so as to obviate the risk of prolapse during the few days following the operation, and yet in the end maintain the pupil in all its integrity, and secure the chief advantage of the old flap method without its principal attendant danger. This end I have attained by removing a minute portion of the periphery of the iris, and through the aperture thus obtained separating it with scissors from its marginal attachment to an extent corresponding to the size of the wound required for the easy exit of the lens.

The sphincter of the pupil is thus not stretched by the passage of the cataract which glides from its posterior surface; and I find as a matter of experience that a slight wrinkling, to be seen only when sought for, is the only change to be observed in the margin of the iris after the recovery of the patient, while as a result of the procedure the pupil is maintained intact, central, and movable. The first part of the operation is facilitated by the preliminary application of the Calabar bean and the adoption of a minute section in the corneo-sclerotic junction at the summit of the globe, while the rest is easily accomplished by enlarging this aperture with a blunt-pointed knife to the right and left until sufficiently spacious for the exit of the lens. I find the small knife that I commonly use best adapted for the purpose, and I usually lacerate the capsule through the natural pupil. Of the ten cases in which I have extracted by this method on patients taken as they came, without any selection, nine presented results quite as brilliant as the one I am enabled to show you, while the tenth, although suffering from closed pupil, the result of iritis following the operation, is still in a condition to permit of the restoration of sight. The operation is somewhat tedious, and generally requires prolonged anæsthesia; but the first objection may be obviated by making the minute iridectomy a preliminary step, as in Mooren's method, and the latter is scarcely to be deprecated if we employ such a safe anæsthetic as our distinguished colleagues, Dr. Joy Jeffries and Professor Morgan, have shown anhydrous ether to be.

MIDWIFERY NOTES FROM BRITISH KAFFRARIA, SOUTH AFRICA.

By CHARLES JAMES EGAN, A.B., M.R.C.S.E.,
Assistant-Surgeon to Guy's Hospital, and District Surgeon, King William Town, Kaffraria.

(*Continued from page* 226.)

It is impossible to give any statistical account of the duration or the ratios of difficult and natural labour among the native population of this colony, as I never see any cases except such as occur among those natives who have been brought somewhat under the influence of civilisation, and who reside within a short distance of town; and those cases which I do see are difficult or tedious labours, requiring professional assistance.

From what I can learn from my own observation and from inquiry amongst the natives, I do not think that first labour among these people is so short as is usually supposed. About twelve hours is considered by them to be natural labour in a primipara, and many last for a much longer period. Amongst multiparæ labour is much shorter, in some cases lasting not more than an hour, or even half an hour; but these are very exceptional, and similar cases are often met with among Europeans. There is no doubt but that they recover from the effects of labour much quicker than Europeans do; and I have been astonished to see some women that I have attended, who required operative interference, standing up and walking about half an hour after delivery.

The performance of an obstetric operation amongst these people is by no means an easy proceeding, as may be imagined when we take into consideration the following circumstances. First of all, the place to operate in. Their huts are built in the following manner:—A circular basket-work is made about fifteen or twenty feet in diameter and about eight feet high in the centre, the top supported by poles; this is thickly covered over with long grass as thatch. There is only one entrance, about four feet high by two wide, and there is no other opening into the hut. The fire (which is made of very dry wood, so as to produce as little smoke as possible) is placed in the centre of the hut, but there is no outlet for the smoke except through the door, so that the upper part of the hut is always full of it, and the atmosphere is such as is difficult to be endured by any person unaccustomed to it. In these huts the natives sleep on mats made of reeds, and it is in such a place you have to deliver a woman with instruments by candle-light while she is lying on the floor. The application of forceps or the operation of turning is by no means easy under such circumstances, and added to the above-described difficulties is the want of a nurse or experienced assistant. The supply of water also is always rather scanty; about a couple of quarts is as much as ever can be obtained, and that in a little tin can or in a basket made of woven reeds.

The obstetric position adopted by the natives is sitting with the heels drawn up to the buttocks, while the shoulders are generally supported against one of the poles supporting the roof of the hut, or against some of the female friends, who are generally present in full force. A somewhat similar position in labour is also followed by the German population here (immigrants who came here in 1858 from Prussia and Pomerania), but they do not raise the shoulders so much. The Kaffir position is a very good one, and the woman has full power to bear down and assist her pains. Of course, in this position, no support can be given to the perineum by the hand of an attendant; but I am very much inclined to think that some very useful support is given to the perineum from its resting on the firm floor of the hut, and the too sudden passage of the child's head is thereby prevented.

Flooding is a very unusual occurrence among the natives, and I have never been called in to see or to prescribe for a case of the kind; even when I have used forceps, and labour pains had completely gone away for some time before I saw the case, no unusual hæmorrhage has taken place. I suppose this can be accounted for by their fine muscular development, in which the womb must participate. The quickness with which the abdominal muscles recover from the state of tension in which they have been kept by the enlarged uterus, and return to their normal state, is surprising, and is certainly a principal cause of the native women being able to get up and walk about so soon after delivery without suffering any bad consequences from doing so.

From my experience, not only in cases of labour, but also from having attended native women for various diseases, both in hospital and out-door practice, I should certainly say that their pelves are not larger than those met with in Europeans; they are certainly more largely developed in the fleshy covering of these parts, but I do not think that the bones are at all larger. I have not had any opportunity of making measurements so as to arrive accurately at a decision on this point. The head of the child is, I consider, generally smaller than is usually met with in Europeans, and therefore the passage of the child in labour should be easier.

I have met with two different methods among them in which they treat the funis. In some cases they do not cut it until after the placenta has been expelled. I have been called to attend a case of twins, three hours after the birth of the first child—the second lying across, and requiring to be turned; and when I arrived the first was lying on the floor, still attached by the funis, in which all circulation had ceased, the child being alive and well. I believe that in cases, which sometimes occur amongst the natives, of women being unexpectedly delivered out in the fields, they wait until the placenta has been expelled, and then separate the child from it.

The second method is to cut the funis with a rough reed,—in fact, to saw it slowly across, making a ragged end to it, as if it was torn, and thus effectually preventing any hæmorrhage.

The natives always allow the placenta to be expelled naturally, and in some cases it is hours before it comes away. They often apply to me for retention, four or five hours after delivery. In these cases, when I cannot go out to see them, I send a dose composed of liquor secalis cornuti ʒj., oil of turpentine ʒij., and castor-oil ʒj.; and I have always found this draught successful, never producing any bad effects.

I have twice been called to see cases of complete inversion of the uterus, but what caused the inversion I could not ascertain. There did not appear to be any adhesion of the placenta, and it is contrary to the usual practice of the natives to interfere by traction on the cord; so I consider it must have been caused by excessive labour pains. In neither of these cases was there any hæmorrhage, and I returned the womb without much difficulty, administering a full dose of opium afterwards; and two days subsequently the patients were quite well, and walking about.

Among the native infants one is much struck with the numerous cases of umbilical hernia to be met with. You will see little Kaffirs, from a year to four or five years of age, running about quite naked, with large protrusions at the navel—sometimes the size of a hen's egg. Yet these herniæ seem always to disappear without any remedial measures being adopted. Though it is so often seen in children, I have never

met with a case of it in adults. It originates, most probably, from their never using any binder on the infant when first born; and it appears to be removed naturally on the development of the abdominal muscles when the child begins to run about. It shows me that the occurrence of such herniæ in European children need not be a cause of so much anxiety as it usually is. The European mother, when it does occur, is always in a dreadful state of mind about it, but I believe that it will always cure itself if left alone.

I have seen a good many cases of trismus amongst native infants, and I believe that it is by no means an uncommon occurrence. I have never seen any benefit from treatment, but intend to try chloral hydrate in the next case that comes under my notice.

The first case of midwifery that I attended among the natives was a difficult one of cross-birth—a presentation of right arm and shoulder, the head lying to the right side of the mother. The woman had been three days in labour, and all labour pains had gone away when I arrived at her hut. Her friends had given her up to die, and when I arrived I found over twenty women sitting round outside the hut, quietly waiting for this event. I examined the woman, and found that the child was dead, a part of the funis being prolapsed; and I learned that the liquor amnii had come away on the previous day. I had no one with me except a native interpreter; and none of the women would assist, as they considered that the woman must necessarily die. I told them that the child was dead, but that I thought I could save the mother, which they seemed to me rather to doubt.

I accordingly, with the assistance of the interpreter, proceeded to turn, which was no easy operation, not only from the nature of the case but also from the position of the mother (lying on the floor) and the other concomitant circumstances previously described. However, after some time, I extracted the child, and the astonishment of the native women when I came out of the hut and told them that the woman was all right gave me ample reward for all my trouble. This woman, in her first confinement, had also a cross-birth, and, from what I could make out from the description of the labour given to me by the woman and her friends, I think it must have been a case of spontaneous evolution.

I have had to perform many midwifery operations since then among these people, and never have found any opposition from them to whatever I stated was necessary to be done; but they never give any assistance; they will sit by and look on, smoking all the time, and allow me to do as I like, with the assistance of my interpreter. The leaders of the Anti-Tobacco Association should come out here and examine the effects of smoking on the natives—as they all smoke, men and women, and do not appear to be at all physically deteriorated by the practice.

Since my last communication to you I have attended a lady (European) who has always suffered from severe hæmorrhage in her confinements. I therefore tried with her the treatment I have mentioned in my previous letter of administering three grains of gallic acid and one grain of extract of rhubarb twice daily for three weeks before labour. She is a very large, heavy woman, over twelve stone in weight, and five feet ten inches in height, pale and flabby.

When labour came on it was quite natural, the first stage lasting six hours, the second only a quarter of an hour; male child. Very little discharge with the birth. The placenta expelled naturally in about ten minutes, and what blood came with it was small in quantity, and coagulated at once; not as on previous occasions, running from her in a stream and lying uncoagulated in the bed for some time after escaping from the vagina.

(*To be continued.*)

The Malta correspondent to the *Post* writes on September 24 that the health of the island is good, and fortunately there has been no epidemic of any kind during the summer months.

St. Mary's Hospital Medical School.—The biennial dinner of this School took place on Wednesday evening, October 2, at Willis's Rooms; H. Spencer Smith, Esq., Senior Surgeon to the Hospital, in the chair. In addition to the acting staff of the Hospital, nearly all of whom were present, were Dr. Chambers, Dr. Sibson, and Mr. White Cooper, of the consulting officers, together with numerous old students, many of whom came far to join the gathering of St. Mary's men. Amongst the latter were Mr. Turner, Mr. Woodman, Mr. Naylor, Mr. Maurice, Mr. Belamore, and many others well remembered in the School.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

OPERATIONS ON WEDNESDAY, OCTOBER 2.

(Cases under the care of Mr. DE MORGAN.)

For notes we are indebted to Mr. Scale, House-Surgeon.

Case 1.—*Recurrent Cancer in Cicatrix in Mammary Region—Removal.*

E. R., aged 42, was admitted in January last with a tumour in the left breast, which was removed. It had been growing some time when she first came under Mr. Morris in the cancer out-patient department, and it presented all the symptoms and appearances—naked-eye and microscopic—of scirrhous cancer. The wound healed very slowly, taking nearly three months to do so; and very shortly after leaving the Hospital the scar became painful, and a nodule the size of a small hazel-nut appeared at one spot about the centre of the scar. This was injected three times with the strong acetic acid by Mr. Morris, under whom again she became an out-patient. As this mode of treatment made no perceptible change, it was thought better to admit her and remove the growth.

The nodule was very hard and attached to the skin, and though movable upon the underlying structures, it was likely soon to become attached to them. Mr. De Morgan therefore deemed it advisable to remove the diseased part freely by excising it with a portion of the surrounding skin, and then to leave the wound to granulate. It had been intended to apply chloride of zinc to the wound, but the parietes were so thin that it seemed better not to do so. An enlarged and hardened gland existed deeply in the axilla. As it was not increasing, and in all probability would be a long time before it gave further trouble, it was not interfered with.

Case 2.—*Caries of Os Calcis—Carious portions removed by the Gouge, and Potassa Fusa applied.*

J. T., aged 43. For thirty years has been off and on troubled with a bad heel. It commenced thirty years ago with swelling, and in about twelve months the skin broke and discharged pus. Ten years afterwards the bone was gouged at Northampton Hospital, and two years after this it was again gouged, when it became well enough for him to walk upon it without inconvenience. Six years ago he again suffered pain and inconvenience, and the part commenced to discharge; and in this state it has remained up to the present time. On the under surface of the point of the heel there is a broad sinus with thickened edges, and on passing a probe into this to the depth of an inch and a half bare bone is felt.

This was exposed through a linear incision, and the diseased bone, involving the greater part of the bulk of the calcaneum, gouged away. A small piece of potassa fusa was after inserted to expedite the removal of some small quantity of carious bone which was left, and to stimulate a healthy action in the parts near.

Case 3.—*Ulcerative Disease of the Second Range of the Tarsal Bones of the Left Foot—Syme's Amputation.*

J. P., aged 42, began to suffer pain and had an abscess on the dorsum of the foot six months ago. Three months ago two abscesses formed on the front of the chest, and one in the calf of the leg. When he was admitted under Mr. De Morgan he had the symptoms of pyæmia—viz., high temperature, with sweatings and rapid pulse (130 in the minute)—there were the abscesses alluded to discharging thin pus, and one of them connected with caries or necrosis, or both, of one of the ribs. There were several sinuses over the dorsum of the foot, all of which led down to carious bone.

Mr. De Morgan remarked that as the disease did not extend further up than the second row of the tarsal joints, Chopart's operation might have been performed; but he had preferred Syme's because, as the patient's condition showed such a tendency to caries and suppuration, the removal of the foot farther from the seat of disease than Chopart's operation permits of seemed the better treatment to pursue. The amputation was performed in a manner somewhat different from that usually followed, as the joint was opened after the short anterior flap was made, and the bones of the joint separated before the point of the os calcis was dissected

out of the lower and long flap. Mr. De Morgan gives preference to this method because the possibility of twisting the foot from side to side after its detachment from the bones of the leg allows of the more easy formation of the under flap.

(Cases under the care of Mr. NUNN.)

For notes we are indebted to Mr. Scale, House Surgeon.

Case 1.—*Necrosis of Tibia—Removal of Sequestrum.*

George S., aged 20, a groom, received a kick from a horse eight months ago on the upper part of the lower third of the left tibia. The soft parts swelled immediately, acute ostitis followed, and upon admission three days afterwards there was an abscess discharging offensive pus, and bare bone could be felt at its base. Numerous sinuses formed rapidly over the inner side of the left tibia from the malleolus as high as the upper third of the tibia, at the bottom of each of which rough bone could be felt. An incision from three to four inches in length having been made along the inner side of the leg, and the skin reflected, after removing a long tract of the new-formed bone, a sequestrum between four and five inches in length was withdrawn by freely exposing and seizing the upper end of the cloaca. This sequestrum represented the whole thickness of the tibia below, but gradually tapered off above, so that only a portion of the thickness of the shaft was involved at the upper part. A feature pointed out was this: that although the sequestrum evidently represented the whole calibre of the tibia at its lower end, it was much smaller in its dimensions than the normal tibia, showing that much of the bone may be removed, either by absorption or suppuration, or both, while the new bone is being developed around the necrosed part. The greater part of the surface of the sequestrum was very rough and irregular, and this was of course more especially the case where the sequestrum consisted of only a part of the thickness of the shaft, and separation of the dead from the living bone had taken place; but here and there upon the free surface of the sequestrum the bone presented an unaltered outline, and, though hard and white, was smooth and not irregular.

Case 2.—*Epithelioma of the Lip, with Secondary Affection of the Submaxillary Glands—Removal.*

The patient, a strong, robust adult man, first noticed a small sore upon the margin of his lip four years ago. This soon became a warty growth and gradually spread. Twelve months ago the glands below the chin and inferior maxillary bone began to enlarge. He had neglected to submit himself to proper treatment until now, when the whole length of the upper margin of the lower lip presents an ulcerated surface with a thickened base. On the left side under the chin was a hard elastic substance the size of an egg, and on the right side below the angle of the jaw was an enlarged and hard gland. At the very urgent request of the patient Mr. Nunn removed the whole of the diseased parts of the lip by a curved transverse incision, and afterwards dissected out the hard elastic substance from beneath the chin. This consisted of a quantity of pultaceous material contained in a well-marked limiting membrane. Strips of lint spread with chloride of zinc paste were placed in the wound. The lower portion of the edges of the wound of the lip were brought somewhat together by means of harelip pins, after the mucous membrane, reflected from the inner surface of the lip to the jaw, had been divided. A wide gap in the lower lip was however left, which would no doubt become partly filled up by granulations.

Case 3.—*Tumour of Breast—Removal of the Gland.*

Rebecca I., aged 53, first noticed a swelling and hardness about the size of a pea in the left breast about nine months ago. This gradually enlarged, and became painful about a month ago. There was at the time of the operation a hard nodular mass of the size of an egg, over which the skin was movable. The swelling itself was movable over the submammary tissue. The nipple was retracted and drawn somewhat upwards; but there was an elevation of the entire mamma, as illustrated by an imaginary horizontal line through the centre of the unaffected gland. As the breast presented many of the symptoms of being the seat of scirrhous cancer, and as there was no indication of deep fluctuation, the breast was removed. On making the necessary incisions, it was noticed that there was more than the usual amount of resistance to the knife when this came in contact with the breast-tissue, owing to a state of general sclerosis. The tumour itself consisted of cysts—one large, about the size of a walnut, with at least one other much smaller cyst close at its side. The cyst contained an opalescent but not tenacious fluid. The cyst-walls were most intimately blended with the surrounding tissues, so that it was impossible to dissect them away without removing some of the gland structures.

(Under the care of Mr. HULKE.)

Case 1.—*Fissure in Ano.*

A healthy-looking blonde, admitted some weeks previously, suffering extremely from a fissure in ano. Defæcation was attended with and followed by such agony that she restrained all desire to go to closet as long as she could. The fissure was in anterior margin of anus towards raphe. It was not possible to examine it without chloroform. She shrank at the mere separation of nates. The stools were streaked with blood. She had some months previously been treated in the out-patient department for condylomata and sore mouth. The former had quite disappeared; but she still had a superficial ulcer on inner surface of lower lip. She was put under pot. iod., and black wash was used locally. The fissure was also touched with arg. nit. Mr. Hulke was averse from dividing the floor of ulcer, fearing that the cut might be attacked with chancrous ulceration, which he had already seen; but her suffering obliged recourse to this measure.

Case 2.—*Sinuses about Greater Trochanter.*

The patient, a farm labourer, had had a sinus about a hand's-breadth below the greater trochanter, which ran upwards in front of it for five inches, and another which ran downwards for a couple of inches. He said these sinuses had lasted four months, and had been preceded by a painful lump. No bare bone could be detected, though the persistence of the openings made this suspected. During some weeks he had been kept perfectly at rest in bed, and wore two short drainage-tubes. As no contraction of the suppurating surfaces followed these measures, he was put under chloroform and a circular opening made, and search was made for a sequestrum, but none was found, and a drainage-tube was drawn through. The abscess was thought to have probably had a bursal origin.

Case 3.—*Fleshy Growth from a Leucoma.*

A man, aged 62. A fleshy, smooth, pinkish mass, over which the eyelids could with difficulty be closed. At its centre a small dimple, from which a triangular web passed to lower tarsal cartilage. The mass followed the movements of the other eyeball.

Little information could be gleaned from the patient; but it seemed that about two years before the eye had been inflamed and afterwards shrunk. In the spring of this year the wasted eyeball began to enlarge and became very painful.

The history was a very common one of sarcoma of choroid at this age, many of these tumours beginning in eyes which have been spoiled by a previous inflammation; but when such tumours burst through the front of the globe they generally immediately ulcerate and fungate and bleed; but this was smooth and not ulcerated. Whether it was an inordinately hypertrophied leucoma Mr. Hulke could not decide. In either case the removal of the mass with the eyeball was proper. This was done; and, a section having been made through it and the eyeball, it was found to be a firm, fleshy tumour, springing from a scar occupying the place of the cornea, which had sloughed.

Case 4.—*Necrosis of Clavicles.*

B., a healthy-looking labourer, on October 12, last year, carried a heavy box on his left shoulder. It hurt his collar-bone, and next day this was painful, and continued so. In the following spring a swelling formed, which last June was opened by his surgeon (in the country), and pus was let out. An ulcer remained, with a sinus leading behind the inner end of the clavicle, where bare and loose bone was felt; but whether this was collar-bone or first rib could not be made out. The sterno-clavicular joint was swollen, and tender when pressed. He could not work on account of pain in this part. A director was passed, and the sinus laid open: it passed between the sternal and clavicular insertions of sterno-cleido-mastoideus to a small hollow in back of clavicle, close to the sterno-clavicular joint, which enclosed several small friable loose pieces of bone, which were removed after the lips of the cavity had been cut away. Mr. Hulke remarked that in doing this the risk was not only or principally to the large bloodvessels in the immediate vicinity, but that an operation of this kind always involved the considerable danger of purulent œdema of the cellular tissue at root of neck, and through this of that of the anterior mediastinum, occurring by the entrance of discharge from the sinus or abscess through the newly cut tissues. He had known death from this cause follow the removal of a small sequestrum from the manubrium sterni.

CORNWALL ROYAL INFIRMARY.

HOUR-GLASS STOMACH, WITH CICATRICES.

(Under the care of Dr. JAGO.)

P. U. was a tall and (though not of broad frame) well-made woman. When in health she had ample flesh. She lived to be in her 53rd year; was the mother of one child, that had died young, but she had been for twenty-nine years a widow. At from 38 to 39 she had finally ceased to menstruate. Had been twenty years in the service of the Infirmary, for seventeen of which she had been nurse, and for most of the time head-nurse of the accident ward, the arduous duties of which office she performed with undeviating diligence, and was invariably equal to her work up to a few months before her death. When under 4 years of age she had small-pox, and her naturally brunette skin was much pitted by it. She had no recollection of trouble from her stomach until she was nearly 30 (before I was acquainted with her), when she was between one and two years dangerously ill from persistent vomiting, though it is uncertain whether blood was then vomited or dejected, or if there was notable gastric pain. Only on one other occasion was she for any time at all attacked in this way, and that in a much less degree. It was about eight years ago, when, though she still held on to her work, she for many weeks vomited most of her meals. She had then no gastralgia, and passed no blood. According to her own account, she got quickly well, from a casual prescription I gave her, without an examination in bed. I remember vaguely the accuracy of this statement.

About ten months ago she became liable to occasional vomiting. The symptoms went from bad to worse, until, about six months before her death, scarcely anything she swallowed would remain half an hour in the stomach before it was returned. My hospital duties rarely extend to the accident ward, and for two months or more previously to her confiding her case to my care, I had not a glimpse of her. On her getting into bed at my request, to afford me a better opportunity for investigating her complaint, I was so concerned to see how greatly she had wasted in flesh, that, though I had not settled my mind as to the precise nature of the disease, I ordered her off duty, and, temperate as I knew her to be, I instructed her for the time to abstain from the little wine she had been taking, and to confine herself to an emollient dietary, and prescribed enough magnesia and rhubarb to get a daily movement through the intestinal tract. Under this treatment the vomiting ceased for a whole week. It reappeared, however, so I got her leave of absence from the Infirmary, and visited her at her brother's house, where she had every comfort that the funds of the Hospital could supply.

Well, here she was emaciating, with all the viscera above the diaphragm sound. The loose body I detected deep in the abdominal cavity, beneath the liver, I was fully persuaded was nothing else than a healthy right kidney. No scirrhous growth could be found by feeling or percussion about the pyloric orifice of the stomach or elsewhere, nor was there obtainable any evidence of the existence of any of the organic diseases of which vomiting is a symptom. True, she was of an age when scirrhus is apt to occur; but she suffered no pain whatever, nor was there any tenderness upon even rough manipulation of the abdomen; there were no slimy regurgitations from the stomach. I had reason for suspecting that the cause of the vomiting had existed to some extent for twenty-four years. Her complexion was such, in spite of the disfigurement of variola, as is rarely coincident with the existence of malignant disease. With a clean tongue, her appetite was essentially unimpaired, and the presence of food in the stomach she was only conscious of by its "rolling and rolling round," until it became suddenly painlessly ejected, an hour or so after it had been taken, or perhaps, as frequently happened, only at the end of the day after she had gone to bed, as if the horizontal position favoured the ejection. The contents of the stomach were usually returned with scarcely an indication of having undergone digestion, and leaving no acid taste in the mouth.

There were no signs of present ulceration in the stomach, and though there were of obstruction to the exit of food from its pyloric orifice, I did not, upon the whole, believe that the patient was a victim to scirrhus; and as she had on one or two previous occasions recovered from severe attacks of vomiting, I tried to regard the case as one that it might be possible to cure.

During the three months she was under my charge I believe that every sort of expedient was resorted to in the effort to relieve her: dry and fluid food, artificial digestion, champagne without stint, apart from and with medicinal treatment, with only transient fits of stay to the process of starvation, now and then a day or two being got through on spare dietary without any vomiting. About a week before her death the vomiting ceased entirely, but she had coincidently lost all relish for food and become afflicted with much frothy saliva and secretions in the throat; one little morsel of meat, and sips of brandy-and-water and orange-juice, were all she swallowed during the last few days. At the time of death emaciation was extreme.

Mr. Sharp, one of my colleagues at the Infirmary, who had felt much interest in the case, induced the friends to permit a post-mortem, and gave me the benefit of his experience at the autopsy, which was kindly undertaken, twenty hours after death, when the body was still warm, by Mr. Salmon, the House-Surgeon of the Infirmary, to whom I am also indebted for the accompanying sketches. The only morbid organ we could discover was the stomach. The first drawing gives a sketch of the front aspect of the stomach at half the size of the original. In the second it has been laid open along the lesser curvature; C, the cardiac end; P, the pyloric orifice; U and V, in the first, dotted indications of the sites of two cicatrices, sketched in the second; U being a cavity one inch and a quarter long, three-quarters of an inch broad, and a quarter of an inch deep, with a hard unyielding wall; V, a shallow cicatrix of about an inch in diameter; R, rugæ, showing the corrugated condition of the lining membrane between the cicatrices and the opening of the stricture, S, through which the second joint of an average index finger could not be passed.

Fig. 1.

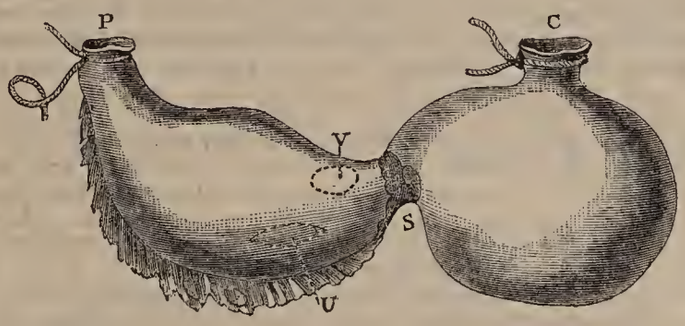
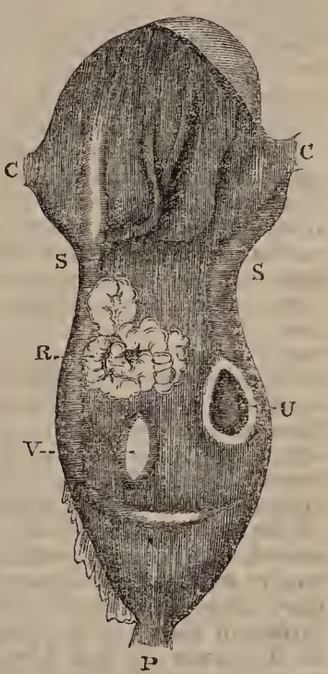


Fig. 2.



There were found about three ounces of thick chocolate fluid in either of the two chambers of the stomach, that on the pyloric side being the thicker. It was of acid reaction, but how far this was due to citric or a gastric acid was not investigated, nor how far the fluid itself was a mixture of swallowed liquids and gastric secretions.

A quantity of tenacious mucus was entangled in the rugæ, but there was no appearance of pus, blood, or abraded surface.

It is conceivable that there was here congenitally an hour-glass stomach, and that ulceration occurred in the second chamber subsequently, without having caused the constriction. But the inferences are so clearly against this supposition that it is needless to point them out. Did the original ulcers occur at 4 years of age through variola; or did they occur twenty-four or twenty-five years ago, when her health was probably depressed through the grief of recent widowhood, hard work, and self-denial in her struggles to maintain herself and child? Her dangerous and prolonged gastric illness at that time would lead one to this conclusion; for one can hardly imagine her to have had a gastric ulcer during her short poorliness in the Infirmary eight years ago.

In fact, all recollections of her general deportment and look for the twenty years I have known her, my inquiries from her relations, and from the retired matron of the Hospital who was in the house with her for the first sixteen years of her service there, and the nurses who ate at the same table with her, satisfy me that she had a strictured stomach during the whole time she lived in the Infirmary. In health she would daily eat more

than an average woman, and even at a single meal (dinner) there was no one at the table who ate more. But she made herself remarkable by requiring twice as long a time to eat this meal as her companions required. This was not from loss of teeth, and seemed to indicate that she could not appease her appetite until the first chamber of the stomach had time enough to transmit some of its contents through the stricture. In addition to this fact she made herself remarkable by nibbling bread and other eatables between her meals. Her very expression of face in the midst of her work has frequently, years ago, suggested to me that she was thinking about her stomach.

But has the stricture been for many years as narrow as at the last? Possibly, before emaciation, it may have been somewhat narrower than at the post-mortem. Could the cicatrices have gone on still contracting for more than twenty years? Or from the mere fact of the individual growing older have the tissues that wall the stricture hardened, and thus, through their loss of elasticity, a stricture that formerly was capable of being stretched become no longer so capable?

HEREFORD GENERAL INFIRMARY.

CASE OF HYDATID TUMOUR OF THE LIVER.

(Under the care of Dr. SMITH.)

[Reported by Mr. B. P. MORISON, House-Surgeon.]

G. C., AGED 35, brickmaker, was admitted into the Infirmary on June 13, 1872, and found to be suffering from hydatid tumour of liver. The following is the history of case:—

Patient, who is a sallow-looking man and very much emaciated, has always enjoyed good health till about four years ago, when he suffered an aching pain in his right side, which seemed to vary in character—sometimes it was continuous, and at other times it would be of a stabbing nature. The latter kind of pain would always come on after the patient had been lying down and then risen suddenly; consequently, he suffered more from this sort of pain in the morning than at any other time of the day. This went on for about twelve months, the patient still continuing his work, but feeling weak and ill in himself. At the end of a year he noticed a small swelling in his right side, which was accompanied by an increase of pain, and after eating food he experienced a sensation of wind in his stomach. He continued his work till March, 1870, when he found that owing to his weakness and the increase of the tumour he could not continue. At brickmaking he has occasion to lean sometimes for a long time against a table. He came to the Infirmary in May, 1870, but did not derive any benefit from the treatment he received. Since the commencement of the disease his urine has been high-coloured and thick, especially in the morning. During the last twelve months the pain has extended from the right side round to the small of the back, and he has aching pains in his legs, especially in the calves, after waking from sleep. His family history is good. He has a wife and six children alive and healthy.

On Admission.—Patient is very much emaciated, and his skin is of a brownish-yellow, especially upon the face and hands; he has got much yellower during the last six months. On examining the abdomen the patient complains of a good deal of pain all over that region, and especially on the right side. The skin of the abdomen is very tense, and there is a large swelling which has the appearance of a camel's hunch. This tumour, which projects outwards, forwards, and upwards, extends from about the middle of the sixth and eighth ribs on the right side to about the same position on the left—measuring about twenty-two inches from the one side to the other. Between the navel and the sternum it projects upwards, forming a large swelling, somewhat pointed in shape. At the apex of the tumour there is distinct fluctuation to be felt. The skin over it is very tense. The measurement around the body over the apex of the tumour is forty inches and a half, but the patient said that it used to measure five inches more. Round the tumour itself, where it projects, its measurement is thirteen inches, and at the base about nineteen inches and a half. The base of the tumour seems to be perfectly solid. The ensiform cartilage of the sternum is completely displaced, and is turned upwards, almost at right angles with the sternum: U. It was intended to puncture the tumour and inject some pot. iodid., but the patient refused to have anything done to it; and he left the Infirmary June 22, 1872.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, OCTOBER 12, 1872.

THE INTRODUCTORIES.—No. II.

DR. J. PYE-SMITH'S Introductory at Guy's could not be said to be an example of the fault we indicated last week—*pace* the *Daily Telegraph*, it was not commonplace. It had here and there a pugnacious tone about it, and attacked things and theories with commendable vivacity. The lecturer drew down upon himself the wrath of our daily contemporary by warning the students not to waste time in reading the newspapers, and particularly the *Daily Telegraph*. Whereupon a leader appeared in that paper of world-wide circulation on the 3rd of the present month, describing Guy's as "the little Hospital in Southwark," and attacking the lecturer with most amusing energy. With regard to the waste of time spent over the daily papers, we thoroughly agree with Dr. Pye-Smith. We recollect the late Admiral Smyth, well known for his extensive labours in many fields of scientific observation, being asked how he contrived to get through so much work as he did. His answer was—"Why, sir, I never look at a newspaper."

Preventive Medicine received from Dr. Pye-Smith its due meed of laudation. But even when treating of a subject on which not only the Profession but Parliament and the public have been bestowing a good deal of attention of late, he could not refrain from a hard hit at the "one person entrusted with power who is capable of regarding with the scorn of self-complacent ignorance that 'knowledge of organic and inorganic matter' on which depend not only human health and happiness but much of human virtue." We are left in the dark as to the person at whom the blow is aimed, unless, as we suppose, it be the irrepressible member for the Tower Hamlets, who is the only person in the Government we can conceive laying himself open to such a charge. From preventive the lecturer passed on to curative Medicine. To the latter we think he gives a too limited definition. He asks—"What is curing a disease? It is not healing—strictly speaking we cannot heal the most trifling ailment. Curing is, as the term implies, 'taking care' of the sufferer." Again, "we cannot

originate the least step in the healing process. We can only guide and direct the action of those physical laws which produce the phenomena of life." We suppose Dr. Pye-Smith really intends only to reassert the supposed old aphorism that it is nature and not the physician who cures the disease. But it is not true that curative Medicine is only "taking care" of the patient. The administration of quinine in ague which cures the disease is not mere taking care of the patient, nor is application of aconite for the relief of neuralgia, nor the administration of arsenic in skin disease, nor a thousand other curative proceedings, which certainly transcend any ordinary meaning of the term "take care," and to say of which that they guide and direct "the action of those physical laws which produce the phenomena of life" is only to veil our ignorance of their action and of the nature and action of the physical laws themselves under, at the best, a probable hypothesis. We quite sympathise with Dr. Pye-Smith in the high estimate he forms of the spirit and ideal of Medicine as a calling; but we suppose he only intends us to smile when he classes together as businesses which "many a conscientious man must often feel grave doubts whether he is justified in pursuing at all"—the occupations of "a publican, a newspaper correspondent, a bill broker, or a member of Parliament"! We have nothing but praise for the concluding sentences of the address, in which he compares the present phase of existence to an embryonic condition, however little the idea may be in unison with the fashionable—albeit, as we think, shallow—materialism of the day.

At the Westminster Hospital Mr. G. E. Legge Pearse made some common-sense remarks upon the abuse of alcohol as a cause of disease and upon the Contagious Diseases Acts—subjects somewhat out of the beaten track. One good point in his address was the stress he laid on clinical observation, and the high value which he attributed to clinical clerkships and dresserships—offices which, in England at least, now form an integral part of the prescribed curriculum.

The address at St. Mary's, delivered by Mr. A. T. Norton, of which we published a full abstract last week, dealt, for the most part, with the subject of medical education. He advocated the addition of several of the subjects which at present are included in the medical curriculum to preliminary education; and to obviate the objection that enough is already required from the mere schoolboy, he proposes that the time for entering the medical school should be somewhat later than at present. He thinks that many students commence the study of Medicine at too early an age, and that men often spend in comparative idleness a portion of time between the attendance on lectures and hospital practice and their final examinations. Our experience would not lead us to think this very common; but we are quite disposed to agree with Mr. Norton that the study of such subjects as chemistry and botany would be better pursued before the student enters on his special medical studies, including anatomy and physiology. By far the hardest knowledge to be acquired is, to most students, a knowledge of chemistry and of anatomy. But both these subjects have to be "got up" in the first winter session. Is it any wonder that a large number of students fail in anatomy at the College and in chemistry at the Hall, or other examining board where chemistry is required? Another valuable point in Mr. Norton's lecture was the importance he attached to work in the out-patients' room and in the special hospital departments where the use of the ophthalmoscope, laryngoscope, and other special instruments for diagnosis is taught. These things, if not learned during the student's career, are only learned with difficulty, and often very imperfectly, in after life. In conclusion, he recommended the students, if they did not find cottage hospitals in their neighbourhoods, to establish them. Very good advice for country practitioners; but in London, at least, we are inclined to think that we have enough hospitals already.

But it is time that we turned to the provinces. The address delivered by Mr. T. M. Morton at Sheffield possessed historical interest. He gave a sketch of the history of the Sheffield School, which will be new to many readers. It appears that the Sheffield School was founded in 1828. It is the second in age of the provincial schools, that of Manchester having been founded in 1824; the last founded was the Newcastle School in 1839 or 1840. The difficulty of obtaining subjects for dissection at that time weighed grievously on teachers and students, and in the year 1828 and the two following years the medical profession at Sheffield petitioned Parliament to remove the obstruction preventing the study of anatomy. Three causes, Mr. Morton said, led to the foundation of the provincial schools—the large population of towns and the necessity for hospitals; the advantages derived from the study of anatomy and other subjects by local practitioners; and the protracted and somewhat dangerous journey to London. Railways have excluded the last of these causes, but we think that there are many reasons why it is desirable the provincial schools should be maintained. Each school and hospital ought to be a focus of medical and surgical illumination for the surrounding district. It prevents the waste of a large amount of material for the advancement of professional knowledge which would be otherwise lost, and it secures medical and surgical talent of a high order for the large town in which it is placed. The tendency to centralise medical teaching in the metropolis, which in the present age is the result of easy railway communication, we believe to be conducive neither to the welfare of the population nor to the cultivation of medical science. Mr. Morton in adverting to the system, which was inaugurated by the establishment of the Royal College of Physicians by the charter of Henry VIII., said very justly that in the three centuries which had elapsed since that time it had been the means of raising the character and respectability of physicians, and through them of the medical profession, to a higher eminence than in any other nation of Europe. We believe this has been the effect of the influence exercised by the medical corporations, and it is matter for the consideration of those who are again raising the cry for a State licence how far the position of Medicine will suffer by being no longer a self-educating and self-governing profession.

Professor Bracey's address at Birmingham, besides giving excellent advice to the new students, to those who had passed their first professional examinations, and to those who had completed their studentship, touched on the past and present of the School which he represented. He had reason to refer with pride to the present state of medical science in Birmingham, to the extent and high character of the hospitals, and to the additions made to medical and surgical science by the past and present physicians and surgeons of Birmingham. There were some good remarks in the concluding part of the lecture on the bearing and conduct of the medical man to his patients, and on the smaller difficulties of practice, such as that of appeasing a patient's curiosity as to the name and nature of his disease—"some persons enjoying the dignity of suffering from a complaint with a portentous name."

In the rapid review we have made of some of these addresses we think we have found enough to warrant us in indulging a hope that with the changes of the time the custom of so inaugurating the session may not be swept away. The delivery of the introductory lecture is often the one opportunity given to the teacher to deliver his thoughts on important matters outside his special province to his colleagues, his pupils, and the Profession at large. Original and valuable addresses of this kind are generally to be found amongst the introductories of each year; whilst of the less ambitious ones the worst that can be said is, that they give good advice which has been often given before, but which nevertheless will require to be repeated as long as young men are specially trained for practising the art and science of Medicine.

SUICIDE AND OVERWORK.

The unfortunate death of Mr. Justice Willes seems to have taken a powerful hold of the popular mind; nor do we remember any similar event which has created such a profound impression in its way, except, though in smaller degree, the death of Hugh Miller under somewhat similar circumstances. Deaths like these are deeply to be regretted: the lives lost are of the highest value, and the conditions of the deaths render them among the saddest of human events. With such men as the actors suicide is elevated to a drama of intense interest, its phases surrounded by a lurid splendour, even though the sight of the great mind giving way excites feelings of the deepest sympathy and pity.

But contrast such suicides with what is commonly called the same thing, as we have lately had an opportunity of doing, through the epidemic of attempting self-destruction which has spread abroad among hysterical females. A young American woman, in a destitute state, jumped from Waterloo-bridge, and was drowned. Unfortunately, she left her reasons for so doing behind her, and some fuss was made about her and her fate. Forthwith every young woman who has a quarrel with her lover, or who has no lover to quarrel with, sets about following her example, and presently they are splashing in the water in every direction. It is questionable if half of those who have managed to get into the water wanted to drown themselves; but the nuisance is the same, nor will it be put an end to till some of the rescued ones are sharply and ignominiously punished. In both sets of cases the result is the same—self-destruction; but compare the conditions of the one with those of the other. Such deaths are caricatures on public misfortunes like the suicide of Mr. Justice Willes.

To our Profession, indeed, the history of the death of that distinguished lawyer, and what led to it, is full of instruction. It is too much the custom nowadays to disregard health and even life in the pursuit of riches, yet such a case will teach a lesson in unmistakable language which a medical practitioner has in vain tried to convey. It is the old story of overwork and want of rest. A man may go on a long time working very hard, and doing his work well, provided he can get a fair amount of sleep. But it is the peculiarity of mental work that after a time it brings sleeplessness along with the desire to sleep, rather than the quiet rest which follows bodily exertion. Whenever such a stage is reached, even if nothing has been done before, it is time to interfere. And there is only one way of interfering—that is, by complete change of scene and occupation. It is useless to stay at home; to dose with opium and chloral is worse than useless. The patient must go away; where, it does not greatly matter,—but away he must go.

There is one consideration which our brethren will do well to urge on men they see bent on ruining themselves thus: that is, the comparative value of work done in such a state and that done in perfect health. There is no comparison between the two. The work of an exhausted brain is always poor in point of quality.

The peculiarity of the cases of Mr. Justice Willes and of Hugh Miller lay in the fact that they both had got their work over. This in itself constitutes a lesson. It shows how deeply overwork may injure the constitution; how it may produce results from which it is hard to recover. All the more reason why it should be taken in time.

Suicide can never be other than a miserable thing; but it is especially miserable coming at the end of a long and honourable career, when it is the final reward of good service done to the country. Yet if such a death do anything to open the eyes of men to the error of such a course of unceasing work as that pursued by the lamented judge, he will not have died altogether in vain.

ON THE AMMONIA IN URINE.

Physiologists have long been familiar with the fact that even acid urine (and that of health is always somewhat acid to test-papers) contains an appreciable quantity of ammonia. Neubauer and Vogel estimated the amount of this as about 10·8 grs. per diem in the adult; and Dr. Andrew Clark, in a paper published in the first volume of the London Hospital Reports, associated various pathological conditions with varying amounts of ammonia in the urine. Since 1864 the subject appears to have been almost forgotten; but this year Dr. Meymott Tidy and Dr. Bathurst Woodman, of the London Hospital, read a paper before the Royal Society, based on upwards of 200 observations, which are some of them so novel and suggestive as at least to invite further inquiry. Their method was to Nesslerise the freshly-passed urine, after diluting it with distilled water to destroy all apparent colour. Those who are familiar with water analysis know that Nessler's solution is a solution of mercuric iodide in potassium iodide with caustic soda or potash. This produces an immediate brown colouration when ammonia is present. Even distilled water contains traces of ammonia, and this has to be allowed for. Drs. Tidy and Woodman then compare the resulting colour with that produced by a known quantity of ammonia. Urea and uric acid do not interfere with this reaction. The paper, as it appears in the *Proceedings of the Royal Society*, although concise almost to a fault, is yet, from the number of observations, too long for our pages, and we must therefore content ourselves with reproducing the principal novelties.

First: Drs. Tidy and Woodman boldly fix upon sixty ounces as nearer the normal average daily excretion of urine in adults than the forty to fifty ounces usually assigned.

Secondly: They consider that the daily excretion of ammonia in health is very much less than Neubauer's estimato. They consider about 2·5 grains per diem as the average.

Thirdly: They state that the largest quantity in health is passed after food; and even in invalids, those on liberal diet with stimulants pass the most ammonia. "These experiments seem to prove that a large proportion of the urinary ammonia is derived from the food ingested."

Fourthly: Exercise increased the amount of ammonia largely. When we come to the examination of the urine in disease, we find that even here there are certain general rules—or, as it is the fashion to call them, laws—which apply to almost all diseases.

Thus, the ammonia is generally increased in proportion to colour and specific gravity, and is largest with a moist skin and open bowels, and a moist tongue. It is decreased with the opposite conditions—with high temperature, and with very rapid pulse and quickened respirations. Oddly enough the administration of acids increased the elimination of ammonia. As might be expected from the foregoing statements, acute rheumatism, erysipelas, small-pox, typhus, and enteric fevers show a great diminution in the quantity of ammonia excreted, so that the total daily ammonia is actually less than one-fourth.

In diabetes the ammonia is considerably in excess of normal. Passing over some other diseases, we find that in chronic nodular arthritis the ammonia is almost doubled.

Lastly,—and this seems to us one of the most remarkable results obtained—it appears that in nine cases of complicated disease with extreme physical prostration the ammonia was decreased, and in some almost altogether absent, whilst in two cases just before death it was altogether absent: "the only cases of entire absence known to the authors." Whether the researches of Drs. Tidy and Woodman be confirmed in their entirety or not seems to us immaterial; they have at all events directed attention to a subject which must be further investigated, if only for the credit of physiological chemistry and scientific medicine.

THE WEEK.

TOPICS OF THE DAY.

THE *Daily Telegraph* of Tuesday last has some very sensible comments upon the example recently made of the keeper of a "night house" in Leicester-square by Mr. Knox, the police magistrate. The police gained admission disguised in plain clothes, bought brandy under the name of "cold water," and the next day Mr. Knox fined the woman who kept the house, which was a well-known den of infamy, £50. But our daily contemporary in his remarks upon the case takes a line of argument which we have frequently enforced in reference to the prevention of contagious diseases. It is the duty of public authorities, if they cannot abolish vice, to drive it from our streets and thoroughfares:—

"Vice in holes and corners is bad enough; but it has at least this advantage over vice flagrantly, openly, and notoriously exhibiting itself, that it is less likely to corrupt and demoralise the young. There is a vast deal of truth in the rough stoicism of the old Roman satirist. If a full-grown man likes to revel in low profligacy, it is almost beneath the dignity of the State to stand between such a mature reprobate and the ruin which he deserves. Let his blood be upon his own head. But it is none the less our clear duty—even if it be not within our power to stamp vice altogether out—to drive it, as we drive noisome vermin, into obscure holes and corners, and to forbid it to flaunt itself openly in the market-places, and where the roads meet. So much we owe to the young, who are too ignorant and too self-confident to protect themselves, and for whom we are responsible if ruin comes upon them through our own negligence."

If this principle were acted on systematically by the authorities in this country we are certain that there would be far less reason for the extension of the Contagious Diseases Acts.

The champion of "muscular Christianity," Canon Kingsley, has been telling the good people of Birmingham that they ought to be ashamed of their physical development. In an opening address delivered at the Birmingham and Midland Institute he is reported to have said:—

"He wanted to make every man, woman, and child, from the highest to the lowest, discontented with themselves. He wanted to awaken in them about their physical, their intellectual, their moral condition, that divine discontent, that noble shame which was the parent, first of upward aspirations, and then of self-control; for to be discontented with the divine discontent, and to be ashamed with the noble shame, is the very bud and first growth of all virtue." "Therefore," continued the lecturer, "I would make men and women discontented with that divine and wholesome discontent at their own physical state, and at that of their children. I would accustom their eyes to those precious heirlooms of the human race, the statues of the old Greeks; to their tender grandeur, their chaste healthfulness, their unconscious because perfect might, and say—'There, there are tokens to you, and to all generations yet unborn, of what man could be once, of what he can be again if he will obey those laws of nature which are the voice of God.' I would make them discontented with the ugliness and closeness of their dwellings. I would make the man discontented with the fashion of his garments, and still more just now the women of all ranks with the fashion of theirs, and with everything around them which they have the power of improving, if it be at all ungraceful, superfluous, tawdry, ridiculous, unwholesome. I would make them discontented with what they call their education, and say to them, 'You call the three Royal R's education. They are not education; no more is the knowledge which would enable you to take the highest prizes in this institute. They are not education; they are only instruction—a necessary groundwork in an age like this for making practical use of your education, but not the education itself.'"

We agree with Canon Kingsley that the physical development of our town population is by no means a thing of which we as a nation should be proud; neither is their dress, their mode of living, or their dwellings. But gazing at the Apollo Belvidere and Venus de Medici will hardly be all that is necessary. We doubt whether the Grecian statues can be more fairly supposed to be copied from specimens of the ordinary early Greek population, than can Raphael's Virgins from the general type of the Italian women of the sixteenth century, or the Amazon from a German *frau* of the present day. Still, all that elevates the tastes of the masses will no doubt in a certain way affect their physical development by making them dissatisfied with squalor, dirt, and low surroundings; and, aiming at something higher, a gradual improvement will result, but it will be the work of generations.

Small-pox having attacked 12,000 of the inhabitants of Dublin, and killed 2000, has now nearly disappeared. The Guardians of the North Dublin Union are engaged, we hear, in debating the amount of the honorarium they shall vote their Medical Officers for their services during the epidemic. We understand that it is proposed, in a notice of motion by a guardian, to give each of the five officers of the North Dublin Union—£10! These gentlemen treated 1395 cases at home, and in an article in the *Dublin Daily Express* it is calculated that they saved the ratepayers £784, which would have been the cost of treating the cases in hospital. "Fifty pounds each," the same paper observes, "would be a very moderate remuneration for such a service." We think so.

THE LATE MR. UPTON.

AMONGST the events of the week we exceedingly regret to notice the death of Mr. Robert Brotherson Upton, which took place suddenly, in a railway-carriage at Dover, immediately after landing from Calais. Mr. Upton, although a member of the legal profession, was as well known to members of the medical profession as to those of his own. For forty-two years he had been Clerk to the Society of Apothecaries, and for some part of that time we believe he was Secretary to the Court of Examiners. Mr. Upton's long connexion with that Society, and his intimate acquaintance with all legislative enactments, charters, etc., relating to the medical profession or its governing bodies, rendered him a high authority on the state of the law in reference to Medicine. We believe that, representing the Society of Apothecaries, he took a considerable part in the negotiations which led to the passing of the Act of 1858. In the more recent attempts at combination between the examining bodies, with legal acumen he pointed out the difficulties which encumber the action of all the bodies. Whether those difficulties will ever be surmounted remains to be seen, but Mr. Upton's opinion that they could not be without fresh legislation has been clearly proved to be correct as far as the University of London and Society of Apothecaries are concerned. Mr. Upton was himself the son of a medical practitioner who was a Past Master of the Society of Apothecaries. He was a man of great sagacity, a charming conversationalist, a clear-headed lawyer, and a polished gentleman. He was 65 years of age. At the inquest which was held on his body a verdict was returned to the effect that he died of heart disease, his death having been accelerated by the motion of the vessel in crossing the Channel.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE first meeting of this Society took place on Tuesday evening, and a goodly assemblage inaugurated the session. Two very interesting papers were read—one by Mr. Dalby, Aural Surgeon to St. George's Hospital; and another, communicated by Mr. Spencer Wells, was the record of a case of ovariotomy during acute peritonitis by Dr. Tracey, of Melbourne.

Dr. Dalby's paper was on the subject of Mucous or Subacute Catarrh of the Tympanic Cavity as a cause of Deafness. He showed how the accumulation of mucus in the tympanum, and especially its inspissation, was a prominent cause of deafness, giving rise to some of the secondary causes of deafness described as primary by the late Mr. Toynbee. Some interesting facts were elicited in the course of the discussion, especially relative to the sudden and complete perforation which may

occur in the drum of the ear, and the surprisingly short period in which union again takes place. The paper seemed a valuable addition to the literature of aural surgery. One curious point raised was the purpose for which Sir Astley Cooper used to perform perforation of the membrana tympani: this it seems was obstruction of the Eustachian tube; but he appears ultimately to have given up the operation.

Dr. Tracey's case was one full of interest. The woman was evidently dying when the operation was performed. Her temperature was 102° Fahr. in the axilla, and on opening the abdomen it was found filled with fluid, in which were floating flakes of lymph, and the intestines were covered with the same. The tumour was multilocular, the contents of the cysts very various, but they were broken down and emptied, and so at last he succeeded in removing it. The woman did well in every way, and in a short time perfectly recovered.

THE CHAIR OF ANATOMY AND SURGERY AT TRINITY COLLEGE, DUBLIN.

As the time approaches for the appointing of a professor to this very valuable chair, we learn that the greatest interest in the election is manifested by the Profession in Dublin. Among the favourite candidates are to be found the names of Professor Macalister, of Dr. Bennett, and of the gentleman who has already so well and ably filled the chair during two septennial periods—Benjamin George MacDowel. Mr. Macalister is well known for his original researches in comparative anatomy, and he was appointed to the new Professorship of Zoology in the University of Dublin in 1871, having held the lectureship in that subject since 1869. Dr. E. H. Bennett is a distinguished surgeon and anatomist. He is one of the staff of Sir Patrick Dun's Hospital, and has been University Anatomist in the School of Physic since 1864. Dr. B. G. MacDowel, the present Professor of Anatomy and Surgery, enjoys a very high reputation for proficiency in the science and practice of his profession. He has ever been a most popular teacher, and under his auspices the School of Physic has made rapid progress of late years as an anatomical institution. It is a generally expressed opinion that no better appointment could be made than the re-election of one who has proved himself so well fitted for the duties of the office. However, it has been the expressed wish of the Board of Trinity College that the successful candidate should forego the active practice of his Profession, and should devote all his time and energies to the duties of his chair. In Dr. MacDowel's case especially, such a regulation would be a very great drawback indeed, and it is to be hoped that it will not be insisted upon. To impose for the first time such an obligation on one who has already twice competed successfully for the chair appears to us to be, perhaps in the least degree, an inconsistency on the part of the authorities of Trinity College.

STRIKE OF DOCTORS.

It is seldom that we hear of a strike amongst our professional brethren. It is certain, however, that union surgeons have more cause to combine against their employers than any of the mechanics who have been lately on strike. It is not for a want of *esprit de corps* so much as a want of union that they are imposed upon and defrauded. When they can combine in a good cause we find they do so, as the following facts relating to the Tiverton Infirmary will prove:—There has been (says the *Bristol Post*) a strike of doctors at the Tiverton Infirmary. It came about in this way. The House-Surgeon having resigned, applications from duly qualified professional gentlemen were invited by advertisement, the salary offered being £80 a year, with residence, coals, and gas. The young gentleman who had resigned the appointment in order to complete his education in London had only £60 a year. Several candidates appeared, but it seems that the choice lay between a gentleman who was a stranger, but who produced testimonials of a very high character, both for skill and proficiency, and a youth of the town, who happened to be a student under the same medical gentleman who had had the training of the late House-Surgeon. The latter applicant was 16 years of age, and it does not seem that he was endowed with any wonderful amount of knowledge; but it will hardly be credited that this boy was actually elected to the office with the higher salary and emoluments which were set forth in the advertisement to attract competent practitioners to seek the appointment. The job was too glaring to be passed over. Four of the Honorary Medical Officers tendered their resignation as a protest against the indecent act, and many of the subscribers to the institution have loudly expressed their indignation at what seems to be a flagrant instance of family patronage. In the worst days of nepotism in the London hospitals such a gross outrage on decency would not even have been attempted.

A SHABBY STATE OF THE LAW.

Medical officers to unions are paid sufficiently ill without their being subject to any *inequitable*, if they be *legal*, losses. It seems that an union medical officer may die in harness, may be struck down by fever in the very prime of life, or die from accident received in pursuit of his duty, and yet his widow, children, or other representatives may be deprived of a moiety of his quarter's salary. Yet it will be seen by the following case that such is the fact. "The law allows it, and the court awards it." At the weekly meeting of the St. George's-in-the East Board of Guardians, on the 4th inst., the Clerk stated he had forwarded the cheque drawn for the salary of the late Medical Officer, Mr. Courtney, to the representative of that gentleman. In accordance with the Orders of the Local Government Board the salary was calculated up to August 21, the date of the decease of Mr. Courtney, and since forwarding the cheque he, the Clerk, had received a letter from Mrs. Wood, the executrix, expressing surprise that the Guardians should not have drawn a cheque for the whole quarter's salary, and asking them to reconsider the matter. The Clerk stated that according to the law the salary of every officer was payable up to the day on which he ceased to hold office or employment, and no longer, and that therefore the Board could not legally make any alteration. After some conversation the Clerk was instructed to reply to Mrs. Wood to that effect.

THE ADULTERATION OF FOOD ACT.

The Food Adulteration Act is rapidly bearing fruit. Several prosecutions under the Act came before the Bolton magistrates on Monday. A grocer was summoned for selling half a pound of coffee adulterated with chicory, and without, either verbally or by other means, informing the purchaser that it was sold as a mixture of chicory and coffee. A fine of 2s. 6d. only and costs was imposed, as this was the first offence of the kind. The same defendant was fined 2s. 6d. for having sold butter which contained 20·31 per cent. of water and 7·63 per cent. of salt, the same being highly coloured and rancid. A woman was fined 10s. and costs for selling a pint of milk which contained 20 per cent. of water and only 2 per cent. of cream, whereas there ought to have been from 6 to 9 per cent. of cream. If the Act be carried out with vigour and judgment it must eventually be of great benefit to the public. In the case of the sale of butter mentioned above, why should the wholesale dealer be let off scot-free? In many instances the adulteration of articles of food is made by the importers or wholesale dealers.

GERMAN SICK AND WOUNDED AID SOCIETIES.

A report has just been issued by the German Aid Societies for tending the sick and wounded. It contains most minute and comprehensive details of the Societies' depôts in that part of France occupied by the French armies, their various hos-

pitals all over Germany, and the sanitary trains they fitted out for ambulance purposes. An idea of the magnitude of the operations of the Societies may be gleaned from the fact that the entries of sick and wounded soldiers on their books stand at 509,837 men, of whom 60,000 were French. These Aid Societies intend not only to perfect their organisation, but to train as great a number of nurses and sick-bearers as possible, giving them at the same time some elementary medical or surgical instruction, to be brought into requisition when medical aid is not at hand in cases of accident, etc., to look after the sanitary condition of their respective towns, to counteract epidemics by giving advice as to diet, and so on. A hope is expressed in the report that these Societies may become truly international, for the benefit solely of suffering humanity.

THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

At a meeting of this Corporation held on the 7th inst., the following office-bearers were elected for the ensuing year, viz.:— *President:* Eben. Watson, M.D.; *Visitor:* George Buchanan, M.D.; *Treasurer:* John Coats, M.D.; *Honorary Librarian:* J. D. Maclaren, M.D.; *Vaccinator:* Hugh Thomson, M.D. *Councillors:* The President, *ex officio;* the Visitor, *ex officio;* J. G. Fleming, M.D.; Robert Scott Orr, M.D.; H. R. Howatt, M.D.; James Steven, M.D.; Andrew Fergus, M.D. *Board of Examiners:* Robert Scott Orr, M.D., Medicine and Materia Medica; Wm. Leishman, M.D., Midwifery and Medical Jurisprudence; William Lyon, M.D., Surgery and Surgical Anatomy; Ebcn. Watson, M.D., Anatomy and Physiology; James Morton, M.D., Surgery and Surgical Anatomy; Robert Perry, M.D., Chemistry; P. A. Simpson, M.D., Midwifery and Medical Jurisprudence, and Medicine and Materia Medica; Alexander Lindsay, M.D., Chemistry; George Buchanan, M.D., Anatomy and Physiology. *Examiners in Arts:* John Coates, M.D.; James Steven, M.D. *Clerk:* William Henry Hill. *Librarian and Secretary:* Alexander Duncan, B.A.

CHOLERA.

The Copenhagen authorities, in their successful endeavours to keep clear from cholera, have recently declared that the Russian islands of Aland and the Swedish port Gefle, both situated in the Baltic, are infected by cholera, and have ordered that all vessels arriving from these ports have to undergo quarantine. According to official Roumanian reports, during the week ended September 24, 174 cases of cholera came under treatment, 77 out of which number proved fatal. When compared with the last report this shows some decline in the number, but a rather great increase in the death-rate. From Taganrog, the Russian port on the Don, all traces of cholera have disappeared. Last month cholera made its appearance in some districts of the province of Soudan, in Upper Egypt. The Government of the Khedive is said to have taken strict measures for its suppression.

A WELL-MERITED HONOUR.

Mr. John Netten Radcliffe has been elected a Corresponding Fellow of the Imperial Medical Society of the Caucasus. The honour was awarded to him in consideration of the services he has rendered to humanity by his able and suggestive report on the recent diffusion of cholera. Mr. Radcliffe is highly deserving of the distinction conferred upon him, not only as regards the report in question, but for his numerous contributions to sanitary science.

EFFICIENT VACCINATION.

Under proper regulations, and with industrious vaccination, the beneficial operation of Jenner may be carried out to its fullest extent. Thus we find from a report presented to the Board of Guardians of Marylebone by their vaccination officer that out of 379 children born within a certain time in that parish 168 were vaccinated by the public vaccinators and 160 by private practitioners, and there were forty-seven deaths; so that four only are unaccounted for. The same result may be obtained in other parishes if proper means to effect it be taken.

THE MORTALITY OF VARIOUS COUNTRIES.

In an article of much interest in the last number of the *Philadelphia Medical and Surgical Journal*, the writer says it is a curious fact, and one well worth knowing, that the death-rate in Europe is nearly double what it is in the United States, averaging yearly 1 out of every 43 inhabitants, while in America it is only 1 out of every 81. Of the chief countries of Europe, France leads in its mortality, the average being 1 death to 32 people, and England appears to be the healthiest, the deaths being 1 to every 46. In the United States there is a wide range of difference. In Arkansas, for instance, the annual deaths are 1 to every 49 inhabitants, while in Oregon the rate is said to be only 1 to every 209. It appears that the north-western States average the healthiest, and the Gulf States the sickliest.

WATER ANALYSIS.

Dr. Franklin reports that during September all the water drawn from the various metropolitan companies' mains was pure and transparent. Major Bolton, Water Examiner to the Board of Trade, reports the state of the Thames at Hampton, Moulsey, and Sunbury, where the in-takes of the West Middlesex, Grand Junction, Vauxhall, Lambeth, and East London are situated, to have been very bright and clear during the month ending September 15. The Chelsea Company's in-take at Ditton is also reported good, and the reservoirs are being converted into filter-beds. The Lambeth Company's water has improved since the opening of the new in-take at Moulsey.

"THE VACANT LAUGH WAS READY CHORUS."

Vestrymen are curious persons. It is impossible, as a rule, to drive common sense into them, much less common politeness or courtesy. Here is the way the Bermondsey Vestry treat the Bermondsey and Rotherhithe Master Bakers' Association. These gentlemen addressed a letter to the Vestry requesting that body to carry out the provisions of the Food Adulteration Act, so as to prevent the adulteration of bread. The letter, it is stated, was received with laughter! Anything more disgraceful to a governing body, or more likely to bring discredit and ridicule on a very important sanitary Act, it is difficult to conceive.

PROTECTION OF INFANT LIFE.

The Metropolitan Board of Works being the local authority for the metropolis constituted by the Act for the better protection of infant life, passed last session, has given notice that from November 1 next it becomes unlawful for any person to retain or receive for hire or reward more than one infant, or, in case of twins, more than two infants under the age of 1 year, for the purpose of nursing or maintaining such infants apart from their parents for a longer period than twenty-four hours except in a house which has been registered by the local authority. The Board is about to make an organised effort to regulate baby-farming.

BLOOD MONEY.

We have a most prosperous state of the revenue—a large surplus, and a larger one anticipated. Some remission of taxation will be made, and we urge upon the Chancellor of the Exchequer to repeal the stamp duty on quack medicines and the Excise duty on medicine vendors. No tax inflicts so much injury on public health and morality. For less than £100,000 per annum the nostrum purveyors are enabled to vaunt that

under "Government patronage" or "protected by a Government stamp" they carry on their most injurious trade. No tax is fraught with so much mischief, no tax can be so easily repealed.

THE VOLUNTEERS IN BELGIUM.

THE following is an extract from the Report of the Chief Medical Officer, Anglo-Belgian Staff:—

"I have to report for the information of the Anglo-Belgian Council that, in conformity with their appointment, I took charge of the Medical Staff, and that during the visit to Ghent the following cases required attention:—Three cases of epilepsy, two of them of a somewhat severe character, all rapidly improved and were about the next day; one of inflammation of the tongue; many cases of sore throat, due to severe fluctuations of temperature, the dust and draughts of cold air at the Tir, and the enthusiasm of the national cheer—some were complicated with bronchitis; several cases of diarrhœa, from change of living, irregular and unusual diet; some severe cases of sprain from falls, and several slighter from the unevenness of the pavement; a few cases of contusion, two of boils, and one of whitlow—all quickly recovered.

"I could wish that the knowledge of the disinfecting uses of dry earth, carbolate of lime, etc., was more extended in this city of Ghent, as the stench of the latrines and closets attached even to the more pretentious hotels was much complained of by our Volunteers.

"During the week at Brussels the health of the Volunteers decidedly improved, notwithstanding the continuance of banquets, balls, and fêtes. I have only to report a case of syncope, two of obstinate vomiting, one of obstruction of the bowels, and several of diarrhœa. The change of weather to rain and cold wind was productive of some catarrh and one severe case of pneumonia, which gave rise to some apprehension.

"The authorities at Brussels were equally kind as at Ghent, and allotted us a room at the Hôtel de Ville.

"I wish in conclusion to bear testimony to the unremitting attention and *esprit de corps* of my colleagues, Drs. Helsham, Sandwell, Ryan, Ambler, and Ridsdale, whose addresses were posted in several places, and upon whom an unexpected pressure was made, and to thank them for the promptitude and assiduity with which they assisted in the efficient discharge of the duties of the Medical Staff, for the necessity of which appointment the number of cases proved the forethought of the Council.

"P. HINCKES BIRD, F.R.C.S., 30th Middlesex R.V.,
"Chief Medical Officer, Anglo-Belgian Staff."

FROM ABROAD.—TRANSFER OF THE STRASBURG FACULTY TO NANCY—EARLY SYPHILITIC AFFECTIONS OF THE OSSEOUS SYSTEM—ORCHITIS TREATED BY ABSOLUTE REST.

AT the termination of the period of "option" on October 1 the President of the French Republic issued a decree, at the instance of the Minister of Public Instruction, transferring the Medical Faculty of Strasburg to Nancy. It seems that the municipality of the latter town has furnished some of the buildings required, and has contributed 300,000 fr. towards the erection of others, while the Department has voted an annual sum of 50,000 fr. The transfer has been executed with the most laudable concern for vested interests, all those of the professors and *agrégés* who made the option—which, with very few exceptions, they all did—being maintained in their respective chairs, with M. Stoltz, the Dean, at their head. The existing Preparatory Medical School has, of course, been suppressed; but while some of its most distinguished teachers have been appointed to vacant or newly-created chairs in the Faculty of Medicine, others have been made supplementary professors. Altogether a strong staff has thus been created, and there seems no reason why the great prosperity which has of late attended the Strasburg Faculty should not be continued at Nancy. One very important object in choosing this *locale* has been to keep up the scientific intercourse with Germany, which in the present state of feeling in France would run the risk of being completely interrupted, unless a body so qualified to maintain it, and so well aware of its importance as the late Strasburg Faculty, had been established in its corporate entireness. Indeed, during the discussion before the Assembly the importance of having a Faculty near the frontier capable of realising the advances of science made in Germany was stated as a chief reason for choosing Nancy.

Dr. Herpin, late of Metz, in a note in the *Gazette Medicale* (Oct. 5), represents the hardships which the profession has had to undergo in that city as very great, while, there being no medical school there, of course there is no claim for the same aid that has been extended to Strasburg. During the blockade 20,000 sick or wounded had to be provided for in hospitals or private houses, and a twentieth part of the population was lost through typhus, typhoid, and small-pox. The profession, consisting of thirty-six practitioners at the time, suffered greatly from overwork, four of their number dying and others becoming dangerously ill. All the survivors, save a few whom by old age or lifelong habit were compelled to remain, have made the option in favour of France, preceding indeed the immense emigration which has reduced the population from 49,000 to 16,000.

Dr. Mauriac, of the Hôpital du Midi, has just terminated the publication, in the *Gazette des Hôpitaux*, of an elaborate series of papers under the title of "Precocious Syphilitic Affections of the Osseous System." The following are his general conclusions:—

"1. Epicranial periostites constitute one of the primary manifestations of syphilis, appearing sometimes a few days after an infectious chancre, and before the secondary symptoms. 2. Their exclusive seat seems to be in the periosteum of the cranium, and, if a hyperæmic or inflammatory lesion of the bone exists, this is accessory and subordinate to the periostitis. 3. This periostitis is a true inflammatory process, as shown by the acuteness of the symptoms and the rapidity of their course. 4. In the acquired syphilis of the adult this kind of tumour of the cranial periosteum has a decided tendency to resolution, disappearing speedily, without leaving any traces. 5. In children the subjects of hereditary syphilis these tumours are much more disposed to pass into a state of suppuration. 6. The pain produced in them radiates from a fixed point, as in neuralgia. 7. They may be either separate or confluent, and are chiefly situated at the anterior part of the cranium; and their duration, if left to themselves, varies between four and six weeks. 8. Periostites may also be produced at the commencing period of syphilis, on the ribs and their cartilages and the sternum. 9. Like the pericranial, they are inflammatory, and disposed to resolution, and are the seat of fixed pains, with neuralgic irradiations. 10. In this way they may induce dyspnœa, although 'syphilitic asthma' may be due to various other causes. 11. Other portions of the osseous system, especially the tibia, may occasionally become affected in the same way. 12. Counting the commencement of the incubation of these lesions from that of the infecting chancre, this will be found to vary from 15 to 120 days. 13. The periostites may be manifested some days prior to the appearance of secondary cutaneous and mucous affections; and they appear spontaneously, without the intervention of any provocative cause. 14. They are more common and more serious in hereditary than in acquired syphilis; and they are oftener met with among the Arabs in Africa and the inhabitants of South America than in Europeans. 15. The periostites of the long bones are usually attended with less irritation than those of the pericranium. 16. They may disappear spontaneously, but they do so much more rapidly under the influence of a combination of mercury and iodine and local antiphlogistics. 17. They aggravate the prognosis of syphilis, although they usually coincide with but slight manifestations in other organs, and imply no malignity in either the local process or in the general tendency of the constitutional disease."

Dr. Brambilla gives in the *Gazetta Medica Lombardia* (September 21) an account of the results of the treatment of orchitis by mere rest, which has been put into force by Dr. Fiorani at the Ospedale Maggiore at Lodi. After passing in review the various means that have been hitherto employed, and usually with a considerable loss of time, he observes that Dr. Fiorani being under the conviction that some of these owed whatever efficacy they possessed to the absolute repose which they enforced upon the organ, resolved to try how far mere rest

would succeed. By the employment solely of the most absolute rest he has treated with success twenty-two cases of orchitis, twelve of these being gonorrheal, six traumatic, and four idiopathic. In all of these the cure was complete, in one only it being necessary to apply on the sixth day some mercurial ointment on account of slight induration of the epididymis. By absolute rest is meant that the patient should lie continuously on his back, with a small cushion between the thighs, in order to support the testes, and that he must never get off his bed even for the purpose of his natural wants. The pain ceased soon after the position was assumed, and in a few days the testes lost all sensibility, the swelling and heat also disappearing. The medium time occupied in treatment was five days, although on admission the affection had lasted from two to five or six days, and the testis had acquired from two to five times its normal size. Among the traumatic cases one remained in the hospital for twenty-four days, the orchitis being complicated by severe ecchymosis of the scrotum. One of the gonorrhœal cases also lasted twelve days, but none were dismissed until the testis had entirely reacquired its normal condition. These cases were observed by numerous practitioners, and the patients could be readily found for verification. Dr. Brambilla therefore concludes that orchitis can be more rapidly and more effectually cured in this way than by any of the ordinary remedies, and that in thus treating it by absolute rest we are only imitating nature.

ABSTRACTS OF

THE INTRODUCTORY ADDRESSES DELIVERED AT THE OPENING OF THE MEDICAL SCHOOLS.

GUY'S HOSPITAL.

After referring to the loss sustained since last session by the death of Mr. Poland, the lecturer (Dr. J. Pye-Smith) proceeded to welcome the first year's men to the Profession and to the Hospital. Admitting that Medicine did not offer great prizes in money or in rank, he urged that it is fitted to afford happiness to those who practise it aright, by giving opportunity for the full and harmonious exercise of all the powers towards a good end. With regard to Guy's Hospital, while admitting the excellences of other schools, he claimed for it the habit of practical and steady work and a strong *esprit de corps* among its members.

Defining Medicine as the art of preventing and curing disease, and disease as any bodily condition so painful or so dangerous that people will take trouble to get rid of it, he proceeded as follows:—

"Prevention is better than cure, and the most brilliant triumph of Medicine is when we can forestall the necessity for remedies. Prevention may be based upon simple and direct experience, or upon scientific knowledge. Thus, vaccination as a prophylactic against small-pox is a purely empirical measure, while the prevention of hydatids in the human body is based upon a complete knowledge of the habits of certain worms. Much has already been done to prevent disease. Scurvy is almost unknown, the plague and leprosy have been banished from our islands, and it only needs a more enlightened knowledge among our statesmen to banish in whole or in part many other diseases not less injurious. There is perhaps only one person entrusted with power who is capable of regarding with the scorn of self-complacent ignorance that 'knowledge of organic and inorganic matter' on which depend not only human health and happiness but much of human virtue. Waiting the time when our professors of pathology shall be able, like the illustrious Rokitansky, to teach our senators wisdom, it is for you who look forward to practice to be, each in his own town or district, a centre of enlightenment on this important subject. It is a fact of which our Profession may be most justly proud, that, single-handed, we have done all that has been done for the public health. You must be apostles of the plain and simple knowledge of what makes air and water and food and dwellings wholesome. Upon those especially who will soon enter upon practice I would strongly urge the importance of learning the few technical details which are necessary in order to apply to this subject the great physiological laws with which you are already familiar.

"But if we should ever succeed in stamping out all preventable diseases there would still remain a multitude which we must cure. And what is curing a disease? It is not healing—strictly speaking we cannot heal the most trifling ailment. 'Curing' is, as the term implies, 'taking care' of the sufferer. Just as he to whom is entrusted the cure of souls cannot alter or renew them, but can only stimulate, restrain, or modify mental processes whose existence is independent of his power, so we cannot originate the least step in the healing process. We can only guide and direct the action of those physical laws which produce the phenomena of life."

After giving several examples of surgical injuries, difficult parturition, poisoning, parasitic diseases, cerebral hæmorrhage, etc., he pointed out that from such instances it is clear that disease is not a constant and definite condition, but depends upon all kinds of disturbing causes, and therefore that the cure of disease can never be founded upon any comprehensive principle of therapeutics. "Whatever condition is painful or dangerous you must try to remove; but when once you have ascertained the cause of the symptoms the principle of cure in each case is obvious. All that is then wanted is ingenuity in devising means to your end. In one case you use the simplest mechanical laws; in others you apply your knowledge of chemistry, of botany, of zoology; and in all you are guided by the results of intelligent observation of the effects of treatment. It follows from this that all so-called 'systems of medicine' which profess to be founded upon some universal principle of therapeutics are in the nature of things absurd. For instance, there is no such thing as a '*vis medicatrix naturæ*' as distinct from the operation of common physiological laws. If I push this glass of water so as not to bring its centre of gravity beyond its base, a commotion ensues, which gradually subsides in obedience to the laws of hydrostatics. You would not say that tranquillity is restored by the agency of an innate force which tends to redress the disturbance, for if I had pushed a little harder the same laws would have led to a different result, and no recovery of the former condition would have taken place. Just so if a bone is broken or the whole body is attacked by a fever. A disturbing force, mechanical or physiological, is introduced into the economy, the former laws of vital growth are modified, and the result may be a return to the condition before the disturbance, or the destruction of the entire organism. Along with this 'inherent tendency to recovery' which has been ascribed to the human body (as if each of its component parts were endowed with all the likes and dislikes of the patient) we must also discard such principles as that '*impurity of the blood*' is the origin of all imaginary disorders; that curative means should always produce the same effects as the disease they are to overcome; or that they should always produce the opposite effects; or that they should never be taken from the mineral kingdom; or that they can be recognised by each one resembling some symptom of the malady it is to cure. This last curious doctrine of 'signatures,'—according to which logwood would stop bleeding because it is red, and liverwort cure the jaundice because it is yellow—though more ridiculous, is no more irrational than the modern systems of homœopathy, allopathy, restorative medicine, renewal of life, eliminative medicine, or expectancy. In classing these together, I do not, of course, imply that they are equally foolish, still less that they have been equally used to impose upon an ignorant public; but if you will think over the examples of disease which you meet with, taking first those simple ones of mechanical injury, of parasites, and of poisons, in order to understand the less known, you will see how absurd it is to attempt to construct a science of therapeutics that shall apply to such diverse conditions. There can be no science of therapeutics. It is, as the word implies, an art; it is an art guided by common sense and educated experience, and based upon the knowledge of a number of sciences."

The importance of the preliminary sciences of physics, chemistry, and general biology was pointed out, and the earnest and exclusive attention of students to anatomy and physiology for the first eighteen months of their hospital course was strongly recommended. The lecturer went into somewhat minute details of the best methods of studying practical anatomy and clinical medicine, of the books that should be read, and the appointments taken at the successive stages of his career. Especial attention was advised to the subject of prognosis and instruments of research like the microscope, the ophthalmoscope, the laryngoscope, etc.

"And now I suppose that you have passed through your

four years of study; you are good practical anatomists. The great laws of physiology are to you not hearsay, but things which you have seen and verified for yourself. You have gained a knowledge (imperfect indeed, but thorough as far as it goes) of the outlines of Medicine, and you are capable of using with precision and success the instruments of physical diagnosis and the ordinary appliances of surgery and pharmacy. Thus equipped, you will not be ill-provided for the duties of active practice. That wonderful power of insight into the nature and causes of disease, that shrewdness in interpreting symptoms and in forming a judgment as to results, that practical skill which selects the proper kind of treatment for each case—these qualities which you admire in the best of our Profession it is impossible to acquire by reading or by imitation. They can only be gradually attained as you use thoroughly and carefully the experience of future years. While insensibly acquiring some share of these high faculties, you will experience one of the greatest pleasures of your Profession; you will find it what I began by promising you—a constant exercise which will bring into play all your best powers. It will not be like so many occupations in which the work itself is mere money-getting, and all the man's higher life must be begun when he leaves his counting-house. For you the labour will never be done; but you will be able to say '*Labor ipse voluptas.*' In other occupations a man has to strive not to be *kept down* by their spirit, but, if possible, to raise their ideal; and many a conscientious man must often feel grave doubts whether he is justified in pursuing his business at all—for instance, as a publican, a newspaper correspondent, a bill-broker, or a Member of Parliament. But *your* Profession has this peculiarity, that however industrious, however conscientious, however unselfish and benevolent you may be, your highest efforts will always fall below your ideal; your knowledge and your power will be ever growing, so that, while you continually advance in the most difficult knowledge—the knowledge of your own ignorance—you will be able to say each year, 'At least, I am not such a fool as I was a year ago.' You will have continual opportunities of showing kindness and sympathy alike to rich and poor, and some of your most valued fees will be what you receive when you give advice gratis—that is, '*for thanks.*'

"You will be useful, wherever you may settle, in spreading civilisation, by your support of every reform in those matters of public health to which I have already referred, and of each advance in education, in science, in every liberal art. You are not likely to attain riches, but you will have much of what is money's worth; you are not likely to attain distinction, but you will always meet with respect. You will find your knowledge, though always increasing, yet always imperfect, and yourselves more sensible of its imperfections; but if we believe that we shall live for ever, there will be time enough for that hereafter. This life is an embryonic state, in which the functions that can be fulfilled are limited, and the results of those functions on the outer world uncertain. The most important work of an embryo is the elaboration of its organs for its future life; and the most important duty of time is the formation of character for eternity."

WESTMINSTER HOSPITAL.

The Address was delivered by Mr. G. E. Legge Pearse, F.R.C.S., Lecturer on Anatomy, and Surgeon to the Hospital. After referring to the old students of the Hospital who were present, and expressing the gratification he felt at their presence, he addressed the younger portion of his audience. He impressed upon them the great importance of studying their profession with diligence while there was yet time, of storing up knowledge, of making hay while the sun shone, that in future years they might be able to look back with pleasure on their student days. While mentioning some of the chief diseases and their causes the lecturer said:—"Now let us look upon one of the most distressing cases we have to contemplate. Behold a man whose energies are destroyed, whose body is diseased, whose mind is debased, by indulgence in alcohol—that fluid which, sent us as a blessing, only too often becomes a curse, and for the curtailment of the abuse of which some means have just happily been taken by the Legislature. Lastly, we turn our attention to certain poor creatures, the victims of that malady—perhaps the saddest of all—engendered by their own vice and debauchery, and for the diminution of which that most useful provision, the Contagious Diseases Act, was originated." They should—and in saying so he addressed the older part of his audience—leave no stone unturned to support to the utmost of their power, when the time arrived, that useful measure, which the bigotry, narrow-mindedness, and ignorance of many seemed now likely to overthrow. After describing the chief subjects embraced in the medical curriculum, and pointing out their relative importance, Mr. Pearse noticed the great necessity for clinical observation. He spoke of the inestimable value of dresserships and clinical clerkships, and more particularly the appointments of House-Physician and House-Surgeon, which the Westminster Hospital bestows as prizes on its most diligent students. Having touched at some length upon the advantages, the pleasures, and trials of the medical profession, the lecturer concluded by saying—"We cannot all hope to become Coopers, Brodies, Pagets, or Fergussons; but England expects every man will do his duty, and if we do ours soberly and earnestly, in however modest a sphere, such an one will leave behind him a perennial monument in the hearts of all those he has served in his earthly ministry."

QUEEN'S COLLEGE, BIRMINGHAM.

The Introductory Address was delivered by Mr. C. J. Bracey, M.B., Professor of Anatomy. There were, he said, three classes for whom this session marked a new era—those who to-day commenced the study of Medicine; those who, having passed the examinations in anatomy and the other preliminary sciences, were about to devote themselves to the practical study of Medicine, Surgery, and Midwifery; and those who had completed their studentship and came to receive prizes and other distinctions, and to take leave of their teachers and fellow-students before commencing practice. To each of these he would offer some advice. After a reference to the pleasant freedom of a student's life, he showed how the profession of Medicine was calculated to develope the mental and bodily powers of those engaged in it; as a science, it included many sciences, and touched upon nearly all, so that a well educated medical man had a general acquaintance with the whole range of physical sciences, and was in a good position to cultivate any of them. But the study of disease alone, he maintained, would afford sufficient field for the most active mind, there being no less than 1146 separate diseases registered in the official nomenclature, most of them presenting many varieties, and each requiring careful study. As an art, the practice of Medicine, whilst it quickened the faculties of observation, stimulated the reasoning powers, strengthened the judgment, and steadied the hand, at the same time called forth the better part of a man, elevating his aims and extending and deepening his sympathies. After giving some advice as to the judicious disposal of time and the choice of the best kinds of recreation, the Professor urged the first year's men to be careful, in forming acquaintances, to choose those who were not only pleasant fellows but steady workers, and spoke of the improved discipline of the College, the present authorities being determined to send away those students whose misconduct became a source of danger to others. At the same time he pressed upon the students the need for self-respect on their part, and feeling of *esprit de corps*. He next referred to the attending of lectures as an antiquated custom, which, being in force, must be made the best of; and showed the good points of the system—a subject being thus brought out in a lively form and illustrated by experiment, specimens, etc. By attendance upon lectures, too, the valuable habit of attention or mental concentration might be formed. The Professor pointed out the advantages which Birmingham possesses as a medical school in its large and well-appointed hospitals, with the various special institutions in which disease in all its varieties, both mental and bodily, might be studied; and referred with pride to the position taken by Birmingham physicians and surgeons in medical literature, mentioning the names of many eminent men of past times, and speaking in more general terms of the achievements of those now living. He especially commented upon the frequency with which the Jacksonian Prize—"the blue ribbon of Surgery"—had fallen to the lot of Birmingham men. Turning to those who had passed through the first part of their curriculum, he urged them to keep up their knowledge of the preliminary sciences, especially anatomy; for ignorance of this science led to bad surgery; and whilst the physician's blunders might be obligingly hidden away by the sexton, and decently covered by the churchyard turf, those of the surgeon had an awkward trick of hobbling about, to his great discomfort and eternal confusion. He entered into some details with regard to clinical teaching, and dilated upon the greater importance of getting training than of obtaining knowledge, and advised the students not to neglect the education of their simple senses whilst

learning the use of the stethoscope, ophthalmoscope, and many other aids to diagnosis which modern science has supplied. Whilst working in the hospital wards for the purpose of gaining knowledge, they would also be helping in the noble work of charity; and he entreated them to let their conduct to the patients be in harmony with this spirit, not treating them merely as cases to be studied, but as suffering fellow-creatures. By so doing they would find that

"Mercy is twice blessed:
It blesseth him that gives and him that takes."

For the habit of kindly sympathy would grow upon them, and whilst it made them better men would also contribute to their success in practice. Enlarging upon this subject, he referred to some physicians of old times, and showed how their conduct had influenced their success, more especially the courtly and benevolent Dr. Mead, whom Samuel Johnson declared "to have lived more in the broad sunshine of life than almost any man." Their ideal should be

"Manhood fused with female grace
In such a sort a child would twine
A trustful hand, unasked, in thine,
And find his comfort in thy face."

The duties of the medical man in general practice were afterwards passed under review, and some amusing remarks were made upon the difficulty he sometimes experienced in satisfying the inquiries of patients and their friends as to the nature of their ailments; some persons enjoying the dignity of suffering from a complaint with a portentous name, and others manifesting the opposite feeling. After referring to the conduct of medical men towards their professional brethren, and showing that medical etiquette was nothing more than the fulfilment of the royal law, "Do unto others as ye would they should do unto you," the Professor concluded by quoting some Hudibrastic lines descriptive of the hard fate of a country surgeon. He expressed a hope that those present would not be so hardly tried; and he assured them that if their profession involved hard work it might bring them a high reward in the love and gratitude of their patients, the respect and esteem of their fellows, and the approval of their own consciences.

SHEFFIELD MEDICAL SCHOOL.

The usual Introductory Lecture was delivered by Mr. T. M. Morton. The chair was taken by Dr. Bartolomé. Mr. Morton, after some remarks of a complimentary character in reference to the gentlemen who had given the introductory address in previous years, said that in England alone, excluding Scotland and Ireland, there were nineteen medical schools, of which that at Sheffield was one, recognised by the Council of Medical Education and Registration. The students of each on completing their curriculum were entitled to present themselves for examination before the various corporate bodies which granted a licence to practise Medicine and Surgery. Of these educational establishments eleven were in London and eight in the provinces. The metropolitan had, in some respects, an advantage over the provincial schools. He would, however, remind those students who had joined the Sheffield institution this session, that the highest professional attainments were not confined to those who had the prestige of high-sounding titles, or were associated with more time-honoured places of instruction, but could only be obtained by indefatigable industry and thirst after truth. In dense populations they found disease, upon the study of which, in all its Protean forms, coupled with their efforts to alleviate and cure, depended the whole business of their lives and the advancement of medical science. For many centuries medical instruction consisted in imparting the knowledge of a few herbs and simple methods of treatment founded upon the purest empiricism, accompanied by superstition and idolatry. To more recent times belonged the credit of introducing a national practice of physic. They found Linacre, who was born in 1460, using his influence through Cardinal Wolsey to obtain letters patent from Henry VIII., dated 1518, constituting a corporate body of "regular bred physicians" in London, having the sole privilege of admitting persons to practise within the city and a circuit of seven miles round it. This was an important service to Medicine, because the practice of physic had previously been chiefly engrossed by illiterate monks and empirics—a natural result of committing the power of approving and licensing practitioners to bishops in their several dioceses. A system had consequently been constructed for the public service which had now been carried on for more than three centuries, and which had been the means of raising the character and respectability of physicians, and through them of the medical profession, to a higher eminence than in any other nation in Europe. In London some hospitals were in existence before the corporate bodies, or even medical schools, as for instance St. Bartholomew's, 1123; St. Thomas's, 1553; and Guy's, 1721. The provincial schools of Medicine had in the majority of instances been established since the foundation of the hospitals in their respective towns. It was worthy of notice that the Sheffield school stood second in age, but unhappily was the smallest in regard to number of students. The Manchester school, founded in 1824, had 110 students last winter session; the Bristol, founded in 1833, had thirty-five; the Liverpool, erected in 1834, had seventy-seven; the Leeds, founded in 1831, had seventy-seven; and the Newcastle, founded in 1839 or 1840, had during the summer sixty-one (fifty-five in Medicine and six in Pharmacy); while at the Sheffield school, founded in 1828, there were only nineteen students. The creation of provincial schools might be considered due to three causes—first, the immense population of the towns and the necessity for hospitals; secondly, the advantages derived from extended knowledge of anatomy and other subjects to resident medical men; and thirdly, the protracted and somewhat dangerous journey to London. The last-mentioned reason did not apply now; still, for many students it was convenient to prosecute their studies where their friends resided or where they obtained employment. The medical profession in Sheffield early saw the desirability of a school, and to their credit petitioned Parliament three times—on April, 19, 1828, Jan. 27, 1829, and Feb. 25, 1830—"to remove the obstructions preventing the study of anatomy." Many of the old inhabitants would recollect the difficulty of obtaining subjects for dissection, and many stirring tales might be related of occurrences in connexion with this matter which took place before the Anatomy Act came into operation. The first notices they had of the present substantial building, as stated in the local register, ran thus:—"1828: April 21st.—Sheffield Medical Institution Trustees presented with a donation of one hundred pounds from the Duke of Norfolk, and two hundred pounds from the Earl Fitzwilliam. June 7.—Town Trustees vote £50 towards the intended Sheffield Medical Institution. 1828: July 9.—First stone of the new Medical Institution, near the Music Hall, laid by Dr. Knight." Mr. J. Holland had obtained from a scholar a new translation of the inscription "Ars longa vita brevis" upon the front of the building: it was "Our art is long to shorten life,"—but he judged that the clever gentleman who gave that rendering was not a member of the medical profession. His hearers were perhaps aware that there existed another medical school in Eyre-street, but it met with an ill end, for they read—"1835: Jan. 26.—Riot in Eyre-street, and destruction of the Medical School by the mob." Mr. Morton then proceeded to state that on behalf of the lecturers he welcomed both the new and old students to the school. Although the pupils had been hitherto somewhat limited, he could assure them that the opportunities of witnessing rare and interesting cases, surgical and medical, at the hospitals, and the facilities they had of studying anatomy within those walls, were equal to those of any similar establishment in the country. He then addressed a few words of advice to the new students, giving a brief sketch of the nature of disease, alluding to the gigantic strides towards perfection as an exact science which the practice of Medicine had made of late years, and mentioning the connexion which the study of anatomy, physiology, chemistry, botany, and other subjects had with the success of a medical man. He also dwelt upon the importance of respectful conduct towards patients; and urged those who were entering the Profession to be influenced by higher motives than the acquiring of wealth. A medical man had great influence and power for good, not only on account of the possession of knowledge of which most people were wofully ignorant, but because his skill brought him into contact with an immense number of persons whose lives were almost placed in his hands. Their advice respecting the preservation of health, cleanliness, habits of sloth, excessive indulgence, intemperance, hurtful prejudices, and conduct generally, struck at the very root of immorality and infidelity. A medical man was the custodian of the innermost secrets of his patients' hearts, and in the hour of death he was often the only earthly comforter. Hence the obligations of their profession were great, and it behoved them on the threshold of their career to consider seriously whether they would sacrifice their time, health, and strength for the benefit of man, rich or poor, irrespective of creed. This, he said in conclusion, could only be done by a love of their fellow-creatures and of their Profession, and a veneration of the Great Author of all.

REVIEWS.

On some Affections of the Liver and Intestinal Canal; with Remarks on Ague and its Sequelæ—Scurvy, Purpura, etc. By Stephen H. Ward, M.D., etc. London: J. and A. Churchill. 1872. Pp. 260.

This book bears the stamp on every page of having been the work of a careful and painstaking clinical observer. It is original, and its originality is of a thoroughly good kind. It is not an originality of hasty generalisation or unfounded theory, but of an experience built on many years of conscientious work in the best field probably within the four seas for the observance of the special diseases of which Dr. Ward treats—we mean the Seamen's Hospital.

The book is made up of separate and unconnected chapters, each of which is an essay on a special disease. The first chapter is on "Abscess of the Liver," and is founded on the history of twenty-six cases of this affection, of which the author recounts the particulars of ten. Without attempting to reproduce its substance, we may notice a few of the points in diagnosis on which Dr. Ward's experience enables him to speak with authority. First, with regard to pain about the right shoulder, and especially the acromion process, as indicative of hepatic abscess, Dr. Ward does not regard it as a symptom of great value unless taken in connexion with others. It was present in ten of his twenty-six cases. Annesley regarded it as pathognomonic of abscess in the upper part of the right lobe, and Dr. Budd agrees. This view, however, is not confirmed by Dr. Ward. Shoulder-tip pain was present in one case in which the abscess, which was opened below the ribs, was clearly at the lower part of the liver, and was absent in two cases in which the abscess had opened into the lungs, and in two other cases in which there were abscesses in both lobes of the liver. Again, a rigid state of the right rectus muscle is a symptom which was regarded by Twining as distinctive of deep-seated hepatic mischief. This existed in a few of the author's cases, but he has observed it in other abdominal affections, and he is disposed to regard it merely as a natural effort to ward off pressure from a tender part beneath. Jaundice is rarely present in hepatic abscess,—in only two of the author's cases; but in one, in which the greater part of the hepatic structure was destroyed, it was profound. Dr. Ward thinks that the absence of jaundice should aid in the diagnosis of other hepatic affections from abscess. With regard to the question of the connexion of abscess of the liver with dysentery, Dr. Ward is not disposed to adopt the view advocated by Dr. Budd—"that the exclusive cause of suppurative hepatitis is the transmission by the portal vein, and the veins going to form it, of pus or vitiated secretion from an ulcerated intestinal surface." In addition to facts observed by other authors, in six out of twenty-five of Dr. Ward's cases there was no dysenteric ulceration or other evidence of pyæmic origin.

The next two chapters treat of cirrhosis and hydatid disease of the liver, and are followed by a practical essay on jaundice which seems to us very good. Dr. Ward classifies jaundice under the following heads:—1. Jaundice in connexion with excessive secretion of bile. 2. From deficient or arrested secretion of bile—(*a*) from impaired secreting structure, as in congestion of the liver, adhesive or suppurative inflammation, atrophy, or disintegration of secreting cells; (*b*) from mental or moral emotions; (*c*) from the presence of certain poisons in the blood, as syphilis, mercury, certain miasmata, the peculiar poison of acute rheumatism, etc. 3. Jaundice from obstruction to the passage of bile into the intestine—(*a*) from causes within the duct, as gall-stones, inspissated mucus or bile, catarrhal inflammation of the lining membrane of the duodenum and ducts, and probably spasm of the latter; (*b*) causes external to the ducts, as scirrhus of the liver and pancreas, enlarged lymphatic glands, loaded state of large bowel, strangulation of duct by products of adhesive inflammation around it, pregnancy, etc. These various forms of the disease are illustrated by a number of well-reported cases. Following the chapter on jaundice and functional derangements of the liver we have one on intestinal obstruction, which is undoubtedly one of the most valuable in the book. Dr. Ward's experience fully bears out the propriety of prolonging life as much as possible in order that the curative efforts of nature may have time for their operation; and to fulfil this indication he relies especially upon opium, and at the same time emphatically denounces the perseverance in a purgative treatment. In this he is in accordance with most of our best observers. But Dr. Ward's experience does not confirm that of a distinguished authority—Dr. Barlow—in one point. Dr. Barlow has laid down the rule that the urine is scanty in proportion as the obstruction is high up in the intestinal canal. This may usually be accounted for by the early occurrence and severity of vomiting when the upper part of the canal is closed. But the rule is not constant. In one case where there was a calculus in the jejunum, urine was moderately secreted. In two cases where there was obstruction at the middle of the ileum, urine was free in the one and scanty in the other. In one of the author's cases where there was early vomiting and an absence of tympanites, there was free and sufficient discharge of urine. It seems evident, therefore, that the rule is not absolute.

The remaining chapters are on dysentery, peritonitis and perityphlitis, ague and malarious remittent fever, leuchæmia, scurvy, and purpura. In the section on leuchæmia a very interesting case of the leuchæmia lymphatica of Virchow is related. The case was one of a sailor, aged 24, who had great enlargement of the cervical, axillary, and thoracic glands, but no enlargement of the spleen. Specimens of the blood showed a large increase of the white corpuscles, a feature which distinguished the case from those of simple lymphadenoma, as described by Trousseau, Wilks, Murchison, and Ogle, where no such increase of the white corpuscles has been observed. The enlarged glands under the microscope showed nothing but the ordinary elements of lymphatic gland-tissue.

In the chapter on dysentery, after reading through Dr. Wards cases, all of which were treated—and some of them successfully—with various drugs, it is somewhat disappointing to find him stating that experience continued over a series of years has led him to doubt the influence of special remedial agents in the control or cure of the disease. In this, however, he follows Mr. Harry Leach, who in the *Practitioner* of December, 1870, stated that the records of the Seamen's Hospital proved that failure had been the rule rather than the exception, although the various resources of the Pharmacopœia were fully tried. "They who, having lingered the longest, at length do well are those with whom therapeutics have little or nothing to do." An occasional dose of castor oil, guarded by laudanum, to bring away scybalous matter, and injections of starch and opium to relieve the tenesmus, are undoubtedly, Dr. Ward thinks, of benefit. But the vegetable and mineral astringents disappoint. Rest, and milk and farinaceous diet, with the addition of wine if there is much prostration, constitute the best treatment for the chronic and subacute dysentery met with amongst sailors and travellers who have returned to England with the disease. Dr. Ward does not give his experience of the value of ipecacuanha in large doses in the treatment of the more active form of the disease. Mr. H. Leach includes it in his sweeping statement as to the inutility of drugs.

We trust we have said enough to indicate our high opinion of the practical value of Dr. Ward's work. We hope that it will obtain a large number of readers, not only amongst clinical students and practitioners at home, but amongst those medical men who have to treat the classes from amongst whom Dr. Ward's most frequent illustrations of disease are drawn.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, September 30.

Dr. Peter on the Nature and Treatment of Typhoid—A New Obstetrical Journal—Signs of Winter—The Catacombs.

M. Peter, who is acting for Professor Sée at the Hôpital de la Charité, has delivered a most interesting clinical lecture on that very obscure and yet perhaps commonest affection to be met with in these climes, known under the designation of "typhoid fever." He selected this subject as there was a case in the ward which presented itself in a young man who is convalescent and making rapid progress towards recovery. After having cursorily reviewed the different theories, both ancient and modern, as to the pathology of typhoid fever, the lecturer referred at once to the treatment he adopted in the case under notice, and which he recommends as being the most rational and trustworthy, as he had tried it for some years with great success. It is that which was so much extolled by the late M. Monneret, Professor of Medicine in

the Faculty of Paris, and author of one of the best works extant on physic, which indeed may be considered the classical treatment of typhoid fever in France. Our ignorance, Dr. Peter said, as to the nature of this affection renders the treatment purely empirical and symptomatic; but be this as it may, in the absence of a more precise theory we cannot do better than fulfil the indications suggested by the symptoms. These are—First, to evacuate the stomach and bowels; secondly, to support the strength of the patient; thirdly, to treat the local manifestations of the disease, functional or organic; and, lastly, to attend to the complications.

The first indication is fulfilled by emetics and purgatives. He begins by administering two or three grains of tartar emetic, followed daily and systematically by a saline purgative. The former, he added, emptied the stomach, while the latter removed the morbid secretions produced by Peyer's patches in the intestines. Simultaneously with the above he supports the strength of the patient with tonics and quinine, the latter acting as a febrifuge and antispasmodic at the same time. But, considering the adynamic condition of the patient, alimentation is here of more importance than medicaments, the form of which must be left to individual cases; but no patient should be left to starve under the notion that food was contra-indicated. Nothing was more erroneous, for the best observers are agreed that, as prostration of strength was the most marked symptom in this malady, food would be more useful than drugs. As for alcohol (by which he meant brandy and other spirituous liquors), he said it was altogether of secondary importance, and he did not approve of the indiscriminate way in which it was employed *outre-manche* (on the other side of the Channel), and so blindly imitated by some of his *confrères* in France. It showed, he went on to say, utter ignorance of the action of alcohol on the system, and, notwithstanding that the most recent researches have proved to the contrary, it is still considered by some to be food, whereas he looked upon it as a simple refrigerator and hyposthenisant, its action resembling in this respect the sulphate of quinine and other medicaments of that class. The case is, however, different with wine, which is essentially nutritious, containing as it does nearly all the elements of a perfect aliment. This should be given freely from the very commencement, the quantity being regulated according to the effects produced, and continued only as long as may be strictly necessary. But although the above was the classical treatment of text-books, M. Peter preferred the method of "expectation," by which he meant, not that the physician was to do nothing, but that he should depend principally, if not exclusively, upon diet (*thérapeutique alimentaire*), and attend to other hygienic measures which it will not be necessary to enter into here. As for complications, these must be treated according to special indications, which would be too long to give in detail. I may, however, note that, as regards meteorism, diarrhœa, and intestinal hæmorrhage, M. Peter, following the example of Professor Monneret, strongly recommends the use of the subnitrate of bismuth, as he has found it an unfailing remedy in these cases; and if other practitioners had not succeeded as well, it is owing to their not administering it in sufficiently large doses. Three or four teaspoonfuls a day is the quantity that should be given, otherwise failure is the inevitable result. But while extolling this remedy in the above cases, we must not lose sight of the fact that its therapeutic action is limited to the local lesions; and as these do not represent the entire pathology of this affection, we must have recourse to the general measures already indicated.

A new medical journal has come into existence in Paris, entitled the *Gazette Obstetricale*, and edited by Dr. Verrier, who styles himself "Professeur libre," which means "Professor *ex officio*." In his introductory address, Dr. Verrier states that in founding such a journal he thought he was supplying a great want. But, however true this may be, the journal itself is paltry, and does not at all come up to what might be expected of such a periodical. It contains only eight pages in quarto, and is to appear three times a month. The editor, however, promises to double the number of pages as soon as the preliminary expenses have been recovered; and he states in his programme that the journal will be conducted in an independent spirit, uninfluenced by any party or doctrine, and, as it is especially intended for *sages-femmes*, it will be written in a style and published in such a manner that will render it accessible to every degree of intelligence and fortune. Besides practical observations on the different forms of labour, the journal will contain articles on diseases of women and children, in which the editor says he is to be assisted by distinguished gynæcologists of all countries. We can only wish him success, and I trust that this will lead to the formation of an Obstetrical Society, which to my mind is a great desideratum in Paris.

If the passage of wild geese and the emigration of swallows are symptoms of approaching cold weather, this may be considered realised, for a few days ago a flock of the former was seen flying in an easterly direction, and the latter have taken their flight for a more genial climate. The fine weather has disappeared, and the usual summer *fêtes* and *fairs* which take place in the environs have gone with it. The public swimming-baths are closed, the open-air concerts broken up, and the grim face of winter seems already to show itself. The shows and the performances in the ambulant theatres during the last season were some of them not only amusing but highly interesting. It is wonderful to what a degree of discipline the lower animals can be trained, for I saw in one of these theatres *savant* dogs, goats, horses, and monkeys go through feats which would do credit to the "lords of the creation." The monkeys were treated to a dinner at table, and were served by their master, who was assisted by one of their own party. They sat in their seats as gravely as judges, and, after partaking of fruits and vegetables, drank off their wine, which was poured out in glasses for the occasion. One of the monkeys got rather obstreperous, but he was soon brought to order by the chief of his party. All this was very amusing, but it is also very instructive, and it required but little observation to perceive that however clever animals may be, their intelligence is extremely limited; and the more I look at a monkey, the more I am impressed with the belief that if anatomically or physiologically man is akin to the latter, psychologically speaking there is between them an insuperable gulf.

Close to this theatre was another in which athletes were wielding iron weights and cannons as if they were so many toys. In another tent was exhibited a savage Hottentot and a little French girl of about 6 years, who was earless—that is to say, she was deprived of the pinna, which was, however, represented in a rudimentary state. The other parts of the ear were evidently intact, as she could hear distinctly, though the external meatus was completely covered over by skin, the vibrations of sound being probably conveyed through the nostrils and the Eustachian tube. She seemed both mentally and physically very ill-developed for her age, and the matron who exhibited her coolly declared that, being a curiosity, the child received a pension from the Faculty of Medicine, with a view that after her death her body would become their property.

I lately paid a visit to the Catacombs, which you know are immense receptacles for the loose human bones dug up or found in the cemeteries and in different parts of Paris. The present Catacombs, which date from 1784, originated in underground quarries that had existed from a very remote period, and are situated in the south of Paris. They are about 3,000,000 square mètres in extent, or about one-tenth of the superficies of the whole city, and run under several streets. The various galleries, which form a most intricate labyrinth, are named after the principal streets with which they correspond on the surface. The bones when first brought were heaped up without any kind of order except that those from each cemetery were kept separate; they are now, however, systematically arranged, the skulls and long bones being grouped separately. A faint cadaverous smell is perceived, but not to a disagreeable or dangerous degree, and in walking through the galleries I put myself the same question that was asked some three thousand years ago—"Can these bones live?" For a long time, owing to the dangerous state of the roofs, visitors were refused admittance to these catacombs, and even now, notwithstanding the progress made in the process of consolidation, all is not visible. To give an idea of their depth underground, I may mention that the principal staircase leading down to them consists of ninety steps, and the galleries are tolerably well ventilated by openings that are made in different places to admit air, and channels are formed to carry off the water which accumulates from leakage. These catacombs have also served as convenient receptacles for those who perished in popular commotions and massacres, which take place pretty frequently in France; and after the suppression of the last insurrection several corpses were found in them, which were ascertained to be the bodies of Communist soldiers and others who had there taken refuge and died of starvation. A mineralogical collection of specimens of all the strata of the quarries, and a pathological assemblage of diseased bones, as well as a collection of skulls remarkable either for their formation or the marks of disease or injury, are also to be seen in the Catacombs, and it is calculated that this vast charnel-

house contains the remains of at least three millions of human beings.

It is announced that the Government are about to found six scholarships designed for the benefit of young doctors of medicine and of laws. Three of each branch, selected by competition, will have their expenses paid to enable them to complete their studies in Germany and in England.

Notwithstanding the marked fall of the temperature the sanitary condition of Paris keeps good, as will be seen by the last mortuary return, which shows a total of 794 deaths, against 875 of the week before. Chronic affections have considerably diminished, small-pox has entirely disappeared; but infantile diarrhœa continues to make great ravages, and pulmonary affections are also somewhat on the increase.

GENERAL CORRESPONDENCE.

THE CAUSE AND CURE OF STAMMERING.

LETTER FROM THE REV. W. W. CAZALET.

[To the Editor of the Medical Times and Gazette.]

SIR,—It may seem strange that a defect of speech so palpable to all who witness it, so serious in its consequences, and which may be said to have existed in the human family from time immemorial, should yet in these days of acute and searching inquiry be so little understood. It is looked upon even by the medical profession with indifference. But ought a defect which mars the prospects of so many to be so considered? Every possible device has been resorted to, but with little or no effect, until the unhappy sufferers have been almost doomed to consider themselves as hopelessly incurable. Among these devices may be mentioned—putting instruments into the mouth; keeping the teeth closed forcibly; and loud expirations, or "explosions" as they have been significantly called; and so far has ignorance of the subject prevailed, that excision of the uvula and tonsils has been resorted to as a possible means of cure. Now, ordinary attention only to the action of breathing would have prevented such lamentable exhibitions of absurdities and barbarism, and moreover the defect may be brought within the category of curable disorders by very simple and easily understood explanations.

We are every now and then favoured with some supposed new ideas on the subject, notably from foreigners, who attempt to foist upon the British public their crude and to them newly hatched views. Last year the walls of London were placarded announcing the certainly astounding discovery that stammering could be cured in two hours. And more recently there have appeared some supposed new ideas from a M. Chervin, of Lyons, which have received the sanction of a thing called a commission of inquiry. M. Chervin, however, more modest, allows himself a limit of twenty days. Now, Sir, common sense will show that it is simply impossible to indicate when a wrong muscular action will cease; it must be a process varying according to the individual case, and is altogether out of the reach of any specified limit of time.

Stammering begins always early in life, generally from 5 to 7 years of age; and before any attempt even is made to cure it several years pass away in the hope that the defect may, in some way not explained, cease of itself. Now, a wrong and usually long-continued action cannot be thus disposed of. The cause ought to be clearly put forth, or any process of cure based upon a total ignorance of the subject must be empirical.

Stammering is not a defect of speech; it arises from a wrong action of breathing caused by a spasmodic action of the diaphragm, which arrests the exit of the breath at the rima. This spasm is in very many cases so strong as to produce much pain about the region of the diaphragm, and has in consequence been treated as a dyspeptic symptom, and tonics have been frequently administered, but of course without any relief, as they do not touch the cause. This action, once acquired, is constant; it is not confined to the mere attempt to speak, but every act of breathing is carried on in a continuous spasmodic course, and is therefore always ready to prevent speech.

M. Chervin's process is first a period of total silence. He then proposes an even, slow inhalation, with an even, loud expiration—a somewhat anomalous suggestion. How silence as a preliminary step can be of any avail does not appear very clear, for it too often happens that the unfortunate sufferer is doomed to silence from the defect itself. I have had cases where persons have been obliged to write down what they wished to communicate from a total incapacity of utterance. Of what use, then, is superadded silence? As to loud expiration—which, of course, implies force, even if temporary relief is gained (which is very doubtful)—it can only end in making the case worse, as nature requires no force for the involuntary motions of the body, such as breathing is; and, besides, M. Chervin cannot be credited with any novelty, for the process has already been widely adopted, and has ended in failure. This spasmodic action of breathing is sometimes so severe and continuous as to produce great pain at the back of the neck. I have had cases where mechanical contrivances have been tried to give even temporary relief for sleep. What silence or loud expirations can possibly effect under such circumstances does not appear very intelligible.

The simple explanation is this. All the sounds of the voice are made at the rima; the breath in passing out is there vibrated into sound by the mere volition of speech. All the letters are made by the lips, teeth, and tongue, and the natural action for articulation is to attack the sound at the rima from the fore part of the mouth. In stammering there is spasm of the diaphragm, together with the closure of the glottis, as anyone may test for himself, and thus is prevented the emission of breath, and of course no vocal sound can be produced, and the efforts made to speak cause all those painful distortions so commonly observed. But the act of articulation towards the rima, as I have explained, simultaneously with the act of breathing, will be found to counteract and prevent the spasmodic action, and, with only ordinary attention, speech will ensue, and, carrying on the same rule, will continue; by degrees the spasm decreases, and will eventually cease and the defect disappear altogether. Silence is, therefore, not only unnecessary, but simply useless, and loud expirations will be found incompatible with the natural action of breathing.

It will be seen from what has been here stated that the cure of stammering does not in any way belong to the art of Medicine. It rests altogether with the master of elocution, whose proper business it is to remedy all defects, of which there are many, and of which stammering is by no means the most difficult to deal with. When this is understood it is to be hoped that the sufferer from this most distressing affliction may be released from all the absurdities and, I may add, barbarities to which he has been so long, and still is, unhappily the victim.

I am, &c., W. W. CAZALET, A.M. Cantab.

OBITUARY.

MICHAEL THOMAS SADLER, M.D. LOND., ETC.,

OF Barnsley, Yorkshire, died on October 6. His health had been failing for two or three years, but he had not been confined to bed more than ten days. For the last three weeks he was unnaturally sleepy. On Tuesday evening more distinct symptoms of effusion on the brain came on. From this he seemed for a time to rally, but a second seizure at one o'clock on the 6th, followed by a third at five, proved more than his feeble strength could bear up against. Although perfectly conscious almost to the last, he had no pain or sense of suffering, either in body or mind, during the last three weeks of his life. So passed away peacefully a good, kind, learned man, a very able and successful practitioner, beloved by everyone who knew him. He was a nephew of Michael Thomas Sadler, the author of the well-known work on "Population," whose career in Parliament was short, but brilliant. He had only three pupils—his own son, who succeeds him, and who is a gold medallist of the University of London, Mr. Spencer Wells, and Dr. Priestley, whose affection for their old master has never failed, and to whose example and instruction both have repeatedly acknowledged their deep obligation.

MEDICAL NEWS.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BROWN, Dr. J. C., D.Sc. Univ. Lond., Lecturer on Chemistry at the Liverpool Royal Infirmary School of Medicine—Public Analyst for the Borough of Liverpool.

BUTLER, FRANCIS W., L.S.A.—Resident Obstetric Assistant to Westminster Hospital, *vice* Mr. George Haynes Fosbrooke, M.R.C.S. Eng., who has been appointed House-Physician.

FOSBROOKE, GEORGE HAYNES, M.R.C.S. Eng.—House-Physician to the Westminster Hospital, *vice* Francis W. Butler, L.S.A., who has been appointed Resident Obstetric Assistant.

HARPER, WM. J.—Dispenser to the Chorlton Union, Lancashire.

PROFFITT, W. J. P.—Assistant to the House-Surgeon of Staffordshire General Infirmary, Stafford.

WARD, J. BYWATER, M.D. Cantab., Senior Assistant Medical Officer of the Warwick County Lunatic Asylum—Medical Superintendent of the Warneford Lunatic Hospital, Oxford.

WHARTON, HENRY S., M.R.C.S., L.S.A.—Medical Officer to the Gosport Dispensary of the Royal Portsmouth, Portsea, and Gosport Hospital, *vice* William J. Rundle, M.D., deceased.

WOODS, OSCAR T., B.A., M.B.T.C.D., Clinical Assistant at the West Riding Lunatic Asylum, Wakefield—One of the Assistant Medical Officers of the Warwick County Lunatic Asylum, *vice* J. Bywater Ward, M.D. Cantab., appointed Medical Superintendent of the Warneford Lunatic Hospital, Oxford.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—In accordance with the provisions of her Majesty's Order in Council of February 22, the undermentioned officers have been placed on the Retired List:—Surgeon Dr. Johnstone Christie, from the 27th ult., and Assistant-Surgeon Dr. William Grant, from the 1st inst.

WAR OFFICE, MEDICAL DEPARTMENT.—Assistant-Surgeon Frederick William Wade, from the 60th Foot, to be Staff Surgeon, *vice* Augustus Morphew, appointed to the 27th Foot.

BIRTHS.

BROWN.—On October 7, at 1, Bartholomew-road, Kentish-town, the wife of Andrew Brown, L.R.C.P.E., L.R.C.S.E., of a son.

FOSTER.—On October 7, at Grosvenor House, Edgbaston, Birmingham, the wife of Balthazar W. Foster, M.R.C.P. Lond., M.D., L.K.Q.C.P.I., L.R.C.S.I., of a daughter.

GILES.—On October 6, at Caxton, the wife of John Giles, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., of a son.

MARRIAGES.

BACKHOUSE—LEECH.—On October 3, at St. Mary's, Woolpit, Suffolk, the Rev. William Remington Backhouse, B.A., Chaplain to the Forces, and second son of the late Rev. Ralph Drake Backhouse, M.A., Vicar of Eastry-with-Worth, Kent, to Mary Edith, only daughter of H. P. Leech, M.R.C.S., Woolpit.

BRYDONE—TURNER.—On October 2, at St. Mary's, Battersea, Henry Gray Brydone, Esq., of Petworth, Sussex, to Amy Elizabeth, youngest daughter of Roger Turner, M.D., of Petworth.

COLLINS—SMITH.—On October 3, at St. Peter's Church, Dublin, by the Rev. E. G. Campbell, D.D., Edward Wolfenden Collins, M.D. University of Dublin, of 33, Lower Baggot-street, Dublin, to Isabel Margaret, only daughter of Lieut.-Colonel Thomas Smith, of Adelaide-street, Kingstown, late of H.M.'s 37th Foot.

EDMONDSON—BACKHOUSE.—On October 1, at St. James's, Piccadilly, the Rev. James Edmondson, B.A. and D.C.L. Oxon., Chaplain in the Diocese of British Guiana, and late Curate of Charlton, in Dover, only son of James Edmondson, M.R.C.S., of Wandsworth, to Mary Catherine Monins, third daughter of the late Rev. Ralph Drake Backhouse, M.A., Vicar of Eastry-with-Worth, Kent.

FIDDIAN—GREGORY.—On October 5, at Stoke Newington Wesleyan Chapel, Alexander P. Fiddian, M.B., of Cardiff, to Mary Leonora, daughter of the Rev. B. Gregory, of Stoke Newington.

GLOSSOP—GOODMAN.—On September 14, at St. Silas's Church, Liverpool, William Dale Glossop, Esq., of Notting-hill, to Sarah Anne, fourth daughter of John Goodman, M.D., of Southport, Lancashire.

HINDS—BUSBY.—On October 2, at Edgbaston old parish church, James Hinds, M.B., of Halstead, Essex, to Lucy, second daughter of Thomas Busby, Esq., of Balsall Heath, Birmingham.

MCDOWELL—CARLYLE.—On October 3, at the church of St. Philip's and St. James's, Cheltenham, Charles McDowell, A.B.T.C.D., M.B., L.R.C.S.I., of Carlow, Ireland, to Dorothy Hay, youngest daughter of the late Rev. B. F. Carlyle.

POOLE—DE CASTRO.—On September 28, at the English Consulate, Bayonne, France, James William, youngest son of the late Major-General Poole, Royal Artillery, to Elizabeth Reynell, only daughter of J. C. De Castro, M.D.

SANDERS—FURSE.—On October 2, at the parish church, Hampstead, Thomas Sanders, M.R.C.S. Eng., L.S.A., South Molton, Devon, to Lucy, youngest daughter of the late Robert Furse, M.R.C.S. Eng., L.S.A., South Molton.

SPEIRS—BRITTEN.—On October 3, at Presteign Church, William Robert Speirs, M.B., C.M., of Haltwhistle, Northumberland, to Fanny Jane, eldest daughter of the late Charles Britten, Esq., of The Woodhouse, Herefordshire.

SYMONS—PEARSE.—On October 1, at St. Andrew's Church, Plymouth, Thomas Symons, Esq., of Exeter, to Mary Elizabeth Spry, only daughter of William Derry Pearse, Mayor of Launceston, Cornwall.

DEATHS.

BLACK, GLASS, M.D., M.R.C.P., M.R.C.S., at Meadwood Villa, Torquay, Devon, after lying for five days unconscious, from the effects of a severe accident, on October 5, aged 71.

DRY, THOMAS, M.D., second son of William Henry Dry, Esq., of Walworth, Surrey, lost at sea (to the great grief of his family) in the ship *Glenmark*, which sailed from Port Lyttelton, New Zealand, on February 1, and has not since been heard of.

EDMUNDS, EDMUND, Surgeon, very suddenly at his residence in Mount-terrace, Lambeth, on October 1, aged 76 years, universally respected by a large circle, having been in practice upwards of forty years in the parish.

GILLESPIE, ELIZA MARY SHIRRIFF, widow of the late Alexander C. Gillespie, M.D., F.R.C.S. Edin., at Malveru, on September 28, in her 80th year.

GODDARD, LEONARD MORSE, M.R.C.S. Eng., of 99, St. John-street-road, Clerkenwell, on October 6, aged 63.

JUKES, ALFRED MEREDITH, solicitor, Warrnambool, Victoria, eldest son of the late Alfred Jukes, F.R.C.S., of Birmingham, after a long illness, on August 13, in his 45th year.

LEES, HENRY, M.D., at 8, Gloucester-crescent, Hyde-park, after a lingering illness, on October 3, in his 60th year.

MCCOWAN, FRANCIS DA CRUZ, M.D., at 27, York-place, Edinburgh, on October 6.

NIELL, JOHN, M.D., late of Aldersgate-street, London, at his residence, Sydenham Villa, Croydon, on September 30, in the 66th year of his age.

SADLER, MICHAEL THOMAS, M.R.C.S. Eng., L.S.A., at St. Mary's-gate, Barnsley, Yorkshire, on October 6, aged 71.

YOUNG, FREDERICK WILLIAM, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., eldest son of the late William Wadham Young, Esq., of Salisbury, on October 8, aged 27.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Candidates must possess a registered qualification from some corporation or corporations examining in Medicine and Surgery. Applications, with testimonials, to Alexander Bottle, M.D., on or before October 23.

HOSPITAL FOR DISEASES OF THE THROAT.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of England, and must produce evidence of having acquired skill in the use of the laryngoscope. Applications, with testimonials, to George C. Witherby, Esq., Honorary Secretary, on or before October 22.

PARISH OF ST. GEORGE'S, HANOVER-SQUARE.—Medical Officer of Health. Candidates will be required to strictly carry out the duties as laid down in the 132nd Section of the Metropolis Local Management Act, from time to time to test the gas, and to analyse the water supplied to the parish, to carry out the duties of Analyst under the Adulteration of Food Acts, and to superintend the Inspector of Nuisances in the exercise of his duties. Applications, with testimonials, to the Vestry Clerk, at the Board-room, Mount-street, W., on or before October 16.

UNIVERSITY COLLEGE HOSPITAL.—Assistant-Physician; Assistant-Surgeon; Assistant Medical Officer for the Skin Department. Applications for any of these appointments must be addressed to John Robson, B.A., Secretary to the Council, on or before October 31.

WEST LONDON HOSPITAL, HAMMERSMITH-ROAD.—Two Junior Physicians. Candidates must be Fellows or Members of the Royal College of Physicians of London, and send in their applications on or before October 23.

WESTMINSTER HOSPITAL.—House-Surgeon. Candidates must be qualified to practise under the Medical Registration Act of 1858, and must produce certificates of having served the office of Surgeon's Dresser to the in-patients for a period of not less than six months in some recognised hospital. Candidates will be subjected to a competitive examination, and must send in their names to the Secretary before October 14.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—House Surgeon. Candidates must possess both medical and surgical qualification. Applications, with testimonials, to the Secretary, on or before October 16.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Epping Union.—Mr. A. Macgill has resigned the Roydon District; area 2995; population 910; salary £30 per annum.

Uckfield Union.—Mr. Edwin Fenn has resigned the Maresfield District; area 16,559; population 3940; salary £85 per annum.

APPOINTMENTS.

Alverstoke Parish.—James W. B. Alder, L.R.C.P. Edin., L.R.C.S. Edin., to the Town District.

Basingstoke Union.—Charles F. Webb, M.R.C.S. Eng., L.R.C.P. Edin., to the Basingstoke District.

Hexham Union.—Thos. Stainthorpe, M.D. St. And., M.R.C.S. Eng., L.R.C.P. Edin., L.S.A., to the Western Division of the Third District.

Poole Union.—John R. Philpots, L.R.C.P. Edin., L.R.C.S. Edin., to the Fourth District.

MEDICAL STUDENTS.—As the annual registration of gentlemen pursuing their professional studies at the metropolitan Schools is still going on at the College of Surgeons and Apothecaries' Hall, and will not be brought to a close until next week, it is of course impossible to state the number of new entries. The following is the result up to Thursday night, when the number of new entries at Guy's Hospital was 60; St. Bartholomew's, 62; University College, 55; King's College, 33; St. Thomas's, 40; St. George's, 25; The London, 24; St. Mary's, 13; The Middlesex, 19; Charing-cross, 15; and Westminster, 3. The total number registered is 870.

THE LONDON HOSPITAL MEDICAL COLLEGE.—DISTRIBUTION OF PRIZES, SESSION 1871-72.—Clinical Medicine, £20 scholarship given jointly by the House-Committee and the Medical Council, Mr. W. L. Morgan. Clinical Surgery, £20 scholarship given jointly by the House-Committee and the Medical Council (not awarded). Clinical Obstetrics, £20 scholarship given jointly by the House-Committee and the Medical Council, Mr. W. L. Morgan. Dressers' Prizes for zeal, efficiency, and knowledge of Minor Surgery, given by the House-Committee—£15 prizes, C. A. Low, W. Lang, and G. B. Sineock; £5 prizes, H. G. Brown, W. Hurford Todd, and J. D. Watson. Buxton Scholarships, given for proficiency in the subjects required for the preliminary examinations—£30 scholarship, Mr. B. R. Rygate; £20 scholarship, Mr. H. E. Priee; honorary certificate, Mr. R. H. Fox. Human Anatomy,

£20 scholarship given by the Medical Council, Mr. R. H. Fox; honorary certificate, Mr. Burtonshaw. Anatomy, Physiology, and Chemistry, £25 scholarship given by the Medical Council, Mr. C. A. Mercier; honorary certificate, Mr. Hyde Walker. Special Certificates awarded to Medical Assistants for three months' service, A. Kebbell, C. W. Holmested, C. A. Fox, R. Withers, G. Morgan, W. L. Morgan, J. H. Mitcheson, L. Mackenzie, C. J. Stocker, G. Widdas, and S. Welch.

THE Open Scholarship in Natural Science at St. Mary's Hospital Medical School (of the value of £40 for three years) has been awarded to Mr. Alfred Tilley, and the Exhibition to Mr. W. H. Weddell. Both these gentlemen are of the University of London.

TYPHOID fever is prevalent at Sheffield.

DR. BLACK, of Torquay, was knocked down a few days since by a dairy cart, and has since died. The lad who was driving has absconded.

WE regret to state that Dr. William Cooper Thomson, of 18, Laurence-place, Partick, was one of the passengers injured in the Kirtlebridge collision last week.

AN infirmary and dispensary for children has been opened at Macclesfield by Lord Egerton of Tatton. It will accommodate eighty patients.

PROFESSOR ODLING, the newly appointed successor to Sir Benjamin Brodie in the University of Oxford, will commence a course of lectures during the ensuing term.

THE Medical Officer of Health for the Limehouse district in his fortnightly reports last week stated that there were no deaths registered in Shadwell or Wapping during the first week of the fortnight, and in his opinion the health of the district was highly satisfactory.

A TELEGRAM from Calcutta on the 5th states that cholera is fast disappearing both in India and beyond the frontier. From the beginning of the outbreak there have been 750 cases where British soldiers, their wives and children, have been seized with it, and 478 fatal ones.

THE deaths registered in London last week were 1276. After making allowance for increase of population, they were 115 below the average numbers in the corresponding week of the last ten years.

PATENT MEDICINES.—The stamp duty on patent medicines in the last financial year amounted to the large sum of £86,516 18s. 3d., and the Excise duty on medicine vendors to £7138 15s.

NAVAL MEDICAL SUPPLEMENTAL FUND.—At the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 8th inst., Dr. J. W. Johnston, Inspector-General, in the chair, the sum of £75 was distributed among the various claimants.

THE PARIS FACULTY OF MEDICINE.—M. Vulpian, Professor of Pathological Anatomy, having expressed a strong desire for "permutation," his colleagues have placed him in the chair of Comparative and Experimental Pathology, vacated by the resignation of M. Brown-Séquard. The chair of Pathological Anatomy is therefore vacant, and it seems to be a very general wish that it should be filled up by means of the *concours*. The majority of the Faculty is, indeed, favourable to the re-establishment of the *concours*, and some months since, through its Dean, M. Wurtz made an application to the Minister of Public Instruction in order to obtain this. M. Jules Simon replied that personally he was favourable to the change, and nothing would please him better; but that as the nomination of professors is regulated by an organic decree of 1852, this can only be altered by a new law. It is now hoped, in the presence of a vacant chair, the Minister will obtain this law, which would be readily passed; and it is remarked as somewhat singular that a Republican Minister should feel any hesitation in thus remedying one of the most unfortunate consequences, as regards medical education, of the *coup d'état*.

FUGITIVE FURNITURE DYES.—At the last meeting of the Académie des Sciences, M. Chevreul produced a piece of green damask intended for an apartment, and which had scarcely been suspended when it became yellow in places, just as if it had been long exposed to the sun's rays, whereas it had been almost completely sheltered. He added that for the last twelve years he had been continually protesting against the introduction in silk manufacture of the new colouring matters, the brilliancy of which is inseparable from great instability. In 1860, when the aniline dyes excited so much enthusiasm, he foretold the great deception they would give rise to when their employment passed from personal apparel to furniture, and the justice of his remarks has been amply proved. The article he exhibited cost only 20 fr. the metre, but others that cost 150 fr. or 200 fr. the metre are exposed to the same mischances. For the rich materials used in furniture, therefore, he thinks the dyeing matters formerly employed, which possess great fixity, should alone be used. Damask employed for Marie-Antoinette's furniture, which has been examined by M. Chevreul, retains almost all its pristine brilliancy. He further added that the practice of weighing silk stuffs instead of measuring them, which has been lately adopted, should be discontinued, as one kilo of silk may be magnified into three or four kilos by the addition of foreign matter. Black alone resists this surcharge.—*L'Institut*, October 2.

AMBULANCE MANŒUVRES IN RUSSIA.—During the recent practice of ambulance corps at Grodno, cards were distributed to certain soldiers of each company, designating wounds or injuries they were supposed to have received on a field of battle, in order that they might comport themselves suitably for practising the *ambulanciers* and certain of their comrades. In this way the procedures that would have to be put into force with respect to the wounded on the field of battle were rehearsed as closely as possible. Most of the soldiers performed readily their parts of imaginary wounded, and one of the number so exactly fulfilled his instructions of personating one very badly wounded that he was believed by all to have fallen into a state of syncope, and water was dashed in his face, and other means taken to restore him. All in vain, for so he remained immovable and inert until the trumpets announced the end of the manœuvres, when up he started as lively as possible. When questioned why he had acted thus, he replied that he believed that he was following out his instructions.—*Gaz. Méd.*, September 28.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Quest.—You cannot do better than consult Mr. Hancock, President of the Royal College of Surgeons. He resides in Harley-street, London.

C. C., Cumberland.—Dr. Bulleyn was a celebrated physician and reformer in the time of Philip and Mary.

O. G. O.—Certainly; the circumstances of the case quite justify the steps you have taken.

X. Y. Z.—1. Mr. P. was selected for his surgical knowledge and his knowledge of Italian. 2. No. 3. A china-pointed probe was used.

A Surgeon's Widow.—We think you have acted wisely, and cannot do better.

S. B.—Dr. John Dudgeon is Professor of Anatomy at the College at Pekin.

P. N.—Dr. James Drake resigned our Profession to become "an author by profession" for a party—the Tory party. He left behind him a "System of Anatomy," which was once popular, and curious of its kind. Cline was an ardent Radical, and Gale Jones an advanced Liberal; both took part in politics.

Errata.—In Mr. Haviland's letter on "Medical Maps for England," published in the *Medical Times and Gazette* of October 5, we are requested to make the following corrections:—On page 394, line 23, *instead of* "Society of Arts," *read* "School of Science and Art, South Kensington"; and on the same page, line 18 from the bottom, *instead of* "*Mining Record*," *read* "Mining Record Office, Royal School of Mines, Jermyn-street."

C. H. W. P., Wimborne.—In neither case, we regret to say, does the law give you any remedy. The only thing that can be done is to endeavour to open the eyes of the public as to the real status of the individuals in question. If you find them giving certificates of death, that's another matter. We cannot in the meantime recommend such a work as you want. Doubtless we shall soon have several.

D.L.—Yes. Dr. Fuller's "Medicina Gymnastica; or, a Treatise concerning the power of Exercise with respect to the Animal Economy," 5th edition 1718. The object of the volume is to remind the student what he is apt to forget—namely, to substitute exercise for medicine. He wrote the book before he became a physician. The last chapter contains much curious reading on the ancient physicians and their gymnastic courses. Fuller says that the ancient physician Asclepiades was most fortunate in the invention of exercises to supply the place of much physic; and he adds, "No man in any age ever had the happiness to obtain so general an applause." Pliny calls him the "delight of mankind."

The Builder, in an article entitled "The Engineer and Doctor," calls attention to the vast importance of the office of Medical Officer of Health, and of the qualifications necessary for the efficient performance of the responsible duties of that office. It says:—

"With diseases in general we have but little concern, but with those which are preventible by proper structural works we have always claimed to be concerned equally with the medical profession—if, indeed, the ques-

tion be not even more within our province than theirs. We, therefore, are not going out of our line in introducing Mr. Wolff's book(a) to the notice of our readers. Self-government is a great idea, and probably the ultimate form of any 'government' whatever will be reduced to this *form;* but in the meantime let us own that we are in leading-strings as children are in sanitary science, disguise it as we will, and we cannot afford to let pass unnoticed any contribution such as this book towards a better understanding of the subject. If it does no more than point to the kind of man we want for medical officer it will do much. Those who happen to be acquainted with the kind of man often appointed to this office by Poor-law guardians, and who appreciate at the same time the vast importance of the office, will best appreciate the value of what we say. It is highly important that the colleague of the engineer who is to construct sanitary works should be able to report with no uncertain sound upon what is necessary to be done."

BOOKS RECEIVED—

The Science and Art of Surgery (sixth edition), by John Erichsen F.R.C.S., etc.—On the Diseases of Women (third edition), by Graily Hewitt, M.D. Lond., F.R.C.P., etc.—Deschanel's Natural Philosophy (part iv.), by Professor Everett, M.A., D.C.L., F.R.S.E.—The Dangers of Chloroform and the Safety and Efficiency of Ether, by J. Morgan, M.D., F.R.C.S.—Transactions of the Clinical Society of London, vol. v. —Attfield's Chemistry, fourth edition—Address in Surgery, delivered at the Annual Meeting of the British Medical Association held at Birmingham, August 8, by Oliver Pemberton, M.R.C.S.—The Policy of Restrictive Measures or Quarantine, as applied to Cholera and Cattle Plague, by George Foggo, late a Legislative Member of Council, Bombay—Thirty-third Annual Report of the Registrar-General of Births, Deaths, and Marriages in England—Report of the Diphtheria Commission of Victoria—Diseases of the Ovaries, their Diagnosis and Treatment, by T. Spencer Wells, F.R.C.S., etc.—Aide-Mémoire de Pharmacie, par Eusèbe Ferrand, Pharmacien à Paris—La Vaccine et la Petite Vérole dans le Département du Tarn en 1870 et 1871, par le Docteur Paul Lalagade—Jottings on Vitality, or the Physical Basis of Life, by Andrew Ross, M.D.—The Power of Mind over Matter, by Andrew Ross, M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—Westminster Review—Popular Science Review—Journal of Science—The Graphic—Food, Water, and Air—Philadelphia Medical Times—Australian Medical Journal, July—The Ladies' Own Paper—Medical Press and Circular—Melbourne Argus, August 5 and 13—Wahgunyah and Rutherglen Chronicle, August 3.

COMMUNICATIONS have been received from—

Mr. C. H. W. Parkinson; Dr. Cheadle; Dr. Pye-Smith; Mr. W. Rivington; Mr. J. C. Oliver; Dr. Parsey; Dr. Grace Calvert; Dr. Waren Tay; Dr. Copeman; Dr. Worthington; Mr. MacGillivray; Dr. Day (Geelong); Dr. Neild; Mrs. Abercrombie; Dr. Edgar Sheppard; Mr. J. Chatto; Mr. G. E. Legge Pearse; Dr. T. H. Green; Dr. A. E. Sansom; Mr. T. M. Stone; Dr. Dale; F. J. L.; X. Y. Z.; Dr. Cayley; Dr. Balthazar Foster; Dr. Whitmore.

APPOINTMENTS FOR THE WEEK.

October 12. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

14. *Monday.*

Operations at the Metropolitan Free. 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

15. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Mr. E. Bellamy, "The Parts six years after Excision of the Astragalus." Dr. Crisp, "Specimens of Sygnemus Trachealis." Mr. Spencer Watson, "Cystic Epithelioma of the Eyelid." Dr. Hilton Fagge, "Organs from a Case of General Xanthelasma." Dr. Duffin, "Perinephric Abscess." Mr. Hulke, "Multiplo Dermoid Tumours;" "Stricture of the Rectum." Dr. Kelly, "Fibro-cartilaginous Tumours growing from the Heart."

16. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

17. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

18. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

(a) "Zymotic Diseases: their Correlation and Causation." By A. Wolff, Esq. J. and A. Churchill. 1872.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 5, 1872.

BIRTHS.

Births of Boys, 1137; Girls, 1051; Total, 2188.
Average of 10 corresponding weeks, 1862-71, 2016·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	626	650	1276
Average of the ten years 1862-71	650·2	614·1	1264·3
Average corrected to increased population	...	...	1391
Deaths of people aged 80 and upwards	...	...	40

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	1	1	3	2	3	1	...	1	5
North ...	751688	3	...	3	1	9	1	8	...	9
Central ...	333887	...	3	1	..	4	1	..	...	5
East	638928	1	1	7	1	7	2	3	1	17
South	966132	5	4	6	1	8	1	8	2	14
Total	3251804	10	9	20	5	31	6	19	4	50

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·617 in.
Mean temperature	52·4°
Highest point of thermometer	66·6°
Lowest point of thermometer	36·0°
Mean dew-point temperature	48·2°
General direction of wind	S.W.
Whole amount of rain in the week	0·49 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 5, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Oct. 5.	Deaths Registered during the week ending Oct. 5.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2188	1276	66·6	36·1	52·4	11·33	0·49	1·24
Portsmouth ...	115455	12·1	79	60	64·8	37·4	52·8	11·56	0·83	2·11
Norwich	81105	10·9	64	35	65·0	32·5	50·7	10·39	0·96	2·44
Bristol	186428	39·8	116	79	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	40	35	62·2	35·7	49·6	9·78	0·26	0·66
Birmingham ...	350164	44·7	266	179	63·0	35·5	50·8	10·44	0·27	0·69
Leicester	99143	31·0	67	54	66·0	32·2	50·0	10·00	0·64	1·63
Nottingham ...	88225	44·2	41	36	63·7	32·3	51·1	10·61	0·24	0·61
Liverpool	499897	97·9	378	264	61·2	36·3	49·1	9·50	0·69	1·75
Manchester ...	352759	78·6	238	204	62·5	35·0	49·5	9·72	0·87	2·21
Salford	127923	24·7	96	57	62·5	34·2	48·5	9·16	0·84	2·13
Oldham	84004	20·2	73	75	...	...	...	...	...	...
Bradford	151720	23·0	101	65	60·5	39·5	50·6	10·33	0·67	1·70
Leeds	266564	12·4	214	150	63·0	37·0	50·9	10·50	0·38	0·97
Sheffield	247847	10·9	210	100	61·0	35·0	49·3	9·61	0·69	1·75
Hull	124976	35·1	96	66	64·0	32·0	49·9	9·94	0·49	1·24
Sunderland ...	100665	30·4	118	38	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	70	45	...	...	...	...	...	...
Edinburgh	205146	46·3	135	77	59·0	28·7	47·2	8·44	1·10	2·79
Glasgow	489136	94·8	371	251	57·6	27·0	46·3	7·94	1·62	4·11
Dublin	310565	31·9	166	128	64·0	27·2	48·6	9·22	0·23	0·58
Total of 21 Towns in United Kingd'm	7393052	34·0	5127	3274	66·6	27·0	49·8	9·89	0·66	1·68

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·62 in. The highest was 30·11 in. at the end of the week, and the lowest 29·24 in. on Thursday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

SAVORY & MOORE'S SPECIAL PREPARATIONS

AND

APPLIANCES IN AID OF MEDICINE & SURGERY.

EUCALYPTUS GLOBULUS, or Fever Tree. Preparations—Tincture, Fluid Extract, Solid Extract, and Powder.

"Employed with success in Intermittent Fever, Bronchitis, Asthma, &c., and strongly recommended as a Tonic and Stimulant."—*Vide* "Lancet," April 20, 1872, page 557.

LACTO-PHOSPHATE OF LIME.
LACTO-PHOSPHATE OF IRON. } Preparations—Wine and Syrup.

N.B.—These Syrups are more concentrated than Dr. Dusart's, and the patient consequently takes *considerably less sugar* in a dose.

SYRUP OF THE BROMIDES OF IRON, QUININE, AND STRYCHNINE, separate, or in combination, as suggested by Dr. Richardson.

GENUINE PANCREATIC EMULSION, as originally prepared by them, and the only kind recognised by the Medical Profession.

THE BEST FOOD FOR INFANTS. USED IN THE NURSERIES OF THE ROYAL FAMILIES OF ENGLAND AND RUSSIA.

PURE PANCREATINE effects the digestion and assimilation of Cod-liver Oil and fatty substances generally. Pancreatine Powder, Pancreatine Wine, and Pancreatic Cocoa.

PANCREATISED (DIGESTIVE) COD-LIVER OIL. The labels give directions for producing a Pancreatic Emulsion, and a test for the digestive principle.

PURE PEPSINE PORCI, in Powder and Wine. Eight times the Strength and one-fourth the Price of ordinary kinds. *Supplied in Bottles*, or IN BULK AT PROPORTIONATELY REDUCED RATES.

ETHERODYNE. Superior to Chlorodyne. A perfectly clear, bright fluid, readily miscible with water, &c.

DATURA TATULA, for Inhalation in Asthma, Bronchitis, &c. Cigars and Cigarettes, Pastilles, and in the form for use by means of

THE REGISTERED MEDICAL PIPE, invented by James Bird, Esq., M.R.C.S., by which the amount of smoke and air inhaled may be regulated.

JEREMIE'S SEDATIVE AND ANTISPASMODIC allays pain and produces sleep, without causing the excitement and cerebral disturbance which often follow the use of opiates.

GELATINE DISCS FOR OPHTHALMIC USE have many advantages for all the cases in which such local applications can be used. The medicament dissolves softly and slowly out, and is thus placed under the most favourable circumstances for absorption. Hence much smaller doses produce a marked effect than when drops are introduced.

COD-LIVER OIL, combined with Chloral Hydrate, Iron, Quinine and Strychnia, Chlorate of Quinine, Iodide of Iron, and all preparations of Iodine, Bromine, Bromides, &c.

COD-LIVER OIL. Extra fine quality, without taste or smell. In bulk, or in pint and half-pint capsuled bottles.

PATENT EAR SYRINGE. A valuable substitute for the ordinary syringes. The advantages it affords are, that it is used with the greatest facility, without assistance, and without splashing or spilling the water down the neck, while the possibility of the jet penetrating too far and injuring the ear (the great objection to all other syringes) is entirely avoided.

KHEESAH, OR IMPROVED FRICTION GLOVES AND BELT. For promoting a healthy and agreeable action of the skin.

THE DISINFECTING VAPORIZER (PATENT). For Disinfecting and Purifying the Air of Rooms and Articles of Clothing, Bedding, Furniture, &c., during and after small-pox, fevers, &c.; also preventing infectious diseases.

THE GERMAN HOSPITAL CLOTH, extensively employed in the German Hospitals and Camps during the late war, and adopted for use by the Director-General, Army Medical Department, London. Impervious to heat and the action of acids. Easily washed and cleaned for repeated use. Stronger, more durable, and economical than any other kind of indiarubber sheeting. Savory and Moore are Sole Agents for this article.

SAVORY & MOORE, 143, NEW BOND-STREET, LONDON.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

LECTURE X.

(*Continued from page* 373.)

In sharp contrast with the Sirenia last spoken of, the CETACEA live solely on animal food, of the various kinds in which it abounds in the ocean. According to the precise nature of this food, they have been grouped by the great Danish cetologist, Eschricht, into *Sarcophagi*, *Teuthophagi*, *Ichthyophagi*, and *Pteropodophagi*(a)—divisions which, however, do not coincide with structural modifications, and, as their author explains, are not perfectly well defined, as some of the species by no means limit themselves to that kind of food which is most characteristic of, and gives the name to, the group to which it belongs.

The *Sarcophagi* comprise one genus only—*Orca*, the killers or grampuses, which merit the name on account of their partiality for the flesh of warm-blooded animals, as seals, and even of other cetaceans. The *Teuthophagi*, or eaters of the various species of cephalopods, as cuttle fish and squid, are very numerous, and include one of the giants of the order, the cachalot or sperm whale, all the ziphioids, the narwhal, beluga, and *Globicephalus* and its allies. The common porpoise, most of the true dolphins, and the rorquals or fin-whales (*Balænoptera*), are truly ichthyophagous; while the large-mouthed right whales (genus *Balæna*) subsist entirely on minute pteropods, and crustaceans far smaller than shrimps, which swarm in the waters they inhabit.

Confining our attention for the present to the sub-order of Odontocetes, or toothed whales. The mouth and its appendages are reduced to mere organs for seizing living prey and swallowing it immediately without further preparation, the modification for this end observed in the seals being carried to a much further extent in the Cetacea. The gape is wide, and the jaws are very often prolonged into the form of a long, narrow beak. The teeth are usually numerous and similar in form, having only to perform the function of preventing the slippery food from escaping from the grasp of the jaws. They are therefore simple, conical, pointed, and recurved. Although in some cases they are more numerous than in any other mammals, they are frequently confined only to the lower jaw, and sometimes reduced to a single pair, which may be even so buried beneath the gum that it is difficult to conceive that it serves any useful function. The lips are rigid and motionless, and the palate smooth, having none of the transverse rugæ so conspicuous in the animals which masticate their food most completely, as the ungulates. The tongue is broad and flat, adherent by its base to the floor of the mouth, except by a very narrow edge at the front and sides, which in the porpoise and some species of dolphins is notched or fringed. The surface is very smooth, the papillæ being minute and all of one kind. Behind the tongue the floor of the mouth and sides of the pharynx are lined with a lax, corrugated membrane, capable of great dilatation, and showing numerous openings of follicular glands. The hinder border of the soft palate closely embraces, like a sphincter, the elongated tubular prolongation of the larynx, which forms a median division to the fauces, but makes a continuous channel from the trachea to the nostrils or "blow-holes," without any communication with the buccal cavity. It is probable, however, that during deglutition, as in the horse, the larynx is drawn down from its respiratory position in the posterior nares, and the passage of the fauces made free; otherwise the swallowing entire of large fish or seals (as in the case of the killers) would be impossible.

The œsophagus is very wide, and leads directly by a funnel-shaped orifice into the first cavity of the stomach. This organ is singularly complex, and quite unlike that of any other mammal. By the aid of the diagram (Fig. 36) its structure will be made apparent. The first, and by far the largest compartment (*b*), may be looked upon as a sort of crop or dilatation of the œsophagus. It is lined by a thick white epithelium, which ceases abruptly at the entrance into the next cavity. It corresponds to what has been called the cardiac compartment of the stomach in the ungulates and some rodents; but although its

FIG. 36.

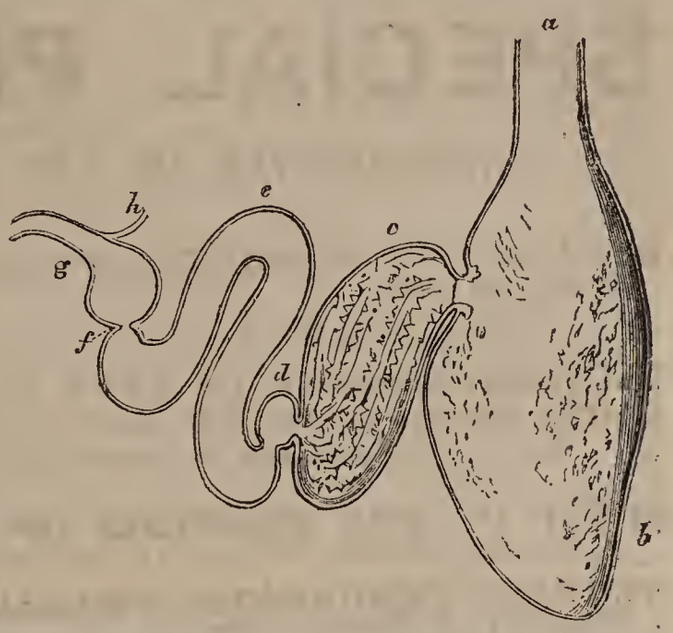


FIG. 36.—Diagramatic section of the stomach of a porpoise: *a* œsophagus, *b* left or cardiac compartment, *c* middle compartment, *d* and *e* the two divisions of the right or pyloric compartment, *f* pylorus, *g* duodenum dilated at its commencement, *h* biliary duct.

walls do not appear to contain peptic glands, true digestion does go on to a certain extent within it, as is proved by the condition of its contents; but this is probably caused by the regurgitation into it of the secretions of the second or true digestive compartment (*c*). This, which is much smaller than the first, has very thick walls, the mucous membrane being filled with closely set parallel tubular glands, which must give rise to an abundant secretion. The surface of this membrane is smooth and soft, and thrown into numerous folds, in the porpoise arranged in a very peculiar and definite manner—forming a series of prominent longitudinal ridges, each sending off short lateral ridges at right angles to itself, interdigitating with those sent off by the next longitudinal ridge. This particular arrangement is, however, not found in most other species. The opening between the first and second compartments is capable of considerable dilatation, but is guarded by a projecting plaited fringe of the mucous membrane. The remainder of the stomach (*d* to *f*) may be likened to the pyloric antrum of the ordinary mammals. It is elongated, cylindrical, intestiniform, with a smooth lining membrane, sharply bent upon itself, and terminating in a very small circular pyloric aperture (*f*). In the common porpoise, the commencement of this cavity is constricted off from the rest, forming a small globular sac (*d*). In most dolphins (as *Delphinus tursio*, *Globicephalus melas*, *Grampus griseus*, etc.) there are two such small sacs of very similar size and form, communicating by circular pylorus-like apertures, and in *Hyperoodon* the whole compartment is divided by a series of constrictions into as many as seven separate cavities, (b) which have been reckoned as so many distinct stomachs. Immediately beyond the pylorus the duodenum has a globular dilatation, as in the camels and some other ungulates, into the lower end of which the biliary duct enters.(c) This was looked upon by Hunter as the fifth stomach of the porpoise.

It is thus not difficult to see that the stomachs of all the different kinds of dolphins are formed on precisely the same principle, consisting of three principal divisions—1. A right or cardiac; 2. Middle or peptic; 3. Left or pyloric. The first two do not vary materially, but the differences which have been noted in different species are occasioned by the varying number of septal constrictions, more or less complete, of the third division.

It is interesting to observe that, as in the ruminants, the stomach undergoes a great change in the relative size of its cavities in the course of its development. In the very young

(a) "Untersuchungen über die Nordischen Wallthiere" (1849), p. 7.

(b) Eschricht, *op. cit.*, p. 40.

(c) In some dolphins (as *Globicephalus* and *Grampus*) the conjoined biliary and pancreatic ducts enter the narrow portion of the intestine some little distance beyond a partial septum at the termination of the dilatation, which might be mistaken for the true pylorus.

animal, nourished only by the parent's milk, the second cavity is actually larger than the first, and its upper aperture is in more direct connexion with the lower end of the œsophagus than in the adult.(d)

The intestinal canal is long and narrow; in the porpoise about fifteen times the length of the animal, and not obviously divided into small and large intestine, as there is no trace of cæcum. There is, however, a short portion which may be considered as the colon, distinguished from the rest by the characters of the mucous membrane. The whole canal is suspended on the edge of a continuous mesentery, without that definite disposition generally met with. Hunter says—"The duodenum does not pass behind the mesentery as in most animals of the class." The absorbent lining surface in the small intestine is vastly increased by prominent folds or ridges, formed as the valvulæ conniventes in man, but running longitudinally instead of transversely. These are covered with very small flattened and pointed villi. In the *Hyperoodon*, as first described by Hunter, and illustrated by several beautiful preparations in his collection, the mucous surface is increased by a totally different arrangement—"The inner coat, through nearly the whole track of the intestine, is thrown into large cells, and these again subdivided into smaller, the axis of which cells is not perpendicular to a transverse section of the intestine, but oblique, forming pouches with the mouths downwards, and acting almost like valves when anything is attempted to be passed in a contrary direction: they begin faintly in the duodenum, before it makes its quick turn, and terminate near the anus."(e)

In this animal, according to Eschricht, the intestinal canal is not more than three times the length of the body, its shortness being thus compensated by the vastly augmented extent of surface of its lining membrane. *Ziphius* agrees with its near ally *Hyperoodon* in the multiloculated character of the stomach, cellular arrangement of the lining membrane of the intestine, and absence of cæcum.(f) The last character appears to be common to all the toothed whales, unless *Platanista*, the singular fresh water dolphin of the Ganges, is an exception, as stated by Duvernoy.(g)

The liver is small and of a very simple compact figure, divided by a well-marked umbilical notch into two subequal lobes, but with no further subdivision; even the Spigelian and caudate lobes do not form distinct prominences. A gall-bladder is never present, but in many species the biliary duct is considerably dilated just before its termination in the intestine. It is joined by the duct of the pancreas, which is a solid elongated body.

The whalebone whales differ from the foregoing group in several respects. The absence of true teeth (except in an early embryonic condition), and the presence in the mouth of the so-called whalebone or baleen is one of their most characteristic features. The last-named structure results from the hardening or "cornification" of the exuberant epithelial covering of numerous transverse fimbriated ridges of the palatal mucous membrane, corresponding in situation with the ridges so often noticed among ordinary mammals, and especially developed in the ruminants. The immensely elongated palate of the true whales affords space on each side for the development of 300 or more of such ridges, each supporting its horny plate of triangular form, fraying out on the inner edge into hair-like fibres. In function these organs belong truly to the alimentary system. The whale feeds in the following manner:—As it swims through a shoal of fish or of smaller marine animals it opens its mouth, the cavity of which immediately fills with a large quantity of water and whatever may be floating in it. Then, partially closing the mouth and raising the huge soft tongue which forms the floor of the cavity, and which has been compared to a large feather-bed, the water is driven out through the meshes of the sieve or strainer formed by the baleen-plates on each side, and escapes between the lips, while the solid materials remain behind to be swallowed. The rorquals or fin-whales have but moderate-sized mouths and short whalebone, and they feed chiefly upon fish, such as herrings; but the great Greenland whale, which lives only on minute crustacea and pteropods, has by far the largest mouth—equalling, in fact, the cavity of the thorax and abdomen put together, as may be seen in the mounted skeleton in the Museum. This is evidently in relation to the great quantity of water it has to take in and pass through the strainer in order to get sufficient nourishment from such small objects. As is well known, the œsophagus of this animal, unlike that of the cetacea generally, is a very narrow tube.

The stomach of the whalebone whales does not differ in principle from that of the toothed whales, consisting of a cardiac, middle, and pyloric division, the latter being subdivided into several sacs; but the intestinal canal presents the marked contrast of being provided with a short conical cæcum, and also in being arranged in the definite manner common to most terrestrial mammals. The duodenum takes the usual course beneath the root of the mesentery, and the colon commences on the right side, and forms an arch with a transverse and descending portion. In this, as in many other points of their structure (as the possession of olfactory organs, and more complete rudiments of the posterior limbs), they depart less from the ordinary mammalian type than do the members of the other section of the order.

The lining membrane of the alimentary canal has always some arrangement for increasing its surface, either by transverse or longitudinal folds. These attain their highest degree of complication in the long-finned or humpbacked whale (*Megaptera*), where there is a cellular structure something like that of *Hyperoodon*. As in the other section, there is no gall-bladder.(h)

(d) See Rapp, "Die Cetaceen Zoologisch-anatomisch dargestelt," 1837, Plate vi.; W. Turner, "Anatomy of the Pilot-Whale"—*Globicephalus melas*—(*Journal of Anatomy*, vol. ii., 1868, p. 73—Figure of stomach of sucking animal).

(e) "Observations on the Structure and Œconomy of Whales" (*Philosophical Transactions*, 1787).

(f) Burmeister, "Anales del Museo publico de Buenos Aires," vol. i.

(g) Cuvier's "Leçons," 2me edit., tome iv., 2me partie, p. 268.

(h) See Eschricht, *op. cit.*; Hunter, *op. cit.*; Carte and Macalister, "On the Anatomy of *Balænoptera rostrata*" (*Philosophical Transactions*, 1867).

ORIGINAL COMMUNICATIONS.

NOTES ON SURGERY IN ROME;

WITH AN ACCOUNT OF SIGNOR CORRADI'S INSTRUMENTS FOR LITHOTOMY.

By J. FAYRER, M.D., C.S.I.,
Hon. Physician to the Queen.

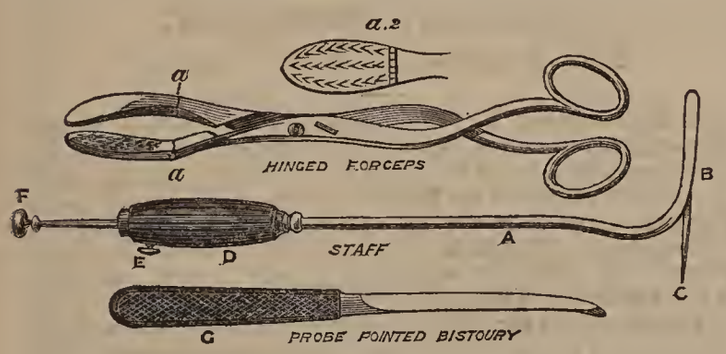
During a recent visit to Rome, in returning from India, I had the advantage of becoming acquainted with Cavaliere Giuseppe Corradi, the eminent Professor of Clinical Surgery in the University of that city, who not only permitted me to be present during his clinical teaching in the wards of San Giacomo, but most kindly showed me many cases of interest, and explained in detail the various instruments which he has invented for simplifying the operations of lithotomy, vesico-vaginal fistula, and stricture of the urethra. I was as much struck with the mechanical skill and simplicity with which these instruments are designed as I was by the impressive mode in which as sound, scientific, and at the same time thoroughly practical, surgical and pathological instruction as I have almost ever heard was imparted. I have heard it remarked that Italian surgery, in the earlier part of this century, and even now, has not kept pace with that of other European nations; but I am convinced that the idea would be removed by a visit to the Clinical School of Rome, and I have every reason to believe of the other great schools of Medicine in Italy; for most assuredly, whenever I had an opportunity of visiting the hospitals, whether in Naples under the guidance of Dr. Tenore, or of Rome under that of Dr. Pantaleone—first of Italian physicians as of patriots—I was much impressed not only with the deep interest manifested in the welfare and advancement of hospitals, and the progress of medical education, but in the sound medical and surgical teaching that prevailed. Whatever might have been said of the state of Italian surgery twenty years ago, no one with justice can say it is in the background now.

One suggestion I ventured to make in the interest of patients and surgeons was the more free use of anæsthetics. Chloroform does not apparently find favour in the eyes of the Italian surgeons whom I had the pleasure of seeing; ether, I believe, is preferred, but that is used sparingly.

Among other interesting cases under treatment in the clinical wards of San Giacomo, the great Surgical Hospital and the Clinical School of the University of Rome, I was much interested in one of popliteal aneurism, in which Professor Corradi ligatured the femoral artery in Scarpa's triangle. After having completed the usual steps of the operation for laying bare the sheath of the vessels, he proceeded to lay open the sheath to a greater extent than usual, and his object in

doing so immediately became apparent when he applied two ligatures and carefully divided the artery between them, the divided ends separating to a considerable extent. This, he observed, took off tension, diminishing the probability of any unfavourable results, such as ulceration, hæmorrhage, or suppurative inflammations; and he found, also, that it was attended with much success. A clinical lecture at the bedside on a case of incarcerated scrotal hernia was most interesting and instructive. He placed the matter in the clearest light to a large class of students, who listened with the most evident interest to what was so clearly and scientifically explained to them in the beautiful language of their country. Signor Corradi afterwards explained to me in detail the several instruments to which I have alluded, with which he has operated with great success. With reference to those for lithotomy he remarked that, though to an experienced operator and anatomist the ordinary lateral operation was all that could be desired, yet to many who from lack of opportunity for sufficient practice of the operation on the living had not attained full confidence in their own powers, his instruments, from the certainty with which they enable the bladder to be reached, possess advantages which are of great importance.

The accompanying sketch of the instruments, with his own description of the mode of using them, may be interesting:—



"At first sight it might be taken for an ordinary catheter—indeed, it has the shape of one, and at its curved end has a large and deep groove like that of a simple catheter (staff). But at the back of this groove is concealed a 'dart' equally grooved, which on introducing the catheter into the bladder has its point towards the perineum. Its heel reaches to the vesical end of the catheter, and it is surmounted by a T-shaped knob which goes into the terminal groove of a stem. This stem traverses the whole instrument and terminates at the button F, which is placed on the handle. On drawing the button, and with it the stem, the 'dart' is pushed horizontally out of the groove of the catheter: it traverses the membranous urethra and the whole of the perineum. When the 'dart' is almost altogether out of the groove of the catheter it stops, because the stem meets with a 'catch' in the handle. The dart is firmly fixed in this position, as it is seen in the figure. If it be desirable to push back the 'dart' to the place whence it came, the little button E is pressed, and the knob F is pushed till it is brought back just above the handle. But if it be desirable to withdraw the 'dart' from the catheter, the little button E is pressed in the same way, and another portion of the stem is drawn out, which causes the 'dart' to fall out immediately. The catheter is thus reduced to its first simplicity.

"The anatomical and topographical knowledge necessary for performing this operation, the exact knowledge of the instrument, and the touch of the region of the perineum and rectum, give the exact particulars for finding within a millimetre the place in the urethra and perineum which ought to be pierced by the 'dart.'

"Nevertheless, there are some surgeons who have not mechanical talent, nor elementary knowledge of anatomy; and as these men practise in the country and in the provinces, they dare not proceed to the extraction of a stone from the bladder.

"However, having the lively desire to see this operation become common, I have provided my catheter with an index, which marks exactly where the 'dart' will come out. This index is a stem, slightly bent below, which ends at one extremity in a T-shaped crescent, and in a little ring at the other. By this ring it may be hung on the little knob, E, of the catheter. The stem descends as far as the perineum; and the crescent, which is turned with its concavity towards the coccyx, presses upon and stretches the skin conveniently, and, forming a grip with the catheter, compresses the whole thickness of the perineum. The 'dart' will be sure to come out beneath the arch of the crescent.

"May I now speak of the advantages of my staff? I believe them so evident that I do not hesitate to give them up to criticism. In the meantime I shall explain the manner of using it.

"I place the patient in the usual position. I entrust the catheter to the assistant who supports the scrotum, and, having examined the state of the prostate, of the perineum, and of the rectum, I place the straight portion of the catheter in the direction of the coccygeo-pubic line. The 'dart' coming forth pierces the membranous urethra and the perineum about eighteen lines from the margin of the anus. If, on account of an increased volume of the prostate, or of the stone, or the increased depth of the third curve of the intestine, it appears necessary to begin the incision higher up, it is only necessary to incline the handle of the catheter a little towards the belly of the patient, and the 'dart' will come forth at a point higher up. I remember that the membranous urethra is partly covered by the bulb, consequently in this last position it is easy to injure the substance of the bulb. However, this inconvenience may be avoided by turning the catheter a little on its own axis. In the case of children, where narrowness of space obliges one to make use of a higher incision without fear of injuring the bulb—for it can be said that at that age it is still rudimentary—this position of the catheter will be useful. Having, then, placed the catheter in a direction appropriate to the case, the assistant is told to pull the knob F, and if it is desirable to have the left hand free, the catheter, already placed in the most convenient direction, is entrusted to the assistant. Then, with the left hand applied to the perineum, the skin is held well stretched, and the right hand, already armed with a straight bistoury, long, and furnished with a knob, the button, F, is pulled, and the 'dart' escapes through the perineum. The stream of urine which comes through its groove encourages the operator much, who, on introducing the bistoury in the direction of the groove of the catheter and of the dart, makes the incision in the desired direction. It is seen that one can easily guide every kind of lithotome into the bladder by means of the groove, but for my own part I prefer the knobbed bistoury. In using the common staff one cannot be sure of cutting as deeply as one would wish, with no matter what lithotome—which arises from the movableness of the parts of the perineum which have to be cut. But with my catheter these parts are held fixed in such a way that one is sure of cutting them within a milimetre of the right place. The further the handle of the bistoury goes from the point of the 'dart' the longer will the external incision be, and will be gradually narrower towards the interior of the prostate, so as to form a true cone. In this way it is impossible to injure the neck of the bladder. But if it be necessary to cut it for the extraction of a very large calculus, that would be easy, by resting the heel of the knife upon the extremity of the dart and making the button go out of the vesical end of the catheter precisely as Vacca directed when he described his median lithotomy. But I believe it to be a great mistake always to cut the bladder. I hold that the difficulty of extracting large stones arises more from the prostate, and the aponeuroses and ligaments of the perineum, than from the neck of the bladder. Consequently I cut the prostate in the whole substance at its apex, not knowing any other limit to be guided by than the angle between that organ and the neck of the bladder. I cut all the layers of the perineum with an S-shaped incision which I begin on the right side of the bulb. I continue it on the raphé, and I bring it as far as the middle point between the anus and the ischium. By this incision, as I have several times shown, I obtain the greatest possible opening, much larger still than that obtained by the bilateral and quadrilateral cut; and, after having made the incision, the wound resumes its linear form, and heals quickly. With this incision I have extracted a calculus which was twenty-four centimetres in circumference, and on the twenty-second day the cicatrix was complete. I ought to add that, this means failing, instead of cutting the bladder I prefer to follow a very ancient practice reproduced in our days as if modern—that is to say, I prefer to take a lithotrite, and to join lithotomy to lithotrity. After having made the incision, I introduce either the finger or the knob into the bladder, which serves me as a guide for the forceps with which I extract the calculus. This moment of the operation is sometimes difficult—perhaps because the bladder is tightly stretched upon the stone, perhaps because the trigone is very pronounced (either because of the tension of the middle perineal aponeurosis or of the size of the prostate); perhaps, in short, because of the size and the shape

of the calculus. In a similar case one must make use of forceps of different shapes—straight, curved, jointed.

"It seems to me that a pair of hinged forceps, as in the figure, can be made some use of in a similar case. When this forceps has penetrated into the bladder—if the limbs are to be widely open because of a large calculus—the resistance that they encounter in the coats of the bladder compels them to come together; and, instead of diverging as they were, they become parallel to each other. There result from this two advantages: the first is that the ends of the blades are much less distant from each other—that may be useful in a bladder spasmodically contracted; secondly, the two blades fashioned in this manner glide better between the coat of the bladder and the calculus, catching hold of it more easily. If the trigone of the bladder is deep, one of the blades will be directed above and the other below, and this, by bending, will descend upon the trigone, and will easily pass beneath the stone. In this way one forceps alone will act as a straight and as a curved one, will thus avoid the introduction of other forceps, and will help to shorten the operation.

"Yet another word upon the catheter with the dart. When for the first time I made a trial upon a dead body, after having made the incision, I was altogether astonished at seeing the prostate and the incision in it almost beneath the skin. On introducing my finger, I found the neck of the bladder at a distance of four centimetres, and, having pushed it farther off, I was better able to examine the bladder in all its cavity. Then I remembered that the catheter with the dart possessed another valuable advantage,—that of fixing the prostate, the neck of the bladder, and all the layers of the perineum in their relative positions in the normal condition. Often in performing lithotomy one can scarcely reach the neck of the bladder with the end of the finger. One concludes from it that the perineum is high, which is contrary to the anatomical fact which we learn, that the neck of the bladder is generally at the distance of four or five centimetres from the cutaneous surface. The explanation that some persons give of the abundance of the adipose layer and of the volume of the prostate is not exact, for one very often sees patients having the perineum high who are very thin, and have the prostate normal. In these cases to what can the height of the perineum be attributed at the moment of the operation? Evidently to the displacement of the deep layers of the perineum, which is the reason why the prostate and the neck of the bladder can sink into the cavity of the pelvis and go farther from the cutaneous surface and the superficial layers, which are less stretched and not so deep. Thus the catheter with the 'dart' is precisely opposed to this displacement of the parts, and can always reach the cavity of the bladder. What operator is there who will not appreciate this advantage? Let him practise lithotomy, making use of the pointed bistoury only, as I have always done myself in operations of lithotomy done in the hospital and in my private practice; let him attribute little value to the lengthening of the groove of the catheter as far as outside of the perineum; let him estimate lightly the facility, the certainty, the quickness of the operation performed with the catheter with the dart—but he will not be able to deny its utility in the way of holding and fixing the parts of which the perineum is composed, the prostate, and the neck of the bladder in the relative positions of their normal condition. Thanks to it, the incisions will be more regular, prolonged as far as one wishes, even to the millimetre; thanks to it, one will find the neck and cavity of the bladder at the least distance from the cutaneous surface. I had already obtained these results in the numerous experiments which I had made on dead bodies, aided by Dr. Marconi, who has always had the kindness to dissect and examine with me the anatomical part. The intestine and the bulb of the urethra have always been respected; in the same way that we have always found untouched the neck of the bladder and the triangle that exists between this latter and the prostate. For a stronger reason, the venous plexus of the prostate has always been respected. The very regular incision of the prostate, the perineum, and the membranous urethra presented a perfect cone, with the apex on the neck of the bladder. These happy results have for some time encouraged me to publish this memoir, but I desired to have first the sanction of practice; and when my excellent friend Dr. C. Palladini, physician at Montopoli, who knew the lively desire that I evinced, proposed to me a lithotomy upon a very little child, I accepted so much the more willingly because upon a child I ought to overcome all difficulties. I accepted, then, this generous offer, and on Wednesday, July 6, 1870, I went to Montopoli, where I found two other surgeons besides my two dear colleagues, Dr. Gustave Colosi and C. Vannieri, who were good enough to assist at the operation. The little patient was born on November 18, 1866, and about the month of April, 1869, he began to feel the first pains in the urinary tubes; he had always enjoyed good health. The restlessness of the child at first rendered the introduction of the catheter difficult; but having stretched him upon a bed we were able to introduce it very easily. After having placed the child in position—that is to say, upon the knees of a man who held his arms between the thighs of the patient—I introduced the catheter; then, having drawn the button, F, the dart went out at two centimetres from the anal circle, where the intestine descended in prolapse. I introduced the bistoury into the groove of the 'dart,' and as far as the end of the catheter, cutting in a single cut upon the raphé as far as the anus. The fixity of the parts, the nearness of the neck of the bladder to the surface, and also the small size of the calculus, suggested to me the idea of thrusting a finger into the intestine, and pressing the stone across its wall and that of the bladder, when it came out and fell into my other hand.

"The operation lasted less than one minute. The child having been placed on the bed soon slept quietly. The sleep which follows after great operations to comfort the patient is the expression of Nature, who declares herself satisfied."

PUERPERAL MORTALITY.

By F. R. HOGG, Royal Horse Artillery.

Miss Nightingale, in an interesting book relating to this subject, states that the death-rate calculated per thousand for several years amounted to 10·9 in the City of London Lying-in Institution, to 14·3 at the Endell-street Hospital, 25·3 at Queen Charlotte's, and 26 at the Rotunda Hospital, Dublin. In eight military lying-in hospitals, out of 5575 deliveries, 51 deaths, or 8·8 per 1000. Abroad the mortality is far higher—for instance, in one hospital at Vienna 86, in another at St. Petersburg 90, at Strasburg 140 per 1000, and in one establishment in Paris, where during ten years 32 deliveries took place, 15 women died. The general deduction of these statistics is that throughout Europe 34 per thousand represents the average mortality in lying-in hospitals.

On the other hand, Miss Nightingale states that the deaths per thousand of home deliveries run 3·9 in London, 5 in Paris, 5 in Edinburgh, 6 at St. Petersburg, 14 at Berlin.

Dr. Evory Kennedy recently stated that the Rotunda Hospital, Dublin, has been haunted with puerperal fever ninety-three out of 111 years, and the deaths latterly average 1 in 33. From personal inquiries, always most kindly and candidly responded to, the following brief notes are compiled:

At the British Lying-in Hospital, Endell-street, St. Giles, rebuilt in 1849, the admissions last year amounted to 226; many of the patients in feeble and indifferent health, and difficult, hazardous cases courted, yet the mortality did not exceed 6—from syncope, pleurisy, puerperal mania, hæmorrhage.

At Queen Charlotte's, Paddington, the annual cleaning was going on, the wards empty. The deliveries in 1871 were 452; the mortality not published—I fancy about 6. Here they admit single women—sometimes girls of 14—who have been drugging themselves, or been drugged (ineffectually), to induce abortion. What with shame and physical prostration, half dead at delivery, they become maniacs, or develope fever in their debilitated constitution rapidly assuming a typhoid type, and when once such cases run down-hill you cannot put the drag on.

At the City of London Hospital, instituted in 1750, the present building having been occupied just 100 years, more than 50,000 deliveries have taken place. Early in 1870 they had a turn of bad luck. Out of 384 deliveries 13 women died, fever having broken out. The building was closed, fumigated, and painted, old furniture destroyed, new iron bedsteads without curtains substituted—palliasses and hair matresses took the place of old feather beds. Wonderful it is how fond people are of four-posters and feather pillows, which harbour bugs and the latent germs of infectious fever; but women will have them. However—the drains double-trapped and the cess-pools filled with concrete—all involved a general outlay of £400. In 1871, out of 460 deliveries only 4 died. The patients are married, and are bound to come in clean. The wards are very neat; there is perfect quiet, you could hear a pin drop. The only objection, to my mind, was the fact of patients getting up on the seventh instead of the tenth day. It is a magnificent institution, and one can easily understand the

contrast women must draw between their miserable homes and such a refuge in their hours of suffering.

As an impartial critic, the next visit was to the York-road Hospital, Lambeth, which issues no report of medical interest. Last year, out of 375 deliveries 1 death (albuminuria) took place; but in three years only 2 women (out of 1000 confined) died, and for six years they have escaped puerperal fever. The wards are emptied every three weeks. Each bed—made of cocoa-nut fibre—is lime-baked after occupation. The ventilation is good, the kitchen fit for a duke, and the patients are well fed. When death takes place the body is immediately removed by the friends or to a mortuary; no post-mortems take place; and the medical officers are most careful not to expose themselves to the risk of conveying contagion.

At the City-road and Endell-street there are separate delivery wards. At all these places the women wear their own clothes.

Through the courtesy of the medical officers in charge, information was received that out of 832 deliveries in 1871 in eight military lying-in-hospitals, three women died—one at Aldershot, out of 358; another at Colchester, out of 67; and the third at Portsmouth, out of 63. At Woolwich, during ten years, the number of deliveries from 1862 to September, 1872, ran—23, 80, 124, 140, 116, 131, 106, 96, 121, 135, 104: total, 1177; the corresponding deaths—2, 0, 0, 3, 1, 2, 2, 1, 0, 0: total, 11. Out of the last 380 deliveries one death took place—that of a woman removed in a lingering labour from a solitary cottage a mile distant, without a creature to help. The child (stillborn) putrid, the placenta diseased; fatal bilious fever supervening.

The hospital mainly consists of two wards facing each other—midwifery cases in one; general in the other—the entrance-hall separating. These general cases, during the period, amounted to 600 women and 400 children admitted with phthisis, bronchitis, pneumonia, diarrhœa, dysentery, rheumatism, burns, scalds, fractures, ulcers—in short, most maladies excepting variola and scarlet fever. The puerperal cases died either from fever spontaneously arising from hæmorrhage, syncope, exhaustion, embolism, albuminuria, dropsy; from puerperal peritonitis, resulting from cold or instrumental delivery; from fever generated during the discomfort of a sea voyage; and from malignant fever traced to half-caste women.

In a lecture on sick children the reader, skipping the nonsense (which I wish had been omitted), will notice certain points peculiar to soldiers' wives, especially the want of a *crèche* in each garrison; at present many a poor woman is confined under most miserable circumstances, unable to come into hospital, and no one to look after the children. Respecting home deliveries, out of 1540 inquiries 55 women state their mothers died in childbirth, figuring under different names in the Registrar-General's returns, whence erroneous theoretical deductions.

The temptation is strong to say a great deal, but, not to trespass too far on space required for others, to sum up in a few words—cleanliness, cubical space, good nursing, and constant scrubbing will keep off fever; but although he cannot help visiting infectious fevers, the accoucheur should avoid post-mortems. General cases, especially of children, should be very reluctantly admitted into lying-in hospitals. Calomel, opium, turpentine, carbolic acid, beef-tea, ice, and champagne are my weapons. Chlorate of potash useless; chloral, and indeed quinine, will drive some women into mania. Through the kindness of the Director-General, being permitted the valuable opportunity of the Netley course prior to going abroad, before dropping the general practitioner I take this farewell opportunity of gratefully thanking the editors of medical journals for the encouraging insertion of professional contributions.

Note.—Case at Colchester died from phthisis.

THE Government at Constantinople have just determined that instruction in the Imperial School of Medicine shall be given in Turkish, and have removed all professors who cannot speak the national language. The Turks say they started their school as a national school, and not as a foreign one. The authorities have therefore determined to run the risk of the change, and to attempt to get for this school, as for others, books and teaching in the vernacular. They maintain that, as Medicine has for ages been taught in Arabic, it can be taught in Turkish. Several French-speaking professors have spent many years in the country, and have not chosen to acquire the language.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE.

OPERATIONS ON SATURDAY, OCTOBER 5.

Necrosis of the Upper End of the Humerus following Amputation of the Arm for Injury—Removal of Dead Bone.

(Under the care of Mr. WOOD.)

THE patient was a lad, about 13 years of age, who had met with a machine accident in August last, which caused a severe compound fracture of the humerus necessitating primary amputation about the juncture of the upper and middle thirds. He recovered well from the operation, but one or two sinuses were left at the inner side of the cicatrix, along which a probe could be passed down to dead bone. Mr. Wood therefore made an incision through these, and after detaching the soft parts with the scalpel he was enabled to withdraw a piece of bone nearly two inches in length, and representing the whole thickness of the shaft.

In his remarks upon the case Mr. Wood observed that it was not at all an uncommon thing to get necrosis following an amputation for a machine accident. In such cases as in gunshot accidents the bone is often cracked or fissured some distance higher than the point sawn through in the operation, and when this happens the injured parts almost invariably necrose.

Before commencing the operation he had thought it not at all unlikely that the head of the bone, and consequently the joint, might be affected, but, though the necrosed portion extended to the upper end of the shaft, it had separated at the epiphysial cartilage so as to leave the joint intact. A good deal of new bone had been thrown out around the upper end of the dead portion, which felt very rough to the finger. Tactile sensation is not accurate enough to be relied upon to distinguish new-formed and growing bone from dead bone, and a good plan, when there is any doubt, is to snip off a small fragment with the bone-nippers for inspection. This was done, and the fragment was seen to be healthy and growing by the presence of particles of cartilage at its base. Some of this growing bone was, however, removed, as it was found spreading out towards the position of the brachial artery and brachial plexus, and Mr. Wood thought it a wise precaution to remove all that was likely to excite inflammation or irritation of these structures.

Fistulæ in Ano—Operation by Division of Sphincter Ani in three places.

(Under the care of Mr. HENRY SMITH.)

The patient was a man somewhat past the middle age. He had been suffering from the disease some years. Mr. Smith pointed out that it was a very severe case of fistula in ano, and just one of those which are often associated with a stricture of the rectum. There was, however, no stricture to be found upon very careful examination. There were three sinuses—two on the left side, which opened just within the external sphincter, and one on the right side, along which the probe could be passed nearly its whole length. The sphincter was divided at each point by passing a curved blunt-pointed bistoury along the sinus from without, then pushing it through the mucous membrane of the gut to the index finger of the left hand, and finally withdrawing the finger with the knife pressing upon the palmar surface of its extremity, making the latter cut its way out to the surface.

Mr. Smith remarked that it was now well known not to be necessary to divide all the tissues from the highest point of the fistula as long as the sphincter of the bowel was divided by an incision from the course of the fistula. He said, too, that this case illustrated what he is always in the habit of asserting—in opposition to the majority of authorities on the subject—viz., that the internal aperture of a fistula in ano is very frequently just within the external sphincter, and not the internal muscle. He further pointed out the necessity of carefully examining the parts in all cases of fistula, as in the one before him the sinus on the right side of the anus had thinly scabbed over, so as perhaps to escape the notice of an inexperienced observer, but the eye of a practised surgeon at once detected the presence of a sinuous tract beneath this appearance. He regretted having had to make three divisions of the sphincter ani, as this free division would of course very

considerably weaken the muscle for a time, but experience had taught him that it would regain its power after some months. It is Mr. Smith's custom to give an opium suppository after the operation, but not to apply any bandage and pad to the perineum. There is generally a slight amount of bleeding after the operation, and it is better, Mr. Smith thinks, to allow the blood to escape than to retain it in the rectum and parts about the wounds by any such mode of dressing.

Sebaceous Cyst in the Neck of two years' growth—Removal.

(Under the care of Mr. HENRY SMITH.)

The tumour was of the size of a small orange, and projected out from the surface over and anterior to the sterno-mastoid muscle below the angle of the jaw. The skin covering it was slightly red but not inflamed or œdematous. Mr. Smith impressed upon his hearers the importance of caution in dealing with such "swellings"; they should never pass too dogmatic an opinion as to their nature. It is an easy thing to mistake a tense cyst for a solid tumour, but he could go as far as to say that the swelling in question was one of a fluid nature. Whether that fluid was pus, and the swelling a chronic abscess, or whether it was of a serous or other character, and the swelling a cyst, he would not positively say. He was inclined to think it a cyst. This it turned out to be, for upon puncturing with a scalpel some milky fluid with a cheesy material escaped. The entire contents were then evacuated through a larger opening, and the whole of the cyst-wall subsequently dissected away. It was found to occupy, as such cysts usually do, quite a superficial position.

Cystic Mammary Gland—Removal after Tapping.

(Under the care of Mr. HENRY SMITH.)

This was an interesting case in a thin, spare woman of advanced middle age. The tumour was hard and prominent, and seated to the inner and upper part of the left mammary gland. The same caution was shown in dealing with this as with the last case. A quantity of pale straw-coloured fluid escaped upon puncturing the swelling, and then the cyst-wall was dissected away from the surrounding gland-tissue.

Mr. Smith also operated upon a patient for necrosis.

LONDON HOSPITAL.

HEREDITARY SYPHILIS — ARRESTED DEVELOPMENT — ENLARGED LYMPHATIC GLANDS IN VARIOUS PARTS OF THE BODY—GANGRENE OF THE TIP OF THE NOSE.

(Under the care of Mr. RIVINGTON.)

E. D., AGED 16, was admitted into the London Hospital on December 20, 1871. The cause of her admission was a presumed frost-bite at the tip of the nose, which exhibited a black spot of the size of a sixpence. The margin of each auricle was of a dusky colour. On further examination it was found that the lymphatic glands in the neck were very much enlarged. The mass on the right side was larger than that on the left; on both sides a chain of enlarged glands extended from the ear to the clavicle. Enlarged glands were also found in both axillæ and in both groins, being in each instance more considerable on the right side. At the lower part of the abdomen was an elephantoid mass of hypertrophied skin and areolar tissue. The labia were slightly affected.

In the neck the glands individually appeared about the size of marbles, hard and movable. They had been noticed since the age of 2 years. Before that date the skin of the neck had ulcerated, and still exhibited scars. The swelling was reported to have been much greater in the neck four years ago than it was on her admission. The commencement of the affection of the nose was attributed to a fall twelve months before. The skin was scarcely broken, but it remained blue for some time as if from frost-bite. The skin covering the rim of the auricle presented a similar appearance. During the summer these parts recovered their natural aspect. On the return of the cold weather the sore on the nose broke out.

The patient was so dwarfed and stunted in her development that she looked more like a girl of 6 than 16 years of age. Her complexion was pale and earthy; her physiognomy suggestive of hereditary syphilis; her forehead prominent at the frontal eminences, with marked depressions beneath them; the bridge of the nose was sunken; there were scars at the angles of the mouth, and the central incisor teeth were dwarfed, discoloured, and notched; her fingers were clubbed; hairs were absent from the pubes and armpits, and the mammæ were undeveloped; she had never menstruated; she had suffered from inflamed eyes, of which affection traces remained in the form of slight corneal opacities; she was reported to have been "blind of the right eye" for seven years; she had not been and was not deaf.

The patient had a slight attack of bronchitis while she was in the Hospital. Dr. Sutton examined her lungs with the following results:—Dulness existed over both posterior apices, and also at one spot on the posterior surface of the left lung. There was marked tubular breathing; it was more drawn in its character than is usually heard in this spot, which, together with the dulness, was in favour of there being some pressure on the left bronchus. There was also a little large crepitation scattered here and there in the upper part of the lung. The lower part of the chest on both sides was somewhat hyperresonant. The superficial veins over the chest and abdomen were distended and dipped down on a line with the first and second ribs. The jugular was markedly distended on the left side, moderately on the right, without regurgitant pulsation. A systolic murmur was heard distinctly over both sterno-clavicular joints, loudest over the second costal cartilage, and was more loudly conducted towards the right than the left clavicle; the murmur was very harsh. There was no murmur at the apex. The second sound was much exaggerated.

There was very marked dulness over the upper half of the sternum, and about half an inch to the left of it, whilst over the inner half of the chest on the right side there was defective resonance with long-drawn inspiration, accompanied by large crepitant râles.

The preceding physical signs were considered to be indicative of some pressure upon the large vessels and root of the heart, and on the vena cava superior and the bronchial tubes. In all probability the lymphatic glands in the abdomen, including the mesenteric glands, were enlarged.

The diagnosis of hereditary syphilis was supported by the following family history:—Her father had been married twice, and his second wife stated that he had not married his first wife till a fortnight before the birth of his first child, now a girl of 22. This girl was seen at the Hospital, and was found to be healthy and well-developed. Soon after the birth of the first child the father contracted syphilis and gave it to his wife. The second child, a female, died in infancy, as also the third, a male child. The patient was the fourth and last child of the first series. The second wife had two children, both of whom died in a few hours. She suffered from an "ulcerated womb" soon after marriage, and she also had "lumps on the top of her head."

The foregoing case is of some interest, as general enlargement of the lymphatic glands in hereditary syphilis is an affection scarcely touched upon in professed treatises on the subject.

EDINBURGH ROYAL INFIRMARY.

CASES OF MALIGNANT PERITONITIS.

(Under the care of Dr. J. MATTHEWS DUNCAN.)

[Reported by Dr. J. R. HARDIE.]

J. K., AGED 42, married, admitted into Ward XVI. on October 29, 1866. Married her first husband twenty years ago, and has never been well since the birth of her first child, now a young man, 19 years old. Was in the Infirmary for prolapsus uteri and menorrhagia eight years ago. Had no more confinements till nine months ago, when, in March last, she aborted at the third month. After this abortion she had menorrhagia for four months, but has suffered from amenorrhœa for the last five months. Since the catamenia ceased her abdomen has been gradually swelling.

Physical Examination.—P.H.: Belly much swollen and irregular in shape; dulness absolute beneath a line extending from the middle of right Poupart's ligament to region of spleen, passing through the umbilicus. The superficial veins of the abdomen are enlarged. Fluctuation at the lower part of the region above described. P.V.: There is a small polypus about the size of the point of the little finger in the os uteri. The cervix occupies nearly its normal position. Above it nothing can be felt but a mass of induration, occupying the left posterior quarter of the brim of the pelvis, which makes the roof of pelvis feel very tense. Measurement round by umbilicus 53½ inches.

November 28.—An examination to-day reveals the following differences from that of last examination:—P.H.: The whole left inferior half of the belly is now resonant on percussion. There is absolute dulness over the right inferior half of the belly, over a space enclosed within a line extending upwards

from the symphisis pubis to within an inch and a half of the umbilicus, and then passing to the crest of the right ilium. There is no other change in the symptoms further than that the tenderness over the abdomen is increased.

December 6.—Ordered a simple diuretic. The right iliac region is found to be tympanitic.

11th.—Feels much better, and able to sit.

15th.—Since the diuretics have been stopped the abdomen has enlarged, and now measures thirty-nine inches. Diuretics recommenced.

20th.—Before operating to-day, an examination was made by percussion, etc., which indicated absolute dulness over the entire lower part of the abdomen up to a line drawn transversely three inches below the umbilicus. Dr. Gillespie then dissected down on the peritoneum, and opened into the cavity. At first there came out several small bodies, varying in size from that of a pea to that of an almond, and of a pearly-white colour. Several of these also came away during the evacuation of the fluid contents, and sometimes plugged up the canula, and even the opening itself. The fluid drawn off was of a bright-red colour and measured 130 ounces. Passing the finger into the wound after the fluid had ceased running, a great mass of apparently similar substance could be felt occupying the cavity. The area of dulness after the operation was much the same as previously.

21st.—Passed a comfortable night; no pain except a little on right side.

22nd.—The bandage and strapping were removed to-day. The wound showed no signs of healing; the skin even moved freely on the subcutaneous tissue. A piece of lint dipped in spirits and warm water was then applied and retained on the wound with plaster.

24th.—Much the same. The wound is to be dressed with red lotion.

January 9, 1867.—Patient has been much easier for the last few days; complains of severe pain in the back whenever she attempts to move herself; her appetite is also pretty good. Dr. Duncan tapped the abdomen, and took away seventy ounces of a reddish-coloured fluid, similar to the former, but none of the bodies which before were expelled at the last tapping.

10th.—Severe pain in abdomen; pain in the head. Pulse small, weak, and irregular; 120 to 140. These symptoms continued, along with some delirium; evidently sinking till 6 p.m., when she died. Opium and warm fomentations were used, but without doing good.

12th.—*Post-mortem.*—The abdomen was distended with fluid (reddish-yellow serum), which, on laying open the cavity, escaped along with numerous rounded cancerous nodules floating in it. The peritoneum was everywhere studded with cancerous masses, varying in size from that of a pin's head to a small orange, single and also grouped into bunches, and of a milk-white to a deep-red colour. Some of the latter resembled hæmatoid cancer. The great omentum, as well as the small, was almost entirely converted into these cancerous masses, so as scarcely to be recognised. The under surface of the diaphragm was also quite completely covered, and on the surface of the liver and spleen were some outgrowths. In the substance of the liver were numerous nodules of soft cancer. The mesenteric glands were everywhere enlarged and cancerous. In the pelvis there was a compound tumour formed by cancer of the uterus, of both ovaries, the lymphatic glands, and of the peritoneum of the part; each ovary was fully the size of a man's fist. The cancer infiltrated the uterus, but the cervix and its os were entirely free from it, the disease having extended to the fundus from neighbouring parts. The substance of the diaphragm was cancerous, and on the upper surface was a dark, fungating, cancerous nodule connected with a similar growth from the diaphragmatic pleura of left lung.

Mrs. D., who is 53 years of age, has had five children—the last fourteen years ago—and two miscarriages; was admitted to Ward XVI. on April 3, 1871, complaining of swelling of, and a painful feeling of tightness over, her belly. Until the beginning of May last the patient enjoyed robust health; at that time she began to feel languid and weak, and not so able for work as before, but had no special complaint up to last February, when she first observed the swelling in her abdomen. This has gone on increasing ever since, pain accompanying it and increasing with its growth. The abdomen measures forty inches round by the umbilicus. Urine scanty, high-coloured; specific gravity, 1028; contains no albumen. On palpation the abdomen is found to be firm and tensely elastic. Fluctuation is to be seen all over the belly, but it cannot be felt by the hands when applied in the usual manner. On percussion, dull and resonant patches are observed to be scattered irregularly over the surface of the swollen abdomen. In the mesial line the only absolute dulness begins an inch below the umbilicus, and extends to the pubis. To the right of the dull part of this line there is an irregular mass of dulness. Elsewhere there are patches of comparative dulness on superficial percussion. On examination per vaginam nothing is to be made out. Pulse 88; temperature 99°. Ordered one-tenth of a grain of arseniate of iron thrice daily, and twenty drops of tincture of opium when pain is violent.

April 13.—Pulse 108, having gradually increased since admission; temperature 100°; respirations 34 per minute; tongue dry, and patient complains of thirst; she perspires much at night, and suffers from pain in the right iliac region. The abdomen now measures forty-three inches; over its surface are scattered numerous sudamina. Requires forty minims of tincture of opium to procure relief from pain, and sleep.

14th.—Feet and legs are observed to be œdematous.

20th.—Œdema of legs has increased. A papular eruption has made its appearance on the arms.

21st.—Rash spread over back and chest. Pulse 114; temperature 99°.

23rd.—Morning: Pulse 128; temperature 99°. Evening: Pulse 100; temperature 99·3°.

24th.—Morning: Pulse 116; temperature 99°. Evening: Pulse 110; temperature 99·4°. Rash of a dull-red colour. Patient feels very weak.

25th.—Morning: Pulse 120; temperature 99°. Evening: Pulse 116; temperature 98·8°.

26th.—Morning: Pulse 120; temperature 99·2°. Evening: Pulse 120; temperature 100°.

27th.—Morning: Pulse 112; temperature 98°. Evening: Pulse 112; temperature 100°.

28th.—Morning: Pulse 128; temperature 98·8°. Evening: Pulse 110; temperature 98·3°. The rash still covers arms, back, and chest.

29th.—Morning: Pulse 120; temperature 98°. Evening: Pulse 100; temperature 99°.

May 1.—Died at 8 a.m.

Autopsy twelve hours after death.—The peritoneal cavity contained about two quarts of clear yellow serum. The whole of the great omentum thickened, forming a tough flattened mass, of leathery consistence; its average thickness being three-quarters of an inch, but in many places it measured one inch and a half thick; vertical length nine inches, transverse fourteen inches; on the anterior surface of its lower two-thirds it was marked with shallow fissures resembling lobulation, but was smooth over upper third. Along the greater curvature of the stomach was a ridge one inch thick. The posterior surface of the omentum was more lobulated than the anterior; some of the lobulated masses projecting as pedunculated tumours bearing secondary lobules. Appendices epiploicæ enlarged and cancerous. Peritoneum lining the omentum was glistening, and presented on its surface the appearance of effused lymph. In the small omentum was a lobulated, flattened, cancerous mass one inch and half thick. Stomach at both curvatures thickened and cancerous, but elsewhere free from cancer. Small intestine thickened; peritoneal coat roughened and granular; vessels injected; mesentery tough and leathery; parietal peritoneum thicker than usual, but smooth and not congested; broad ligaments leathery. Both ovaries enlarged, the right three inches and a quarter vertically, left three inches; from the right sprang three small fungating lobulated masses. A microscopic examination of parts of these diseased structures was made. On section a fibrous stroma was seen, embedded in which were numerous oil globules, many of large size, and a good many round and oval cells, in some of which were large nuclei. The cells were not of the irregular tail-shape common in hard cancer, but were like free nuclei found abundantly in many cases of soft cancer.

Remarks.—Cancer of the peritoneum of a diffuse character is not common, and little is met with about it in the ordinary students' text-books. This disease in its first stages is difficult of diagnosis, and, as its course in many instances is very rapid, it is desirable to have the symptoms pointed out by which an early diagnosis may be possible, or at least the disease suspected. The true nature of the cases which have come under observation in Ward XVI. during the last few years was not made out before admission: they were mistaken for ovarian disease, ordinary ascites, etc. In no case was the diagnosis correct. When you can detect, by abdominal or vaginal palpation, irregularly shaped, hard, nodulated masses scattered over the peritoneum, and when you observe that their presence is coincident with certain other peculiar physical signs and constitu-

tional symptoms, the diagnosis is readily arrived at; but you rarely have these signs available until the disease has advanced considerably. You may be called on for an opinion before the state of affairs alluded to has been reached; the diagnosis is then difficult, and this difficulty may be increased by the presence of complications, such as ovarian dropsy, an omental cyst, or stricture of the gut. The first symptom to which notice is generally attracted is great abdominal enlargement accompanied by little complaint of pain. On percussion this increase in the belly's size is seen to consist principally of flatulent distension. Constipation is sometimes present at an early stage of the disease, and a free purgation may diminish considerably the swollen abdomen. Fluid now begins to accumulate, but its presence is not easily made out, because the ordinary method of producing fluctuation is generally interfered with here. Before any great amount of fluid has collected in the abdominal cavity, the local disease has given rise to adhesions, at various parts, of the parietal and visceral layers of the peritoneum, or of different parts of the visceral layers, to one another. These adhesions cause the cavity to lose its character of a tense fluid bag without dissepiments, which character it possesses in cases of ordinary uncomplicated ascites. This prevents the wave, which is produced in the manipulation necessary when using this sign to diagnose the presence of fluid in a closed sac, being distinctly propagated from one side of the abdomen to the other. The dulness is peculiar in its irregularity of distribution over the belly. Patches here and there present a distinct dull note, but in the intervals between these patches a clear note can be elicited by percussion. The temporary character of some parts of dulness, the changing of its position from day to day, is present here as well as in cases of ordinary chronic peritonitis. On palpation over the abdomen a feeling is sometimes experienced as if you laid the hand on some parts which were thicker than others. In this disease the general constitutional symptoms are remarkable for the rapid course which they pursue—in history resembling those of an ordinary acute disease. In most cases the patients are observed to emaciate quickly—so much so that shortly before death the features are hardly to be recognised. In the second case related death ensued about six weeks after the true nature of the affection had been made out. When admitted into the ward, which was six weeks before the fatal termination, she was a fine, stout, good-looking woman; but she became emaciated to such an extent, and so rapidly, that it was difficult to recognise in her the woman who had been admitted only six weeks previously. This acute course is not surprising when we consider the pathological appearances generally found after death; the great extent of surface which is seen to be occupied by deposit of cancerous matter—both parietal and visceral layers of the peritoneum, with its reflections, and the mesentery, being more or less infiltrated with the disease. Little need be said with regard to treatment. All that can be done with propriety is to take measures to relieve pain, if it exist, and to procure rest. This is best effected by means of opium given by the mouth or rectum. Care must be taken in the early stages of the disease, when the diagnosis is uncertain, not to treat in the dark and prescribe remedies such as strong cathartics, diuretics, mercurials, etc., directed towards removing the fluid which may be present in the abdominal cavity. Such treatment would only weaken the patient, shortening life, and would be proper matter for regret when the true nature of the case became clear.

THE returns of the mortality for 1870, just published, show that during the year the deaths of 18 males and 63 females whose ages were stated to be upwards of 100 years were registered—in all 81 persons, against 63 and 79 respectively in 1869. The highest ages said to have been attained in 1870 were—108 by a male who died at Stone, in Staffordshire, and 107 by a female who died at Huddersfield.

A RETURN completed for the year 1870 shows no less than 330 coroners in England and Wales—233 for districts in counties, and 97 for boroughs. The great majority of them are elected by the freeholders or town councils; but in some cases by charter or prescription the appointment is made by the lord of the manor. It would be interesting to have officially the relative number of medical and legal coroners.

THE unveiling of the statue erected in Penzance (his native town) to the memory of Sir Humphry Davy took place on the 15th inst. The high standing of the Cornish chemical philosopher has at last been substantially recognised.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, OCTOBER 19, 1872.

THE WORKING OF THE PUBLIC HEALTH ACT.

THE Public Health Act was, even in the reduced form in which it received the assent of Parliament and the Crown, one of the most useful pieces of legislation which the last session produced, and reflected credit on Mr. Stansfeld, the Minister who had charge of it in the House of Commons. We have consistently maintained that the transference of the duties of Health Officers to the Poor-law Medical Officers, with adequate remuneration to be provided from the national revenue, was the best policy that could be adopted for the introduction throughout the country of reasonable measures of sanitary reform; and was a boon conferred on the Poor-law Medical Officers which, if the duties are undertaken on proper terms and duly performed, cannot fail to improve their status socially and professionally. We have seen nothing advanced by those who differ from us in the estimation of this Act which has induced us to alter one iota of our opinion. It is affirmed in certain quarters that the duties of medical attendants upon all classes in agricultural districts will be found incompatible with the disagreeable task of compelling people to look to their drains and cesspools, and to remove their nuisances. We can affirm, on the other hand, that the power of insisting on reasonable sanitary measures, if exercised with due consideration, fairness, and wisdom, would be a marvellous lever in the hands of any local practitioner to diminish sickness in his district, and thus to keep down the local burthens, to gain the favourable notice and respect of all classes, and directly to raise his scientific and professional reputation. The Poor-law Medical Officers will clearly have themselves to thank if they fail to carry out the powers the Act offers to confer upon them with the requisite wisdom and fairness. It will also be their own fault if, as Dr. Rogers at the recent meeting of the Poor-law Medical Officers' Association declared, the scale of remuneration be paltry and insufficient. They are neither compelled by the Act to accept the Officership of Health at all, nor to take any stipend which the local sanitary authority may choose to vote for the office. Should unreasonable terms

be offered them, they have an appeal to the central authority—the Local Government Board—and (which is perhaps as valuable) to public opinion through the local and general press. After all, the labour of the medical profession is skilled labour; but the public will not put a higher value on it than the value set by the Profession itself. If the Poor-law Medical Officers are content to work for a paltry stipend, they may certainly do so; but if they do, they are deaf to the lessons which have been learned in every other avocation.

Having said thus much with regard to the general principle of the Bill, as far as the appointment of Medical Officers of Health is concerned, we are the freer to take exception at the manner in which the President of the Local Government Board has exercised the powers which the Bill places in his hands. It will be in the recollection of our readers that during the tenure of office by the Conservative party, Earl Devon, in contravention of the express recommendation of the House of Lords, instead of appointing Medical Inspectors of Workhouse Hospitals, filled up two vacant offices by nominating his own nephew and the nephew of the Secretary of the Poor-law Board, Mr. Fleming. These appointments were at the time denounced, as they thoroughly deserved to be, by the Liberal press; but it has been reserved for the present Liberal Government and the head of the Local Government Board to show a still more profound indifference to the principle of selecting public servants on the ground of fitness and special qualification. For Sanitary Inspectors under the Local Government Board Mr. Stansfeld has, it is said, appointed ten barristers and an ex-lieutenant of artillery! These gentlemen are to be in a certain degree the superior officers of the Medical Officers of Health, and at least are to form the medium by which the local sanitary authority is to be in communication with the central authority. It is unnecessary to expose the gross unfitness of these appointments; in the words of Sir Dominic Corrigan, in a characteristic letter to Dr. Rogers on the subject, "such proceeding is as absurd as it would be for the War Office or Admiralty to appoint only lay or legal inspectors to control the manœuvres of an army or the tactics of a navy."

It is true that these appointments are only made temporarily, and have to be renewed in March next. But the precedent has been established; and whereas inspectors ought to have been chosen from the ranks of medical men, who, with the highest qualifications for the appointment, are anxious to serve in the capacity, the example has been set of employing laymen, who, whatever political or personal influence they may possess, labour—to quote Sir Dominic Corrigan again—under two disqualifications: incompetence and fear. "I never yet knew," writes Sir Dominic, "a lay or legal inspector competent to inspect a hospital or dispensary; and I do not recollect that I ever yet met a non-professional man who was totally devoid of fear of contagion, or who had not an invincible repugnance to approach some forms of disease." Mr. Stansfeld's action in this matter almost justifies the conclusion, so loudly asserted by the opponents of the Act, that the whole measure was never intended to succeed as a great instalment of sanitary reform, but was merely a sop to Cerberus.

We have always supported the Poor-law Medical Officers' Association in their efforts to obtain the establishment of a system of outdoor medical relief in England analogous to the Irish dispensary system. But we would remind the Association that the working of the present system in Ireland affords a strong argument for conferring on the Poor-law Medical Officer the duties of Officer of Health. In proof of our assertion, we quote from Dr. Roger's address at the recent meeting of the Association. He said—"Now, they were aware he had asserted that as epidemic disease commenced among the poor, and as sickness was the greatest factor in inducing pauperism, it would therefore be true economy to make medical relief as efficient as possible. Here, again, in Ireland they found this had been done. Not only did they provide all medicines there, but in the rural districts sanitary and curative duties were consolidated in the dispensary doctor's hands, the result being that epidemic disease had notably diminished, and also the duration of sickness." Dr. Rogers could not have advanced a better argument for the provision in the recent Act which will enable the Medical Poor-law Officers of England to combine sanitary with curative duties. We hope that reform in the Poor-law Medical Service will not stop here, but that in the next session of Parliament a vigorous effort will be made to introduce into our system the better features of the Irish. But we also trust that when Parliament meets sufficient pressure will be brought to bear on the Government to induce Mr. Stansfeld to retrace his steps in this matter of the appointment of sanitary inspectors. If Mr. Stansfeld's interest in the working of his Act is in any degree real, he will look for different qualifications for sanitary inspectorships than want of success at the bar or a knowledge of gunnery. He may agree with Falstaff that "A good wit will make use of anything: I will turn diseases to commodity;" but we much doubt whether, should cholera or small-pox visit us next year, the House of Commons and the public generally will allow the working of the Public Health Act to remain in the hands of a Minister who has appointed lawyers and soldiers to combat them.

THE ALLEGED POISONINGS AT WEST AUCKLAND.

The extraordinary narrative which has been laid before the public relative to the career of the woman Mary Ann Cotton, now in prison at Durham on a charge of poisoning her stepson, Charles Edward Cotton, is such as at first sight is hard of belief. We hear of a woman of evil ways, but able to fascinate rude miners, as the story goes, entering family after family, and murdering all by arsenical poison. The deaths were taken to be due to typhoid or gastric fever, and registered as such, until one particular death roused suspicion, and an inquest was held, whereat was revealed the fact that in the boy's stomach and entrails there was contained much arsenic. This is not the time to discuss the case, inasmuch as the woman has not yet been tried, but the narrative suggests to our mind certain reflections on the past which may be worth bearing in mind, especially with regard to the particular poison alleged to have been used.

It is not yet many years since (1838) it was said that arsenic was a normal constituent of the human body, existing especially in the bones. This was as far as possible disproved by Flandin. Doubtless the arsenic, if any existed, was in the reagents employed by Orfila, who made the so-called discovery. Even now it is by no means certain whether arsenic does not exist naturally in many soils. Dr. Taylor says he has extracted an unmistakable quantity of arsenic from earth taken from churchyards in the North of England. Such statements necessitate the utmost care in removing bodies from the ground, and in putting up the parts intended for analysis. An interesting case is narrated of a gentleman who, after removing a stomach for analysis, being called away in haste, wrapped it in a piece of wall-paper, the clean side next the organ. On analysis, both morphia and arsenic were found in the stomach, the origin of the last not being apparent until the paper was more carefully examined, when it was discovered to be coloured with arsenic. The history of the case contradicted the use of arsenic in it; had it not, a false charge of arsenical poisoning might have been brought.

But even supposing that every precaution be taken in removing the parts for analysis, the analyst has difficulties of his own to contend with. Many of his reagents are contaminated with arsenic if special precaution has not been taken to purify them, and sometimes it will be found even in substances called pure. It is especially common in sulphuric and hydrochloric acids, either or both of which must be employed in almost every process for searching for arsenic.

Such a source of error is hardly likely to occur to a skilled chemist, nevertheless it is well to bear it in mind. Even the copper used for Reinsch's test may contain arsenic, and itself give proof of its own impurity, as in Smethurst's case. In point of fact, the whole analysis for arsenic, though perhaps the best known of toxicological processes, is surrounded with difficulty.

In criminal cases, such as the present, it is the duty of the analyst to use his material sparingly; at all events to leave enough of it for a subsequent analysis if that is desired. It is always better to have two separate investigations if possible. Thus, the full truth in the notorious case of Pritchard would not have been known had the public prosecutor contented himself with the Edinburgh analysis alone.

Arsenic is easily separated in the metallic forms if present in any quantity, and it is a good plan, when it can be so obtained, to preserve some portion of it in a sealed tube for production at the trial. To a jury there is nothing so telling as the exhibition of a quantity of arsenic in the state removed from a given portion of the viscera of the deceased.

A very common mistake we often see reproduced at trials —and one already alluded to in this case—is that of saying "enough poison was found in the stomach to account for death." Very often, in cases of poisoning, there is hardly any poison found in the stomach, and in many that found there has had nothing to do with causing death. Take a case of poisoning by strychnine, for example: it is not the strychnine found in the stomach, but that which has been absorbed, and reached the nervous system, which has caused death. This is only partially true in the case of arsenic, but even here the fact ought not to be overlooked.

There are many other points, curious and interesting, which suggest themselves to our mind, but we refrain from noticing them. There is only one case in the great history of poisoning to which we would refer. The case is that of Catherine Wilson. This woman was executed for having poisoned several people she was nursing, with colchicum or some similar irritant. To this day there are grave doubts in the minds of many as to the woman's guilt and the justice of the sentence. Let us not have such a reflection in this case. If this woman Cotton—or whatever her name is—be guilty, by all means let her suffer; but certainly let us make quite sure of her guilt first.

HINTS ON HYDATIDS.

The so-called uterine hydatids, which for the most part are not hydatids at all in the modern sense of the term, will be designedly omitted from this article, although we may remind our readers that Dr. Braxton Hicks and others have recently shown that true hydatids may be discharged not only per vaginam, but from the very cavity of the uterus itself. The cystic or hydatidiform degenerations of the ovum or its appendages are well deserving of a special notice, especially in their relations to albuminuria and to zymotic diseases, and this we hope shortly to afford them. The object of this paper is to direct attention to those cysts which are due to the arrested or peculiar development of the ova of tapeworms, when by any chance they find their way, not into more or less closed cavities like the abdominal canal, but into such organs as the liver, the lungs, brain, spleen, kidneys, or elsewhere. Much might be written on the scientific researches of Küchenmeister, Von Siebold, Livois, Davaine, our own Cobbold, and many others, including some of our Icelandic *confrères*, who have taught us all that we know of the true nature of these strange parasites. For, suppose we take one of the most familiar examples,—the comparatively common rounded or globular hydatid tumour of the liver: we may generally recognise this by its cushiony resistance, like an air- or water-pillow, its spheroidal outline, its comparatively painless (and we had almost said insidious) growth, and, if punctured or emptied in any way, whether in life or afterwards, by the nature of the fluid, which should be almost as limpid as water, of low specific gravity, abounding in chlorides, but containing little or no albumen, and, when examined by the microscope, almost certainly containing either *echinococci* (the abortive scolices of the *Tænia echinococcus* of the dog or wolf, or of some other variety of tænia) or traces of their presence in the form of those singular hooklets called, or miscalled, teeth. All this is well known, although perhaps many do not know that should the contents of the cyst have become puriform, or undergone partial inspissation or degeneration of any kind, the presence of the "claws," "hooklets," "teeth," or "spines" may often be easily recognised by a modification of Dr. Fenwick's process for the detection of elastic tissue in sputa—in other words, by boiling the dried or puriform contents of the cyst with caustic soda and a sufficiency of water, and afterwards examining the sediments with the microscope. This process is equally applicable to sputa suspected to contain the remains of hydatids, where the characteristic "white currants" or "mistletoe berries" are not found in the spittoon, but only muco-purulent or purulent sputa. Cases of hydatid disease of the lung (generally secondary to that of the liver, and the result of perforation of the diaphragm, pleuræ, and lung substance, finally reaching the bronchial tubes) are by no means so uncommon as was fancied a few years ago. Several are known to us as having occurred within the last six or seven years. One which came under the notice of the late Dr. Gilchrist, of Torquay, is remarkable both for the severity of the symptoms and the happy result to the patient. An officer of some standing in the Indian Army was invalided and sent home to Europe during the famous mutiny, for a supposed simple abscess of the liver. A heroic incision, we believe, had been followed by the discharge of a quantity of fetid matter, and some relief to the symptoms; but fresh attacks of jaundice, rigors, peritonitis, symptoms of supposed (and perhaps really) pyæmic pleurisy, and broncho-pneumonia, and at one time even pericardial mischief, appeared again and again to threaten almost immediate death. Again, at times there was a fair promise of recovery, the hopes of which were from time to time frustrated by renewed attacks of the right chest, in which the left also not infrequently participated. Ever and anon he expectorated or vomited (for at times it seemed doubtful which) large quantities of intensely fetid pus—a disgusting product which few of his medical advisers cared to minutely examine. At last it occurred to one of them to do so, and his zeal was rewarded by the discovery of some of the hydatid hooklets, and afterwards of some very minute and globule-like hydatids, quite perfect, although so small. In the end, the gallant officer, after a purgatory of nearly seven years, made an almost perfect recovery, and has, we believe, remained well "up to date." In other cases the nature of the expectoration has been at once apparent to the practised eye; whilst in some fatal cases, even where the physicians or medical attendants were quite alive to the probabilities of hydatid disease, the real nature of the disease has been rendered clear only by the post-mortem examination. The object of our remarks is chiefly to remind our readers that a large proportion of these cases are within the compass of our art, either to cure or very greatly to relieve. The diagnostic puncture, made with a fine capillary trocar and canula (after which the patient should be kept absolutely at rest for some days, and without food—or at least solid food—for a few hours), is in itself a means of cure, as Dr. Murchison so often insists, and as has been proved in Australia and elsewhere in hundreds of instances. It is not necessary to torture the patient by preliminary application of potassa fusa, or reiterated incisions, setons, or issues, meant to set up adhesive inflammation. Absolute rest, and a capillary puncture, with ordinary care to exclude air, are all the precautions essential. A pneumatic aspirator may, doubtless, be of good service in this way.

It is also not essential, indeed undesirable, to completely empty the cyst. The creatures die if only a part of the fluid be withdrawn, and as a rule the cyst withers up or collapses. But the contents must on no account escape into the abdominal cavity; hence all squeezing and manipulations, after the manner of some with abscesses, must be avoided most religiously. All this applies, of course, to the simple hydatid cyst often found in the liver and elsewhere, when the diagnosis is reasonably certain from the character of the tumour. Before alluding to another mode of treatment, which may reasonably be tried in cases of less certainty, or when the simple puncture is refused or deemed unadvisable, it must be premised that these tumours are not always painless, although the absence of pain is often a diagnostic point of some value. In one case in the London Hospital the tumour was deep-seated, and the man suffered lancinating pain, which had given him a cachectic or, as some called it, a "cancerous" expression, and the disease had been diagnosed by some as encephaloid cancer of the liver. Careful manipulation, however, led the physician (we believe it was Dr. Andrew Clark) to the belief that the patient had a deeply seated hydatid cyst, and a capillary puncture both established the diagnosis and cured the patient. Great care should be exercised in handling the fluid—not by any mischance to mix it with one's food or receive it inadvertently within the oral cavity.

We must not forget that such tumours may simulate other diseases, such as pregnancy, retention of urine (as in cases of a hydatid cyst between the bladder and rectum, which has in more than one instance been tapped for a distended bladder), ovarian and other tumours; and they may themselves be simulated by phantom tumours, a distended gall-bladder, and other cysts simulating phthisis, broncho- and pleuro-pneumonia, and often setting them up. Their diagnosis in the thorax is generally difficult, and in some cases must be impossible, or almost so. For instance, Dr. Peacock, at last Tuesday's meeting of the Pathological Society, mentioned a case where there was hydatid disease in the heart, and none in the liver or any other organ. As difficult is their detection in the brain, when sudden death may be the first indication —as in the Brighton governess—and where most certainly the differential diagnosis between them and aneurisms of similar size must be impossible. In the eye, or in the nose or larynx, the ophthalmoscope or laryngoscope may, and probably will, aid us in the diagnosis. It is possible that, in the future, galvano-puncture or the galvanic cautery may be more used and more useful; but, as an act of simple justice to the memory of the late Dr. Tanner, we wish to put on record the fact that, in addition to the cases recorded by him, four cases (three of them verified by post-mortems and elucidated by the microscope) are known to us in which the daily use of iodide of potassium in full doses for a few weeks (in none exceeding two months) was followed by the gratifying result of the gradual wasting and complete cure of the hydatid cyst—the one patient remaining well after several years, the others dying, after some months, of totally different diseases, and the result becoming patent at the autopsy. Two such cases occurred in the practice of the late Dr. Heckford, but were known to, and verified by, the writer of this article. These may be pure coincidences of a natural cure and the exhibition of the drug; but the multiplication of such coincidences seems to us to render the use of so innocuous a method, or of some similar plan, imperative in all cases where more heroic means are inapplicable.

THE WEEK.

TOPICS OF THE DAY.

We find we owe Dr. Edward Smith an apology. In a letter published in the *Times* of Wednesday, October 16, he totally denies having made the remarks on fish and tea as articles of diet at the meeting of the British Association which were attributed to him, and quoted in inverted commas in Baron von Liebig's letter, and on which we offered some criticisms. It is not easy to surmise the nature of the extraordinary blunder by which these remarkable opinions were credited to Dr. Edward Smith. Dr. Edward Smith, however, has fairly the advantage over Baron von Liebig in reference to the main topic of the Baron's letter. Von Liebig says neither tea nor extract of meat is nutriment in the ordinary sense. Exactly so, retorts Dr. Smith; there is no difference in opinion between us. A cup of your extract is only food in the same sense that a cup of good tea or coffee is. But, adds Dr. Smith,—

"*Ex nihilo nihil fit*, and if there be no nutritive material in Liebig's extract it will not nourish the body. Let it be clearly understood that, at length, the Baron is in accord with other scientific men, and that all may adopt the words of Liebig—'Neither tea nor extract of meat is nutriment in the ordinary sense'—and all I have contended for is accomplished. Then we shall no longer have sick and dying men, women, and children fed with it under the delusion that it is nutriment in the ordinary sense. Liebig's extract is meat flavour, a nervous stimulant, and has good qualities, but it is not food."

Dr. Smith also has great advantage in the neat way in which he deals back the personal attack made by the Baron. Dr. Smith writes, "it has always been his manner in discussion, and perhaps injures others less than himself."

Miss Jex Blake and her supporters have commenced their annual attack on the Edinburgh Infirmary. But again she meets with difficulties. One Mr. Walter Thomson, of London, we see by the papers, is helping on her cause with a donation of £1000 "in payment of expenses that have to be incurred in prosecuting the claim of women to the highest medical education obtainable in the University of Edinburgh and elsewhere, and in assisting or encouraging lady students who have been subjected to extra charges by the obstacles interposed in Edinburgh." Of course if there be many Mr. Walter Thomsons this absurb agitation will not cease, and the Medical Faculty of Edinburgh will be kept in hot water for years to come. But, as we said, a majority of the authorities of the Infirmary do not show themselves particularly anxious to damage their institution as an educational hospital by admitting women. The managers held a meeting last Monday, when a letter was read from Miss Jex Blake again requesting tickets of admission as students to the Infirmary for herself and friends, "in accordance with the Statute of January 1, 1872." Mr. George Harrison moved—

"That the managers, being of opinion that it is desirable to admit female medical students to the Infirmary wards, remit to the House Committee to make arrangements for that purpose, and to report."

The Lord Provost seconded the motion. Professor Muirhead moved as an amendment—

"Having again heard read the letter of Miss Blake, the managers, without any admission of the regularity or validity of the statute referred to, remit to a committee to consider and report whether, and to what extent, it is practicable to give instruction to females within the wards of the Infirmary."

On a division the amendment was carried by eight to four. We hope, for the sake of the great medical interests bound up with the Edinburgh School, the opponents of these irrepressible persons will be firm in resisting claims which can only do infinite damage to the teaching of Medicine north of the Tweed.

The first meeting of the Pathological Society for the present session was well attended. The President, Mr. Hilton, filled the chair. A large part of the evening was occupied with the history of some fatal cases of jaundice with xanthelasma. It seems pretty clear that the curious skin affection now known as xanthelasma, but first described by Addison as vitiligoidea, may accompany various forms of jaundice, and therefore that it is not of great clinical import.

We learn, from a correspondent at Bishop Auckland, that

Mr. Scattergood, of Leeds, who has entrusted to him the chemical investigations in the Durham poisoning case, reports with reference to the young man Nattrass, who lodged with the prisoner, that he found arsenic in all the portions of the viscera sent to him, and that the "stomach and intestines contained five grains of undissolved arsenic. The *Times* reports that only two bodies were exhumed at St. Helen's churchyard on Tuesday—those of Frederick Cotton, aged 10 years, and the prisoner's own child, Robert Robson Cotton, aged 14 months. The coffin of the husband, Frederick Cotton, could not be found, as no register had been kept of the graves, and the bodies had been buried during the small-pox epidemic, when interments were made without means being taken for future identification.

There has been a meeting for the purpose of setting on foot a subscription to present a testimonial to Mr. Hancock on his retirement from the Surgeoncy of Charing-cross Hospital. The testimonial will most probably take the form of a portrait.

THE CLINICAL SOCIETY.

THE first meeting of the Clinical Society was signalised by an exceedingly important discussion on the treatment of high temperature by cold affusion. Dr. Southey read an account of a case where a patient, the subject of rheumatism, become delirious with a moderately high temperature. Cold water was used, and the temperature reduced, whereupon the delirium abated and the patient got quiet sleep; but the temperature went up again, and the delirium returned. Again it was reduced with favourable results; but though this was repeated frequently, the patient ultimately died quite worn out. In a case of Dr. Greenhow's, a somewhat similar history was recorded. In this, too, a fatal course was the result. The question accordingly arises,—In what cases should cold be used to reduce temperature? Dr. Wilson Fox, whose experience is great, distinctly lays down the rule that the cold-water bath should only be used when the bodily heat rose to a great height, and itself threatened a fatal termination. This temperature he put at 106·5° or even 107° Fahr. The President, Sir W. Gull, mentioned a case in which the temperature was 107·5°, and in which two immersions cured the disease. In Dr. Southey's case there were bronchial complications, and there was an uneasy feeling that they were due to the cold. Dr. W. Fox, however, said that such complications happened quite as readily with high temperatures where no cold was used as with cold baths. There was an idea expressed that very large doses of quinine might be found to act as a substitute for cold water in reducing bodily heat.

THE ROYAL MEDICAL COLLEGE, EPSOM.

FROM the foundation of this excellent institution we have urged upon the governing body the importance and necessity of omitting from its title the word "Benevolent." It is not only unnecessary, but most objectionable. The school, at all events, is mainly sustained by the fees paid by young gentlemen—chiefly the sons of medical practitioners—who resort to that admirably conducted institution for their education. The *Times*, on a late occasion, in announcing a munificent gift to the College by Mr. Erasmus Wilson, omitted the word "Benevolent," undoubtedly under the conviction that such a term was inconsistent and unjust. The Royal Medical College at Epsom should form no exception to other great schools founded and carried on upon the same principle. In all our great endowed schools—notably at Westminster, at Winchester, at the Charterhouse, and, above all, at the Bluecoat School—there is no reference to "benevolence" with respect to foundation scholars. Then, one asks, why are the *alumni* of the Royal Medical College at Epsom to be placed upon a different footing from those of similar institutions? John Propert, the munificent founder of the College at Epsom, felt the force of the objection which we have urged; but, whilst admitting it, he stated to us that the title had been obtained under an Act of Parliament, and that it would require another Act to abolish the obnoxious addition, which, however, it is only just to his memory to say that he entirely disapproved of. There is some cogency in this objection, but we maintain that the College is no more eleemosynary than the other great schools which we have mentioned. If an Act of Parliament is necessary to rectify the mistake which has been made, we think the Council are bound, as they have undoubtedly the power, to alter this most objectionable title.

MEDICO-PSYCHOLOGICAL ASSOCIATION—IRISH BRANCH.

ON the 8th inst. a meeting of the ordinary and honorary Irish members of this Association was held in the King and Queen's College of Physicians, Dublin, "with the view of organising an Irish branch of the Association, to hold stated meetings during the year as in England and Scotland, and for the transaction of general business connected with the interests, more especially, of the Irish associates." Mr. Duncan, of Finglass, presided, and there was a large number of other medical gentlemen present. Dr. R. Stewart, Belfast, observed that at the annual meeting of the Association, held in Edinburgh, the question was mooted as to the advisability of having quarterly meetings in Ireland. They had consequently agreed to have a beginning, and for that purpose the present meeting had assembled. If there were such meetings from time to time, the members of the Profession would be brought together in friendly intercourse, and by talking together and comparing notes a beneficial result would be produced, not merely on themselves, but for the good of the afflicted class committed to their charge. He thought there was a sufficient number of members present to form the nucleus of an efficient society for the purpose indicated. The Chairman said no doubt they were late in Ireland in commencing quarterly meetings, but it was only recently they were instituted in England, and still more recently in Scotland. He had no doubt that the proposed meetings would be a source of pleasure and profit, while the papers that would be read and the subsequent discussions that would take place would be highly creditable to the Irish branch of the Association. They would find that, the meetings once established, a large number of the Profession would join them. After a lengthy discussion, in the course of which all the gentlemen present warmly concurred in the desirability of having the proposed meetings, it was moved by Dr. Lalor, seconded by Dr. Eustace, and resolved—"That we, the members of the Irish branch of the Medico-Psychological Association, agree to organise ourselves for the purpose of holding stated meetings for the discussion of scientific and other questions connected with our speciality, in the same way as our brethren in England and Scotland have been in the habit of doing."

CERTIFICATES OF DEATH.

THE suspicions which have been aroused at West Auckland respecting a series of alleged deaths from poisoning will do much, it is hoped, to save the cavilling of ignorant and prejudiced "unpaid justices" at the expenses of post-mortem examinations in cases of inquests. At a late inquiry into the death of a child five weeks old, which was brought to the surgery of Mr. Conolly in a state of collapse—in fact, dying—that gentleman very properly declined to certify as to the cause of its death. After giving his evidence before the Coroner as to the issue of the post-mortem, which showed death to have resulted from pneumonia, one of the jury inquired whether he (Dr. Conolly) could not have given a certificate without putting the county to the expense of an inquest. The Coroner said such a certificate could not have been given legally, and referred to the West Auckland cases as to the importance of a complete inquest in all doubtful cases.

CHOLERA.

At Thorn, in the province of East Prussia, some days ago an official report was published, giving notice of the appearance of several cases of Asiatic cholera in that town, said to have been imported by sailors from Poland bringing wood on the Vistula. It is further announced that cholera has ceased in Moldavia, with the exception of a few mild cases occasionally met with in Jassy. We read in several Russian papers startling reports of the frightful scenes which occurred in the province of Poultava, and probably in other parts of Southern Russia, during this year's epidemic. No sooner did frequent deaths from cholera take place than the population of entire villages was seized with terror and took to flight, parents leaving their children behind them helpless and desolate. Thus whole districts got deserted. Corpses remained unburied for long periods. Some of the fugitives, who were already infected, and got attacked by the disease on the road, perished miserably in the open fields. Medical assistance was rarely to be found. The only doctor of the district appointed by the Government—a gentleman wholly different from what he ought to be according to our notions, and miserably rewarded—has generally such a vast territory under his care that he cannot get round it but in a several days' journey, the villages being small and distant. He only calls on the mayor (*Woyt*) of the place, makes some inquiries, and vanishes again, sometimes after having handed over some cholera-drops and a disinfectant. The authorities, being ignorant and careless in the extreme, have no idea how to meet such unwonted emergencies. The gentry, impoverished by the abolition of slavery, do not care for the country people any more, since the labourer takes liberty for the privilege to be idle. Thus all circumstances concur to increase the destructiveness of the epidemic. As long as this disgraceful state of things exists before our very doors, Europe will be continually endangered, the malady getting more and more endemic in these parts.

DISEASE AND MORTALITY AT HOME AND ABROAD.

Scarlet fever is epidemic in Oldham, Manchester, and Birmingham.——The deaths from small-pox last week in Portsmouth were equal to an annual rate of 5 per 1000 persons living. ——The deaths in London last week amounted to 1218, being 214 below the average.——Typhus fever is alarmingly prevalent in Lauden, Canton of Bâle.——The number of patients admitted into the Small-pox Hospitals at Hampstead, Homerton, and Stockwell from December 1, 1870, to Midsummer last amounted to 12,601. The death-rate of vaccinated patients was 11·8 per cent., and that of the unvaccinated 60·5 per cent. ——Dengue fever is still raging at Madras.——Cholera continues to spread in Central Asia. In the city of Bokhara alone 1000 to 1200 persons are reported to be dying daily.——Mr. Broome, the Vaccination Officer, reported to the Islington Board of Guardians last week the outbreak of small-pox in the parish; eight cases had occurred. He had traced the origin of it to some children attending a school. One death had occurred.——Small-pox, by advices of August 31, has been greatly on the decrease at Valparaiso and Santiago.——The *Journal Officiel* (Algeria) states that small-pox continues its ravages in several tribes.

IRONWORKERS AND THEIR DOCTORS.

A good deal of attention is being given at the present time among ironworkers and miners in Scotland to the question of the fees payable to medical practitioners. Some time ago the Faculty resolved to exact a higher scale of payment; and the ironworkers, while willing to concede the remuneration asked for on the merits of the claim, refuse to do so until they are allowed the power of appointing or dismissing the doctor. This is a power that neither the masters nor the Faculty would like to place in the hands of the workmen, and it is difficult to see how and where the matter will end.

THE FOOD AND DRINK ADULTERATION ACT.

Objectors to this wholesome and useful enactment must be prepared for some startling disclosures respecting the extent to which articles of food and drink are adulterated. The following facts may serve as some guide as to the extent of the frauds which are practised upon the health and pockets of the community. At Glasgow, out of twenty-seven samples of black tea at all prices collected in different parts of that city, six (all high-priced) were genuine, twenty were more or less adulterated, and one (which had been forwarded to a Glasgow merchant from London as a sample of cheap tea) contained as far as could be discovered not a single leaf of genuine tea! Of eight specimens of green tea examined every one was more or less painted or adulterated. There is very little doubt that this is a most common fraud throughout the kingdom. In fact, every article either of food or drink which it is possible can be adulterated is so dealt with by the wholesale or retail dealer.

MEANNESS REBUKED.

When a parish vestry really does anything consistent or sensible the fact is deserving of record; but it is doubly so when they can rise above petty meanness, and show a righteous, if not a generous, spirit. The following facts are worthy of narration. It appears that the indefatigable and able Medical Officer of Health of the Parish of Kensington, Dr. Dudfield, put in his account the sum of 30s. for cab-hire, expended in the performance of his duty. The Finance Committee of the parish refused to pay this exorbitant sum. There were gentlemen, however, in the Vestry who could not, without protest, permit such a mean and paltry insult to be directed against a most valuable parish official, and the result of the painful discussion was that the Vestry overruled the Finance Committee, and the Medical Officer of Health will be recouped his petty expenditure in cab-fare.

MEDICAL JOTTINGS FROM VICTORIA.—THE DIPHTHERIA COMMISSION—A MAGISTERIAL INQUIRY—MEDICAL WITNESSES.

The Diphtheria Commission has just issued its report. It is voluminous and exhaustive—the questions and answers amounting to 5604. The report resembles one of our great Parliamentary blue-books. As was anticipated from the complex character of the Commission, they were not quite unanimous. Dr. Lloyd protested against certain portions of it. If it contains nothing very original it is a document of some interest, and we may probably give a brief analysis of the results arrived at in our next.

A case has occurred at Wahgunyah which has caused considerable excitement in that district. It appears, from a "magisterial inquiry" held on the body of Mr. Hendry, a stranger to that place, that that gentleman died somewhat suddenly at the Royal Hotel, Corowa. He was supposed to be labouring under symptoms of delirium tremens, and Dr. Peele was sent for, and prescribed for him four grains of the acetate of morphia to be taken in four doses, one every hour, till sleep was procured. As these doses took no effect the following mixture was prescribed:—Eighteen grains of the acetate of morphia, three drachms of the tincture of cardamoms, two drachms of spirit of chloroform, with sufficient water to make a six-ounce mixture; two tablespoonfuls of this were to be taken every two hours until sleep was produced. Two doses of it were taken, and the patient became insensible, comatose, and died. It transpired, on inquiry, that he had exceeded the sixth part of the mixture by two grains and a half, and had therefore taken eight and a half grains of morphia. Dr. Peele and the druggist who dispensed the medicine were examined, and, curiously enough, neither of them seemed to think that three grains of the acetate of morphia every two hours was an excessive dose. We quote Dr. Peele's evidence, which will speak for itself:—

"John Richard Peele deposed that he was a duly qualified

medical practitioner registered in New South Wales. Had seen the body of deceased, and recognised it as that of a person whom he had attended. He has died of alcoholism, accelerated by taking half as much of the medicine in excess of the quantity prescribed. He should have had six grains in the time, and he had taken eight grains and a half. He had measured the remaining portion of the medicine in the presence of Mr. Hudson. The bottle now produced is the one. He expected the medicine would have sent deceased to sleep after the second dose. The dose was not unusually large for such cases of delirium tremens. He considered that in a few hours deceased would have been raging, and he gave it to him to stop it. His object in giving him so much was to procure the desired effect in the shortest time, as smaller doses would take a longer time to have the proper issue. There would also be an amount of feverishness, which destroyed the appetite, and kept the patient in the excited condition for a longer period. The symptoms are those that deceased was poisoned by an overdose of morphia. Delirium tremens is congestion of the brain, and if the patient can have sleep procured it passes off."

It was a remarkable fact that no evidence was given to show that the patient really suffered from delirium tremens; on the contrary, the editor of the *Wahgunyah Chronicle*, in a very able leading article, positively asserts that Mr. Hendry was perfectly sane, and comments with just severity upon the slovenly manner in which the inquest was conducted. The article concludes with the following remarks, which we think will be generally considered to be just:—

"A most powerful poison is directed to be given in doses of two tablespoonfuls every two hours; and those who are left to administer it are not even cautioned that the difference in size between one spoon and another might make all the difference between life and death! Why such a mixture was compounded at all for a man who was in the prime of life, and capable of coherent conversation and writing, we cannot conceive; and that it should be left to be administered haphazard is no less difficult to understand. Of this we are persuaded, that if Hendry had local relatives he would never have been subjected to such treatment; decent precautions would have been taken to save his life; and the cause of his death would have been investigated with a more rigorous and searching scrutiny, and the delinquent denounced with a more unsparing hand than we find under the present melancholy circumstances. We believe, however, that the heart of the public is right, or will find the right, in all questions of humanity, and to the public we leave the treatment of the stranger who met a cruel death through the gross negligence of some of those to whom his life was entrusted."

We gather from the report that no jury was empannelled, that the magistrate made no comments on this extraordinary case, and that the "explanation" given was considered "satisfactory."

The *Melbourne Argus* of August 13 gives the following:—

"The Medical Society, having been requested by the Attorney-General to state their views in writing, in regard to the fees paid to medical witnesses, the secretary (Dr. Neild) has written a letter, which sets forth that no class of the community is so seriously inconvenienced by having to appear as witnesses in courts of law as the medical profession, from the circumstance that it is frequently impossible, and always difficult, to depute their private duties to other persons, and that in consequence their enforced attendance in court is almost always the occasion of loss to them. In the case of other professional men, such as solicitors, architects, engineers, surveyors, and the like, the society say their private duties admit of postponment, or they can be entrusted to partners or clerks; and they therefore think that the fee for attendance for medical men should be increased from £1 to £2 per diem. The Society also asked for a day to be fixed for a deputation of three to wait upon the Attorney-General to point out the undesirability of some proposed amendments in the Vaccination Act. The same amendments were proposed about five years ago, when the Vaccination Act was under revision, and they were withdrawn by the then Attorney-General (Mr. Higginbotham) on the representations of the Society. Mr. Stephen has consented to receive the deputation at 3 p.m. on Wednesday."

The objections to the small fees to medical witnesses in Victoria apply with still greater force to the mother country. Here the fees are outrageously low, and constantly inflict great loss —and consequently great injustice—on medical witnesses in the United Kingdom. We think that if the British Medical Association and the corporate medical bodies in this country would take this subject into their serious consideration a salutary reform might be effected. It is no doubt true that the fees paid to medical witnesses in cases of railway accident are large and remunerative, but where the issues to be tried are as important as those referring to injuries sustained by railway travellers, the medical witness receives most inadequate remuneration.

FROM ABROAD.—M. BRIQUET ON SULPHATE OF CINCHONINE—M. DAVAINE ON SEPTICÆMIA.

M. Briquet, so favourably known by his former writings on sulphate of quinine and other preparations of bark, has just read at the Academy of Medicine (October 1) an interesting paper, in which he enters upon an elaborate vindication of the therapeutical properties of sulphate of cinchonine against an unfavourable report pronounced on it by a committee consisting of MM. Lévy, Bouchardat, and Moutard-Martin. Economically, the question is very important; for while at the present time the sulphate of quinine costs in Paris from 1500 to 2000 francs the kilo (and it is calculated that forty millions worth are consumed in France), cinchonine is at present actually valueless, never being used, and being, in fact, only an annoyance during the manufacture of quinine. M. Briquet's statements, at all events, produced a great effect in the Academy; and it is evident that they have not been delivered hastily, for he has not relied solely on his personal experience, but has examined all that has been written on the subject from the time of Magendie to the present day. The results of this investigation are elaborately detailed in the *Bulletin* of the Academy, to which we must refer our readers for them, contenting ourselves with stating that M. Briquet, founding his statement on 893 cases in which its therapeutical agency has been undoubtedly favourable, declares that its effects in intermittent fever of moderate and medium intensity, in arresting the paroxysms of typhoid fever, in diminishing the size of the spleen, and in neuralgia, are just as well marked as are those of quinine, although less in degree. It is at least, then, a valuable succedaneum to quinine, possessing all its properties, but in a less active degree. It is therefore well suited to the slighter cases of intermittent. M. Briquet attaches great importance to the mode of administration, giving it in doses of fifteen grains—which, however, are to be divided into five or six portions, one to be taken every hour, leaving between the last taking and the expected paroxysm an interval of eight or twelve hours.

M. Davaine, in his second paper on Septicæmia, read at the Academy of Medicine on the 8th inst., stated that he proposed examining two questions—viz., Does septicæmia experimentally produced invade all animals indiscriminately, or does it exert its special effects on certain species? and What is the condition which imparts an extraordinary virulence to the blood of an animal inoculated with a putrified substance?

1. His researches already recorded have established the fact that the intensity of the affection so produced is not proportionate to the volume or mass of the animal, but that it is in relation with the nature of (to use M. Claude Bernard's expression) its *milieu intérieur—i.e.*, it is a question of species. Thus, while the rabbit is so extraordinarily susceptible as to be speedily killed with the trillionth or quintillionth of a drop of virulent blood, the guineapig, a smaller animal of very similar habits, does not always fall a victim to strong doses, and is proof against the small ones which kill the rabbit. Experiments since performed on the rat, mouse, and fowls further show the different susceptibilities of different species. As a general result it is found that both septicæmia and malignant pustule (*charbon*)—diseases which have much in common—

respect birds, and affect mammalia according to their different aptitudes, which do not depend upon their size, or even upon vicinity of species.

2. In relation to the question of the conditions on which the virulence depends, it would seem rational to expect that the blood which has been longest kept should prove the most virulent; but very numerous experiments have shown M. Davaine that the most recent putrified blood is the most virulent,—the blood, in fact, after some days losing a portion of the virulence which it at first had acquired. Thus, of sixty-six animals inoculated with blood of from one to sixty days old, thirteen died from doses less than two drops, while of sixteen inoculated with blood of from fifteen months to five years old none died with a less dose than four drops. This fact of the diminution of virulence in a putrified substance consequent upon a still greater putrefaction (as measured by the impression of fetidity on our senses) is farther illustrated by other experiments, showing that the blood of a septicæmic animal loses a great part of its virulence through the putrefaction that ensues after death. The cause of this is very probably the extrication of the ammoniacal and hydrosulphurical products which exert a toxical effect upon the virus. This diminution in power of the septicæmic virus and of the virus of putrefaction are correlative facts due to the same cause.

In fact, the series of new experiments narrated in the present paper confirm the former conclusion—that there is a complete identity between the virus of septicæmia and the ferment of putrefaction. Under identical conditions of temperature they are both produced within the same space of time, and both lose a portion of their virulence if kept too long. The one is not engendered in the economy without the penetration of the other into that economy. Both kill the rabbit in infinitely small doses, and both produce in the inoculated animal phenomena which are identical in their mode of manifestation and duration.

"Septicæmia is, then, a putrefaction which takes place in the blood of a living animal. True, it is not accompanied by the odour which characterises putrefaction, for during life the odoriferous principles are eliminated as they are formed; but the ferment remains, and becomes accumulated in the economy until it destroys it. Thenceforward, the elimination of the ammoniacal and hydrosulphurical products no longer taking place, the corpse acquires in a few hours a degree of fetidity that is not remarked whenever death is determined by any other cause. This phenomenon is most apparent in animals dying after inoculation with septicæmic virus. And are not similar phenomena observed in men who succumb to septic diseases? How often when life is on the point of passing away, the eliminatory functions having ceased to operate, are we struck with the cadaveric odour the patient spreads around him, and after death the time for interment has to be hastened! The patient, in fact, even before his death, has become the prey of putrefaction. In penetrating and undergoing development in the animal economy, the agent remains identical with itself, although we give it the name of ferment here and of virus there. In the facts which we have passed under examination, we recognise that this agent (ferment or virus), in order to play the one or the other part, has no need of undergoing transformation or change of nature, it sufficing for it to find a similar medium and analogous conditions. If it acquire in living animals more powerful properties than in dead substances, this is because it there meets with a more elevated temperature and a medium incessantly relieved of the toxical products which are there engendered."

In the discussion which followed the reading of the paper, M. Bailey observed that, sceptical as he had felt concerning the accuracy of M. Davaine's statements as to the killing of rabbits with infinitesimal doses of putrid blood, a repetition of the experiments in his presence had fully convinced him. Five horses had also been experimented upon with ten drops of septicæmic blood, but no results of importance had occurred. M. Verneuil observed that M. Davaine's remarkable communications contained no statements regarding the symptoms or pathological anatomy; but M. Davaine replied that the symptoms were identical with those already described by MM. Coze and Feltz, while all cadaveric lesions were completely wanting, even in those animals which had lived several days. The only circumstance observed was a particular tendency which the globules of the blood had to lose their colour.

CONTRIBUTIONS TOWARDS A MEMOIR OF RICHARD WISEMAN,

Serjeant-Surgeon to King Charles II.

By JAMES DIXON, F.R.C.S.,
Consulting Surgeon to the Royal London Ophthalmic Hospital.

It is obvious that the real and abiding interest which we feel in the lives of eminent medical men is due to the impulse they may have given to their profession, or to the record of their experience, as handed down to us in their published works. Judged strictly on this latter principle, however, the doings of the physicians and surgeons who lived before the beginning of the last century would lose almost all value for us, the progress of science having been such as to render the teaching of the older schools of medicine altogether unsuitable to the exigencies of modern practice.

There still remains a certain amount of historical interest connected with the lives and labours of those who attained celebrity in times gone by; and on this ground I have put together a few personal facts connected with one who in his day held the highest surgical position in this country—I mean Richard Wiseman.

Considering the reputation he enjoyed as a surgical writer—his "Chirurgical Treatises" passing through six editions, the last printed so lately as 1734,—and the professional rank he obtained, it seems strange that so very little personal record of him should have been preserved. The biographical dictionaries tell us that he served in the Royal army during the Civil Wars, and was present at the battle of Worcester, and after the Restoration became Serjeant-Surgeon to the King. All these facts may be gathered from his "Surgical Treatises"; but in the dictionaries nothing is said about his family history—even the dates of his birth and death seem to be unknown.

I have not ascertained the date or place of his birth; but the year of his death, and an abstract of his will, have been communicated to me by my kind friend Colonel Chester, whose name is familiar to everyone who takes an interest in historical and genealogical researches. A few biographical points in Wiseman's career may also be gathered from the following petition, noted in the "Calendar of State Papers: Reign of Charles the Second, Domestic Series":—

"1661: June.—Petition of Richard Wiseman to the King, for leave to wait as a surgeon in the place of Hum. Painter, who is ill, and to succeed him, with the same title of Serjeant-Surgeon, but with his present allowance. He was the only surgeon who attended his Majesty (as Prince) from Bristol to the West, Scilly, Jersey, France, Holland, and Scotland, and thence to the battle of Worcester, where he was taken prisoner; he was sworn second surgeon at the Restoration, but his attendance became void on admission of two serjeant-surgeons extraordinary, and one to the household."

Of the same date (1661) is a docquet, "granting to Richard Wiseman the office of one of the King's surgeons, void by the death of Michael Andrews; fee £40 a year":—

"1662: September.—Warrant to John Knight, Serjeant-Surgeon to the King. Having served his Majesty abroad, he was continued with others in his place at the Restoration. He received the usual fee for embalming the Duke of Gloucester, being the only profit that has fallen to him, but he is now ordered to divide it with Richard Wiseman, Surgeon-in-Ordinary. He begs not to be made the only person who has had his fee taken from him."

"1662: September 11.—Warrant to Mr. Knight to retain the whole above fee . . . . which had been disputed for by some others of the King's surgeons."

At the present day, when everyone who has travelled a little about the world thinks it incumbent on him to publish a book, one often regrets that some of this *furor scribendi* had not existed in former days. How interesting a diary might have been kept by Wiseman during the eventful years so briefly alluded to in his petition. He even, at one time, was a

surgeon in the Spanish navy, and in that capacity visited the tropics. It is difficult to determine at what time this episode in his career occurred. It can hardly have taken place before the outbreak of the Civil War, in which, we know, he bore his part as an army surgeon. He accompanied Prince Charles to the Continent in 1645, and from his petition it would seem as if he had remained in attendance during the Prince's exile in France and the Low Countries. It is possible, however, that he was not on duty during the whole of that period, but may have served three years of the time with the Spaniards. It seems strange that a Protestant should have been allowed to enter the Spanish service; and it is evident, from an amusing story he tells in the chapter "Of Wounds of the Face," that he did not conceal his religious profession.

After the death of Charles I. the Prince went to Scotland, and was crowned as king at Scone; and when he evaded the Parliamentary forces, and advanced with a Scottish army into England, Wiseman attended him, and was taken at the battle of Worcester (1651), and sent as a prisoner to Chester. He was, however, soon set at liberty, and allowed to return to London. There, in 1652, he recommenced practice and continued to reside for the remainder of his life. He does not appear to have been appointed Serjeant-Surgeon until several years after the Restoration, for in the warrant to John Knight (*ante*) it will be seen that in 1671 he is still spoken of as one of the Surgeons-in-Ordinary. It was probably in consequence of his nomination to the higher office of Serjeant-Surgeon that Wiseman removed to the then new and fashionable quarter of St. Paul's, Covent-garden, in which parish he died. At one time he had lived in the Old Bailey, at another time in the Strand—perhaps in one of the "two tenements" there which he mentions in his will.

He was anxious to get himself acknowledged as being connected by blood with a family of the same name in which there was more than one baronetcy; and in 1671 he applied to Sir Robert Wiseman, Kt., to have this connexion recognised. Sir Robert accordingly drew up a reply, which is preserved among the Lansdowne MSS. in the British Museum. He says:—

"Whereas, my worthy friend and kinsman, Richard Wiseman, Esq., one of his Majesty's Chirurgeons-in-Ordinary, hath expressed unto me [a wish?] to have my declaration of his alliance and kindred unto myself and family. I do thereupon declare that I acknowledge the said Richard Wiseman to be my kinsman and descendant of my family, and that I do give free liberty to him, the said Richard Wiseman, to use and bear the coat of arms and crest of my family, and in such manner and with such distinction as my worthy friend Sir Edward Walter, Kt. Garter, Principal King-at-Arms, shall confirm and assign unto him. In witness whereof I have hereunto set my hand and seal the 3rd day of April, 1671.—Robert Wiseman."(a)

The Serjeant-Surgeon's name, however, does not appear in any of the Wiseman pedigrees, and when, after the above authorisation from Sir Robert Wiseman, Kt., he obtained an allowance of arms, he still recorded no pedigree. It is clear, therefore, that he was not an immediate connexion of Sir Robert's, nor of any of the Wiseman baronets of that period. At the College of Arms they do not regard Sir Robert's recognition of Richard, "as his kinsman and descendant of his family," as any legal proof of relationship. Circumstances, I think, seem to make it probable that he was illegitimate.(b)

In the preface to the "Chirurgical Treatises" Wiseman alludes to a long illness which had afflicted him during twenty years. In the course of his writings he more than once mentions having a cough with spitting of blood. His ailment evidently did not debar him from practice during that period, although it may from time to time have laid him aside; neither did it deter him from marrying again after the death of his first wife, which happened in 1674. It must have been very soon afterwards that this second marriage took place, for in 1676 he died, leaving his wife pregnant. It is her child, no doubt, whose death is recorded in 1678. The widow was married again, to a Mr. Harrison, and died in 1680. She was a daughter of Sir Richard Mauliverer,(c) second baronet of Allerton Mauliverer, Yorkshire, whose father, Sir Thomas, had been a member of the High Court of Justice which sat in judgment on Charles the First.

Wiseman died in the parish of St. Paul's, Covent-garden, and was buried there, as were both his wives and also his posthumous son. For the following entries, occurring in the parish register, I am indebted to Colonel Chester:—

"1674-5: Feb. 23.—Mrs. Dorothy Wiseman, wife of Mr. Richard Wiseman, buried in the chancel.

"1676: Aug. 29.—Richard Wiseman, at the upper end of the church.

"1678: Nov. 13.—Richard, son of Richard Wiseman, Esq.

"1680: Aug. 13.—Mrs. Mary Harrison, in the church."

To Colonel Chester again I owe an abstract of Wiseman's will, proved in the Prerogative Court of Canterbury.

"Richard Wiseman, of St. Paul's, Covent-garden, co. Middlesex, Esquire, Serjeant-Chirurgeon to his most sacred Majesty. (Dated July, 1676).

"To be buried in the chancel of St. Paul's, Covent-garden, where my late wife lies buried. Whereas I owe Mr. Edmond Wiseman, mercer, £2000, upon bond; the same is to be paid out of the following debts due to me—viz., from Sir Richard Blake £900, Mr. Blackwell £600, Mr. Greene £200, Mrs. Bradbourne £100 (by bond of her late husband), and Mr. Dove £200. To my wife Mary the interest I have in a certain mortgage on the estate of her brother Sir Thomas Mauleverer, and also all her portion; my interest in the house where I now dwell, my furniture, plate, jewels, etc. And I settle upon the child wherewith she now goeth the estate and leases I have of the rectory of Stroubby and Barnby, the fee farm of Feckenham-park, in Worcestershire, and my two tenements in the Strand; also the interest of £1000 in the hands of Sir Robert Viner and Alderman Backwell, for bringing up said unborn child. I appoint the said Mr. Edmond Wiseman trustee for said child, and give him mourning and £20 for a ring. If said child die under age and before marriage, then all said estates to my sisters for the maintenance of themselves and their children as my sister Hastings shall appoint. To my said sisters and their children the remaining debts due to me. To my late wife's niece, Mary Doughty, during my said unborn child's minority, the interest of £500, lent to Sir Hugh Owen. To my kinsman Jaques Wiseman, £100. To the poor of St. Paul's, Covent-garden, £20. Residue to my said wife Mary, and I appoint her executrix."

The will was proved September 12, 1676, by Mary Wiseman, the relict and executrix.

On August 26, 1680, letters of administration *de bonis non* were issued to Thomas Harrison, Esq., husband and administrator of Mary Harrison, *alias* Wiseman, deceased, while she lived, relict and executrix of testator.

There is nothing in Wiseman's will, or in other documents, to indicate any connexion with the Wisemans of Essex. A portrait of Wiseman is in the collection of the Duke of Rutland at Belvoir Castle. It is a beautiful miniature, painted by the well-known Samuel Cooper in 1660. Another portrait, in oil, attributed to Sir Balthasar Gerbier, is at the College of Surgeons, Lincoln's-inn-fields.

In this fragmentary sketch of Wiseman's career I do not attempt to discuss the merits of his writings. Medical criticism has long since pronounced its verdict upon them; and if in a great degree rendered obsolete by the advance of surgical and general knowledge, they are still instructive if judged by the only fair standard—that, namely, of the time at which they were published. They are composed in a plain, simple style, and were selected by Dr. Johnson, in the compilation of his dictionary, as a mine of good surgical nomenclature. That Wiseman, with all his practical good sense and originality, believed in the efficacy of the Royal touch for curing scrofula, merely proves that he was not superior to the credulity of an age in which the ablest judges condemned crazy old women to death as witches; and, indeed, a consistent member of the Church of England could not but uphold the power of the Royal hand, for the Church held that this power was inherited by all the lineal successors of Edward the Confessor, and a special form of religious service was drawn up to be used at the "healing." According to the Church's teaching, the miraculous power had been transmitted through all kings

(a) Sir Robert was Advocate to Charles II., and afterwards became Vicar-General and Dean of the Arches. He died August 17, 1684, in his 74th year. (*Notes and Queries*, November 25, 1854.)

(b) There were *three* baronetcies granted to Wisemans. The first was conferred in 1628 on Sir Wm. Wiseman, of Canfield Hall, Essex. This baronetcy still exists. The second was conferred, *the same year*, on Richard Wiseman, of Thundersley Hall, Essex. He died without a male heir, and the title then became extinct. May not our surgeon have been the illegitimate son of this Richard? The third baronetcy was conferred in 1660 on William Wiseman, of Rivenhall, Essex, eldest son and heir of Sir Thomas Wiseman, Kt. He left no male issue, and so the title expired with him in 1692. It was his younger brother, Robert (knighted in 1661), seventh son of Sir Thomas, on whom the Serjeant-Surgeon made the claim of kinship above noticed.

(c) The reader of Wordsworth will remember how—

"Face by face, and hand by hand,
The Claphams and Mauleverers stand."

But the name originally was *Mauliverer*, for so it is spelt in all old family documents, wills, etc. *Mauleverer* appears to be a later innovation.

and queens of England, whether Popish or Protestant, and quite irrespectively of the personal character of the monarch. The obscene hands of Charles II. were as efficient in imparting the blessing as those of his father, who was commemorated as a "martyr." Wiseman accepts the cure by Royal touch as simply miraculous, and therefore not to be doubted, proved, or disputed. "His Majesty," he says, "cureth more in any one year than all the chirurgeons of London have done in an age." But he nevertheless takes care to devote a whole chapter to the treatment of scrofula by ordinary medical means.

Wiseman's volume of "Surgical Treatises" was a parting legacy to the Profession. The preface is dated May 24, 1676, and he died in August of the same year. The following is a list of the various editions of the work:—

1. First edition—"Severall Chirurgicall Treatises. By Richard Wiseman, Serjeant-Chirurgeon. London. 1676." Folio. Pp. 498. Then a half-title, and fresh paging of "Lues Venerea," from pp. 1 to 79. At the end a list of "Observations."

2. Second edition—"Several Chirurgical Treatises. By Richard Wiseman, Serjeant-Chirurgeon. The Second Edition. London. 1686." Folio. Pp. 577; consecutive from beginning to end of volume.

3. This is really the *third* edition, but by a misprint the word "second" stands on the title-page. "Several Chirurgical Treatises, on these following heads, viz.:—I. Of Tumours. II. Of Ulcers. III. Of Diseases of the Anus. IV. Of the King's Evil. V. Of Wounds. VI. Of Gunshot Wounds. VII. Of Fractures and Luxations. VIII. Of the Lues Venerea. By Richard Wiseman, Serjeant-Chyrurgeon to King Charles II. The *Second* Edition. London. 1692. Folio."

4. Fourth edition—"Eight Chirurgical Treatises on these following heads, viz.:—I. Of Tumours. II. Of Ulcers. III. Of Diseases of the Anus [and so on, as in the third edition]. By Richard Wiseman, Serjeant-Chirurgeon to King Charles II. The Fourth Edition. London. 1705." Folio.

5. Fifth edition—Same title as the foregoing as far as "Charles II.," then "in two volumes. The Fifth Edition. London. 1714." 8vo. (Vol. i., pp. 504; vol. ii., pp. 432).

6. Sixth edition—Same title. "The Sixth Edition. London. 1734." Two vols. 8vo. (Vol. i., pp. 512; vol. ii., pp. 429.)

ABSTRACT OF A PAPER

ON THE RELATIVE POWER OF VARIOUS SUBSTANCES IN PREVENTING PUTREFACTION

AND THE DEVELOPMENT OF PROTOPLASMIC AND FUNGUS LIFE.

By Dr. F. CRACE CALVERT, F.R.S.

To carry out this series of experiments small test-tubes were thoroughly cleansed, and heated to a dull redness. Into each were placed twenty-six grammes of a solution of albumen, containing one part of white of egg to four parts of pure distilled water, prepared as described in my paper on "Protoplasmic Life." To this was added one-thousandth, or ·026 gramme, of each of the substances the action of which I desired to study.

The reasons why I employed one part in a thousand are twofold—first, the employment of larger proportions would in some instances have coagulated the albumen; secondly, it would have increased the difficulty of observing the relative powers of the most efficacious antiseptics in preventing the development of the germs of putrefaction or decay.

A drop was taken from each of the tubes, and examined under a microscope having a magnifying power of 800 diameters. This operation was repeated daily with the contents of each tube for thirty-nine days, and from time to time for eighty days. During this time the tubes were kept in a room, the temperature of which did not vary more than three degrees—viz., from 12·5° C. to 15 5° C.

In order the better to show the influence of the antiseptics used, I examined two specimens of the same solution at the same time, one of which was kept in the laboratory, the other in the open air.

A marked difference was observed in the result—the one kept outside becoming impregnated with animal life in less than half the time required by the other, while as many vibrios were developed in six days in the tube kept outside as were developed in thirty days in the tube in the laboratory.

A summary of the results of the experiments is given in the following table, in which the substances are grouped according to their chemical nature:—

	Days required for the development of		
	Fungi.	Vibrios.	Putrid odours in albumen kept at 80°.
1. Standard Solutions—			
Albumen kept in laboratory for comparison	18	12	16
Albumen exposed outside laboratory...	None.	5	—
2. Acids—			
Sulphurous acid	21	11	45
Sulphuric acid	9	9	16
Nitric acid	10	10	16
Arsenious acid	18	22	None.
Acetic acid	9	30	None.
Prussic acid	None.	9	35
3. Alkalies—			
Caustic soda	18	24	72
Caustic potash	16	26	85
Caustic ammonia	20	24	26
Caustic lime	None.	13	14
4. Chlorine Compounds—			
Solution of chlorine	22	7	16
Chloride of sodium	19	14	16
Chloride of calcium	18	7	11
Chloride of aluminium	21	10	16
Chloride of zinc	53	None.	38
Bichloride of mercury	81	None.	None.
Chloride of lime	16	9	9
Chlorate of potash...	19	17	38
5. Sulphur Compounds—			
Sulphate of lime	19	9	14
Protosulphate of iron	15	1	16
Bisulphite of lime	18	11	16
Hyposulphite of soda	18	11	11
6. Phosphates—			
Phosphate of soda	17	13	16
Phosphate of lime	22	7	16
7. Permanganate of potash...	22	9	11
8. Tar Series—			
Carbolic acid	None.	None.	None.
Cresylic acid	None.	None.	None.
9. Sulphocarbolates—			
Sulphocarbolate of potash	17	18	35
Sulphocarbolate of soda	19	18	26
Sulphocarbolate of zinc	17	None.	None.
10. Sulphate of quinine	None.	25	None.
Picric acid	19	17	26
Pepper	None.	8	16
Turpentine	42	14	35
11. Charcoal	21	9	None.

In comparing the results stated in the above table, the substances can be classed under four distinct heads—viz., those which prevent the development of protoplasmic and fungus life; those which prevent the production of vibrio life, but do not prevent the appearance of fungus life; those which permit the production of vibrio life, but prevent the appearance of fungus life; and those which do not prevent the appearance of either protoplasmic or fungus life.

The first class contains only two substances—carbolic and cresylic acids.

In the second class, also, there are only two compounds—chloride of zinc and bichloride of mercury.

In the third class there are five substances—lime, sulphate of quinine, pepper, turpentine, and prussic acid.

In the fourth class is included the remaining twenty-five substances.

The acids, while not preventing the production of vibrio life, have a marked tendency to promote the growth of fungus life. This is especially noticeable in the case of sulphuric and acetic acids.

Alkalies, on the contrary, are not favourable to the production of fungus life, but promote the development of vibrios.

The chlorides of zinc and mercury, while completely preventing the development of animalcules, do not entirely prevent fungus life; but I would call special attention to the interesting and unexpected results obtained in the cases of chlorine and bleaching-powder. When used in the proportions above stated they do not prevent the production of vibrio life. In order to do so they must be employed in excess; and I have ascertained by a distinct series of experiments that large quantities of bleaching-powder are necessary. I found that part of the carbon was converted into carbonic acid, and part of the nitrogen was liberated.

If, however, the bleaching-powder be not in excess, the animal matter will still readily enter into putrefaction. The assumption on which its employment as a disinfectant has been based—namely, that the affinity of the chlorine for hydrogen is so great as to destroy the germs—is erroneous.

The next class to which I would call attention is the tar series, where neither the carbolic nor the cresylic acid fluids

gave any signs of vibrionic or fungus life during the whole eighty days during which the experiments were conducted.

The results obtained with sulphate of quinine, pepper, and turpentine deserve notice. None of them prevent the development of vibrio life; but sulphate of quinine and pepper entirely prevent the appearance of fungi. This fact, together with the remarkable efficacy of sulphate of quinine in intermittent fever, would lead to the supposition that this form of disease is due to the introduction into the system of fungus germs; and this is rendered the more probable if we bear in mind that these fevers are prevalent only in low, marshy situations, where vegetable decay abounds, and never appear to any extent in dry climates, even in the midst of dense populations, where ventilation is bad and putrefaction is rife.

The results obtained in the case of charcoal show that it possesses no antiseptic properties, but that it prevents the emanation of putrid gases, owing to its extraordinary porosity, which condenses the gases, thus bringing them into contact with the oxygen of the atmosphere, which is simultaneously condensed.

The above results have been confirmed by a second series.

MEDICINE IN PEKIN.(a)

Notwithstanding the opposition which missionary enterprise (particularly with the Roman Catholic order) in some parts of China has met with, it must be acknowledged that the medical mission to which the Report before us refers has been attended with considerable success. The union of the missionary office with that of the physician has contributed in some small degree to this result. It is not our province to discuss the propriety or otherwise of missions simply religious, but we think it will be admitted that the benefits conferred by our brethren in China on the sick and suffering cannot fail to have most beneficial effects on the people in that country. The solid advantages arising from the humane and skilful attendance of medical practitioners have been felt in other places less enlightened than China. "The Tenth Annual Report of the Pekin Hospital," by Dr. John Dudgeon, is a pamphlet of great interest. It refers to the disastrous effect in the south of China of the Shan-sin-fau disturbances. Those disturbances did not affect the northern parts of the country, but the terrible floods which inundated so large a tract of the northern parts of the empire were not without their effect upon the efforts of the medical missionary. It appears from a table showing the aggregate number of the out- and in-patients for the years 1871, 1870, and 1869 that they were as follow:—Out-patients, 10,128, 11,061, 14,420; the in-patients, 51, 64, 94. We gather that burns and scalds are of frequent occurrence amongst children and opium-smokers, owing to the bed-place, which is furnished with an open stove, being used for all purposes. Dr. Dudgeon relates the following interesting cases:—

"At the beginning of the year the youngest son of a mandarin had both his legs very badly burned. He was three months in the Hospital, and the sore was not even then all healed over. He returned home, and six months afterwards a piece the size of the hand still remained uncovered with skin. The sore took on a very unhealthy appearance. I ordered some of the dry scrapings of the sole of the unburnt foot to be planted in the ulcer and bandaged, and I had the satisfaction shortly afterwards of hearing that the wound was contracting. It has since healed. Diphtheria, which was somewhat common in the spring, broke out in this family while the lad was with us. Only prompt measures saved the daughter-in-law.

"In the early part of the year a man presented himself with a wound, the result of a stab, over the region of the small lobe of the liver, and below and a little to the left of the ensiform cartilage. Although the parts underneath were exposed, the case did well.

"A case of a man with chronic thickening of the pyloric end of the stomach and small lobe of the liver, the result of acupuncture, was seen; also another, with thickening and an open sore which refused to heal, in the same locality, with impaired digestion, from a like cause. Western surgeons would be horror-struck at the variety of supposed vital places which the Chinese leech or quack (there is little difference) selects for this operation—in the neck, under the nails and tongue, in the temples, and all over the abdomen—in short, directly over or near bloodvessels, whose course they are supposed to know, and which knowledge has been handed down to them from time immemorial. This practice is had recourse to in all diseases, even the most diverse. Constipation and cholera, for example, are both treated by the needle. This mode of treatment is wisely forbidden now on the person of the Emperor. We have each year to note instances of the bad effects of this foolish and often fatal procedure.

"In March a man came into the Hospital with suppuration of the entire foot and leg, the result of a needle having penetrated between the first and second toes."

A case of amputation above the wrist is recorded for the removal of a large enchondroma—a cartilaginous tumour. The patient was a man 60 years of age. The disease had existed for forty-five years, and of late had grown extensively, and exhibiting a decided appearance of a malignant character. An operation was performed for the removal of the unhealthy part, which was eventually unsuccessful; but amputation resulted in a complete cure. Several cases of cancer were treated by operation and otherwise. Cases of paralysis are much on the increase, and little can be done for them. Toothache and tooth extraction had been more common than in any former year, notwithstanding the great care the Chinese take of their teeth, and the Chinese doctors have no acids in their Pharmacopœia. Carbuncles are frequent among the aged and infirm, and are often fatal. One poor man from a distance—an opium smoker—had a carbuncle on his back one foot long by eight inches broad; he died in the Hospital. Hernia is probably more common in China than in any other country, owing to the immense weights coolies carry. The shop in connexion with the Hospital sells a large number of trusses each year. The first case of stone occurred in the Hospital this year. The man had suffered from the affection for seven years; for three years it had existed in the bladder, and for four years in the back of the urethra. During the twenty days previous to his appearance at the dispensary, it was lodged in the navicular fossa, quite close to the external opening. The organ immediately behind the glans was very hard and swollen. The stone was too large to admit of being extracted without a previous incision being made into the urethra. The stone weighed fifty grains.

"Fistula in ano and gluteal and ischial sinuses are excessively frequent among the Chinese. This region is sometimes completely riddled with fistulæ.

"During the year some very large abscesses have been opened, discharging two or more pints of pus.

"Ague has been of very constant occurrence this year. It is usually treated with quinine. The Chinese know and appreciate the value of this medicine, in proof of which it may be mentioned it is the only foreign drug, opium of course excepted, which is found in Chinese drug shops in the city."

In a supplementary note on small-pox, Dr. Dudgeon makes the following remarks:—"Happily we have not been visited with this scourge in its epidemic form this year, as during the last two winters. The views expressed at some length in the last year's Report, regarding the origin of small-pox, receive confirmation to some extent from a statement in a book of this dynasty on this subject, entitled *Tsien chin chi pao* (more valuable and precious than thousands of gold), written by a scholar, a native of the province of Hunan, named Chwang. He states that the first appearance of small-pox in China occurred at a period corresponding with A.D. 317 of our reckoning. In an old Corean medical work it is stated that the ancients knew nothing of it and measles, thus corroborating the view advanced by us, that the opinion of the Jesuits, believed in Europe, and quoted in Moore's 'History of Small-pox,' and by other writers—that small-pox was known B.C. 1000—is entirely without foundation. These early Corean compilers believe that it took its rise somewhere about B.C. 250, but their opinion is unsupported by evidence. The opinion we have advanced seems the most tenable."

We make no apology for further quotations from this interesting little book:—

"*Colour of Iris.*—So universal is black hair and black iris with the Chinese, that we come to look upon any deviation from this type as something almost abnormal. At the Hospital, patients now and again appear with light blue or brown eyes. They certainly look odd, and strike us at once as most strange. One man, born with light blue eyes, but black hair, had small-pox in youth, and since then his left iris had become darker.

"*Medical Jottings.*—The spirits of dead patients are supposed to hover and sit around the door of their unfortunate physicians. Patients in search of a doctor resort to the temples

(a) "The Tenth Annual Report of the Pekin Hospital for 1871."

of Ching-hwang, himself a spirit, unlucky enough to have been 'cured dead' by the Faculty. He is surrounded by his attendants, who also have been sent to the tomb of the Capulets before their time. These patients or their friends are directed to a practitioner whose door is comparatively free of such spirits of departed patients. With such a superstitious people, diviners and quacks have it all their own way. Leagues between these knaves are the pest of every city. Many amusing stories are told of physicians and the ghosts that haunt their doors. The poor patient in this way often calls in the sheerest quack, and it is no wonder that he frequently falls a victim to acupuncture, or some other equally senseless Chinese remedy. Prescriptions, before being adopted and acted upon, are held opposite the patient for his adjudication. If the heart agrees with them, the medicine is taken, if not they are refused. One thinks skilful physicians are not wanted in China, if this easy test of the value of a medicine is to be always applicable. The wonder is, that so many disagreeable and disgusting remedies should still survive in the Chinese Pharmacopœia!

"A useful emetic in emergencies—in cases, for example, of poisoning from arsenic, gold leaf, or other noxious article—is to make a gruel of human excrement and administer it *q. s.* The *officinal* (!) name is *pa-pa-tang* or *fen-tang*. The criterion of a good physician is that he *looks, hears, asks, and ponders.*

"The Chinese doctrine of the pulse frequently gives occasion to the perpetration of jokes upon the Faculty. Most ridiculous mistakes are often made between the sexes, and married and unmarried females. An ordinary joke is for a literary person, with delicate hands and long nails, to simulate a woman. The doctor is called in, the would-be-patient thrusts his hand from behind a curtain or screen, as the manner is when women are attended professionally, and his pulse is most attentively examined at both wrists as the Chinese manner is. All the circumstances of the family are duly considered, and the doctor, knowing how highly sons are esteemed, declares his patient pregnant with a boy!

"Beans and green millet are said to destroy the effect of medicines; hence the care with which the Chinese abstain from these articles when under treatment. No people are more anxious to know what is contraindicated. The idea of the antidotal power of beans originated with the *Pen Tsao*, stating that they destroy the effects of arsenic and other poisons."

Our space does not permit us to quote further on the present occasion. We shall probably return to the Report.

REVIEWS.

Thermic Fever or Sunstroke. By H. C. Wood, jun., M.D. The Boylston Prize Essay. Philadelphia: Lippincott and Co. 1872. London: Trübner. Pp. 128.

Sunstroke is so much more frequently seen in America than in this country that the American physician can claim to speak with more authority on it than those of our brethren whose experience is confined to the British Islands. It is true that a large mass of literature on the subject is the work of our countrymen, but the materials from which their experience has been drawn have been gathered in hot climates, and especially in India. A few cases of sunstroke, it is true, occur yearly in the British Islands, but they are not sufficiently numerous to give any physician the opportunity of comparing a series of cases, and the phenomena of the affection are not sufficiently unvarying to encourage deductions from isolated cases.

The author of this small work states in his preface that his attention was drawn to the subject by cases witnessed at the Pennsylvania Hospital ten years ago; and at that time he noted the peculiar rigid condition of the heart after death, a pathological fact of which a considerable bulk of evidence is adduced in his essay. Professor William Pepper has, however, placed on record certain cases of supposed sunstroke in which, on post-mortem examination, he found the heart much softened and relaxed. To explain the discrepancy between these statements, Dr. Wood assumes that under the name of sunstroke or *coup de soleil* different conditions have been described, which may be referred to three heads—acute meningitis or phrenitis; heat exhaustion; and thermic fever, or true sunstroke. The first class of cases is so rare as to be almost theoretical; the second does not differ materially from other forms of acute exhaustion, the condition being characterised by rapid feeble pulse, cool moist skin, and tendency to syncope, and to this class Dr. Wood would refer Professor Pepper's cases; the third class is that to which he would restrict the name of sunstroke, a disease well marked and distinctive in its clinical history and anatomical lesions. To suppose that exposure to the direct rays of the sun is necessary to produce thermic fever is an error exploded by the general experience of army surgeons. Men are often attacked at night in their tents or their barracks, and patients in hospital who have been confined to bed with other diseases have not unfrequently become the subjects of the malady. One of the cases observed by Dr. Wood originated in a sugar refinery. The necessary cause of the disease is heat, solar or artificial. Of course there are a number of predisposing causes, such as debility, exhaustion, intemperance, improper clothing, etc., but these are not essential. The disease is not in the majority of cases instantaneous: there are usually premonitory symptoms, such as headache, weakness, and vomiting. The minor symptoms of thermic fever vary, but there are leading symptoms which are characteristic and always present. Dr. Wood gives an admirable description of the disease as he himself has observed it; it is, however, too long for quotation, but the phenomena may be summed up as those of intense fever, the temperature 108° to 109° Fahr., with profound disturbance both of the cephalic and spinal nervous system,—the disturbance manifesting itself in the form of insensibility, with or without delirium, and with restlessness, convulsions, or paralysis of the motor tract. In most cases evidences of asphyxia are marked before death, but the author notes that with it there is consentaneous failure of the heart's action. With regard to the pathological appearances after death, they are mostly negative; "there is scarcely any constant lesion whatever of the solids, nor is congestion of the brain, or serous or hæmic effusion into its ventricles or substance of frequent occurrence." The right heart and pulmonary arteries are gorged with dark fluid blood. In Dr. Wood's cases the capillary system of the lungs did not appear congested, but on section of the lung the blood seemed to pour from the larger vessels. The lungs and the whole body seem to suffer from venous congestion. The blood seems to leave the arterial system and collect in the venous trunks. The arterial coats are often stained red, apparently from altered hæmatin. The left ventricle, as we have seen, according to the author's experience, is rigidly contracted. The blood is altered: its coagulability is impaired, but not always destroyed. After death the blood appears dark, often thin, sometimes grumous, feebly alkaline, or in some cases decidedly acid. In some of Dr. Wood's cases the blood was examined microscopically, but nothing abnormal was noted.

The second part of the essay—on the nature of the affection—contains an account of various experiments on the lower animals, the results of which are compared with previously ascertained experimental and clinical facts. The following are some of the results Dr. Wood has obtained:—First, with regard to the study of the muscular system in insolation—(*a*) excessive rigidity of heart, due to a coagulation of its myosin, is a very pathognomonic lesion of sunstroke; (*b*) that in most cases it is a post-mortem rather than an ante-mortem phenomenon, occurring directly after death; (*c*) in certain cases, the so-called cardiac variety of sunstroke, death is probably due to a sudden ante-mortem coagulation of the cardiac myosin, and consequent instantaneous arrest of the heart's action; (*d*) that the muscles after death from heat-fever very soon become rigid—sometimes do so instantly,—and that such rigidity is of the same nature as ordinary post-mortem rigidity; (*e*) that while it is conceivably possible that death from asphyxia may occur from coagulation of the myosin of the diaphragm and other respiratory muscles, it is exceedingly probable that in man death never does actually occur from such cause.—(Pp. 71, 72.) With regard to the effect of heat on the nervous system, Dr. Wood finds that "heating the brain of a mammal produces sudden insensibility, with or without convulsions, at a temperature of 108° F., and death when a temperature of 113° F. is reached; that this effect of the local application of heat is not due to induced congestion, but is the result of the direct action of the heat upon the cerebrum, and that consequently the nerve-centres are as perniciously affected by high temperature as the muscles are. The nerve trunks will bear a temperature of 125° without their conducting power being immediately affected. The temperature reached in sunstroke does not, according to the author, destroy the vitality of the blood, the amœboid movements of the white cells and the absorption power of the red discs not being injured. The author, from his experimental and clinical researches, of which we have given but a partial account, draws the conclusion that *coup de soleil* is a fever not depending upon blood-poisoning, but upon heat.

In the section on treatment the author condemns blood-

letting, although he honestly quotes Dr. Hyde Salter's case, published in 1870 in this journal, in which bloodletting acted like a charm. Cold affusion, on the principle of abstracting heat, meets with his approbation, although, as his own reported cases prove, it very frequently fails. The sequelæ of thermic fever—persistent and grave headache, with tendency to meningitis—are discussed in the last chapter.

Dr. Wood's essay, small in compass, contains much original observation, and is the result of no small amount of labour. His views of course will be tested by labourers in the same line of research; but although they may be found to admit of modification, or in some particulars to be mistaken, the book is not less a very creditable and valuable addition to the current literature on the subject.

NEW BOOKS, WITH SHORT CRITIQUES.

The British and Foreign Medico-Chirurgical Review. October, 1872. London: J. and A. Churchill.

*** This is the hundredth number of the sole representative of the quarterly review which English Medicine produces. Our contemporary has therefore existed a quarter of a century, and we are glad to say gives good evidence of vigorous health. The first article in this number, on "Painters and Accidents of Sight," is a clever one. It attacks Mr. Liebreich's explanation of the senile shortcomings of Turner and Mulready with a pleasant mixture of science and wit. There is a vein of humour cropping up here and there in the paper which makes it very readable. The next paper is one on "The Surgery of the Rectum," the aim of the writer of which seems to be to compare and contrast the treatment recommended by Bodenhamer, Van Buren, Ashton, H. Smith, and Allingham, from whose works long extracts are made. The next review is of a higher stamp; it is a critical analysis of the third volume of Sir James Simpson's works on "Diseases of Women." Then there is a paper on "The Pathology of Hysteria," which is quite worth reading; articles on "Cholera," the "State and Progress of Therapeutics," "Histories of Medicine"; and reviews of Mitchell "On Injuries of Nerves," Thudichum's "Chemical Physiology," Fayrer's "Thanatophidia of India," together with a large number of shorter notices of books and original communications by Dr. Braidwood "On Retro-vaccination," and Dr. Balthazar Foster on "The Therapeutics of Diabetes Mellitus," wherein the effects of peroxide of hydrogen, ergot, potash salts, opium, bromide of potassium, and lactic acid are tested and exemplified in carefully-recorded cases. The number concludes with the usual chronicles of foreign and contemporary medical science, and an instalment of Dr. Greenhill's "Contributions to Medical Literary History." Such a mass of varied material will afford pleasant occupation for many a winter evening.

FOREIGN AND COLONIAL CORRESPONDENCE.

AUSTRALIA.

Melbourne, August 13.

The Diphtheria Commission—The Constitution of the Medical Board—Lloyd *v.* Stilwell.

The Profession is just now discussing the Report of the Diphtheria Commission which was lately presented to Parliament, and is now published for the information of all who may be interested in the history of a public body, sitting six months, but doing nothing. A more fruitless result of an investigation, supposed to involve important scientific questions, was hardly ever given to the world. The Report is a bulky one, and, with the evidence, covers nearly 200 folio pages of tolerably small print. All the old proverbs suggestive of resultlessness instinctively rise to one's mind after reading it; but the truth is—very few people have read it. Some of the daily papers laud it highly on the *omne ignotum pro magnifico* principle. It looks thick and imposing, and, to a non-professional person, just looking into it with that blank ignorance of all medical science which is the rule among those who write for the daily press, it has a quasi-scientific flavour. But, like Sir Charles Coldstream's "Vesuvius," there is really nothing in it. The opinion entertained by the Profession of the Commission may be gathered from the fact that while 435 circulars of queries sent out only 120 were returned. Of these 120 I know that a great many were returned by gentlemen officially connected with the Government, from the fear that if they did not return them their official position might be endangered. Others out of the 120 were returned with a note, saying that it was impossible for the several queries to be answered. As the Commission have not thought proper to publish the answers, we are left in ignorance of what was really said in them. Dr. McCrew, however, has assured the public, in a letter to the *Argus*, that those who did reply were the "cream of the Profession." But unless the replies to the queries contain something more valuable than what was given verbally in evidence, it is impossible to avoid the conclusion that the "cream of the Profession" is unable to give any information of the slightest value on the subject. Of those who thus gave evidence several attended under protest, the Commission having the power to inflict a penalty of £20 for refusing to attend; and some, as I know, not having the fear of the Commission before their eyes, and defying their fining power, absolutely refused to attend at all. But admitting that all who attended were willing witnesses, it requires but a little consideration of their testimony to appraise the value of it. Out of the whole sixty-four there may be perhaps three who gave anything like a scientific opinion. The rest may be taken to represent simply a confliction of vaguely formed opinions. The theories entertained as to the nature of the disease appear to be ludicrously inexpressive, and the treatment adopted is of the most varying description. Some witnesses insist upon diphtheria being a purely local affection; others contend for its being altogether constitutional; a number will have it that it is both local and constitutional. With some it is simply a form of scarlatina; with others it is a disease *per se;* while a particular class "think" it is an allied disease of scarlatina, and a few that it may and it may not be so. Some insist upon stimulants, some prohibit them; some swear by caustics, some denounce them; some apply hot fomentations to the throat, some apply ice. The mortality is stated variously to be from 3 per cent. to 60 per cent. The only certain thing about the Report is that it has cost the country £398 11s.; and as the expenses of the Commission will amount to at least as much more, the Commission will have proved altogether a somewhat costly toy. If any good had come out of the investigation, nobody would have grudged the money; but as nobody besides the Commission and two or three newspapermen—friends of the Commissioners—have discovered any value in it, the general belief is that the Commission-game is not at all worth the expensive candle which has been alight during the playing. You may guess by this, therefore, as to the sources from which a good deal of the agitation in the medical world of this colony arises. Half a dozen restless, mischievous, but active-minded men conceive themselves qualified to demonstrate the desirability of a certain action on the part of the Government. They get one or two newspapers to take up the matter upon which they are bent. And I need not say that to some newspapers it matters very little, or not at all, what they advocate, so long as it is something in which they can persuade the public they ought to be interested. On the principle of one fool making many, other newspapers take up the matter also; then some popularity-hunter introduces it into the Assembly, and it is forthwith made a public question. This, in brief, is quite the history of the Diphtheria Commission; and it is the history of a good many other questions in which the interests of a few self-seeking medical men are concerned.

This kind of agitation has been lately illustrated in some appointments made by the Government to the Medical Board. The restless, self-seeking section alluded to about two years ago made representations to the then Government that they were not represented on the Medical Board. In consequence, a gentleman—gentleman by courtesy—was appointed, who was understood to represent that section. A few months ago he died, and the Duffy Government, being moved by the same section, appointed two gentlemen in his place. This so disgusted the other members—Dr. Howitt, Dr. Motherwell, Dr. Youl, Mr. Thomson, and Dr. Barker—that they resigned in a body, and a committee was appointed to consider the reasons of their resignation. The committee have just reported to the Government, and it is understood that they have recommended the dissolution of the Medical Board, and its re-formation, in the which it is tolerably certain the present Government will not include the two objectionable members lately placed on the Board.

The action of Lloyd against Stillwell, which I think I told you on the first occasion of its being tried resulted in the jury not agreeing, came before the Supreme Court again on the

1st inst. The result was a very prompt verdict for the defendant. The action taken by the medical journal, therefore, with reference to the Diphtheria Commission has been pronounced a right one, and the small malignant faction of which Dr. Lloyd was the indefatigable fugleman are considerably cast down. During this trial very much was made of the feuds which are supposed always to prevail in the medical profession. This action, in fact, was described as a battle between rival editors; but the truth is that, though the Profession here is certainly divided into two parties, they are numerically very unequal. The names on the Medical Register number 465, and it may be safely asserted that the faction which is always creating unpleasantness does not include more than twenty of that number; but as they call themselves an "Association," as they lately had a *Gazette*, and as they are incessant in proclaiming themselves, they have undoubtedly secured a good deal of attention which never would have been gained on the score of merit. But the public do not, and will not, understand this, and so the really well-meaning portion of the Profession—that is to say, its most considerable bulk—are confounded with the other and smaller portion, and are judged accordingly.

GENERAL CORRESPONDENCE.

THE HOT-SAND BATH.

[To the Editor of the Medical Times and Gazette.]

Sir,—Fresh from the enjoyment of a delicious therapeutical novelty, and being, as I believe, the *corpus vile* on whom the first experiment has been made in London, I beg to call the attention of my professional brethren to the hot-sand bath which has been established by Dr. Conradi at 22, Aberdeen-place, Maida-hill.

The patient is introduced into a warm, comfortable room, in which is a bath, fenced round with curtains, filled with sand heated to about 100° to 120°. In this a longitudinal groove (I will not say grave) is scooped to receive the patient, who is wrapped in a sheet, and so protected from contact with the sand. There is a comfortable pillow for the head.

Then the bath operator gradually covers up feet, legs, arms, and trunk with the warm sand. A bucket of hotter and one of cooler sand are at hand, so that the temperature can be adjusted with the greatest nicety. The feeling of warmth is very agreeable, and the weight of the sand is just enough to cause a pleasant sense of compression and support. After an hour's delightful repose, the patient rises, is refreshed by a sluicing with hot water, and goes away refreshed.

The effect is very different from that of hot water, and still more from that of hot air or steam. There was absolutely no commotion of the heart, nor any of the grilling effect on the windpipe which I have experienced in Turkish baths. Altogether, it seems a good thing when we want to produce measured perspiration and relieve congestion of the internal organs. I am, &c., R. D.

37, Hertford-street, W., October 16.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, October 8.

T. B. Curling, F.R.S., President, in the Chair.

Mr. W. B. Dalby read a paper on "Non-purulent Catarrh of the Middle Ear." He commenced by stating that the object of the communication was to direct attention—firstly, to the several conditions under which the Eustachian tubes become so obstructed as to prevent the free passage of air from the pharynx into the tympana; secondly, the various effects which follow catarrh of the tympana; and thirdly, the treatment adopted for these affections of the ear. The notes of cases treated at St. George's Hospital and elsewhere, extending over a period of three years, formed the basis of the paper, and there was an appendix containing an abstract of twenty cases which were considered typical of the disease under notice. When the Eustachian tube only was involved, the appearances of the tympanic membrane most frequently noticed were—an increased inward curvature, unusual prominence of the short process of the malleus, and a tilting inwards of the handle of this bone. The chief element in treatment was regular inflation of the tympanum, on Politzer's method, until the catarrhal condition had subsided, when the hearing was completely restored. In the next class of cases—viz., when the mucous membrane lining the tympanum was the seat of catarrh—the changes noticed on examination of the tympanic membrane were alterations in curvature, opacities, thinning of the membrane generally as well as in circumscribed spots, and calcareous degeneration. The author considered that these should be regarded merely as the effects of catarrh, and not, as in the classification adopted by Mr. Toynbee, separate diseases. Such changes were not of themselves the cause of deafness; the origin of this will be found to be behind the membrane, in the form of accumulations of mucus, and it is to the softening and removal of these that the treatment must be directed. With this view the injections of alkaline solutions into the tympanum was practised, either by means of the Eustachian catheter, or forced into the cavity of the tympanum with the aid of a Politzer's bag, while the patient performed the act of swallowing—some of the fluid thus used having previously been injected from a glass syringe into the inferior nares of the side to be acted upon. In a large proportion of the cases very considerable improvement in hearing followed; but the author stated that in many there were no appreciable results, for as it was impossible to judge of the precise changes that had taken place behind the tympanic membrane from its appearances, it was difficult to predict what might be the effect of treatment. In some instances an incision was made into the membrane, and the mucus evacuated through the cut by passing a stream of air through the Eustachian tube. Very good results followed this proceeding, but it was only done where more simple means had failed, and there was ample evidence of the mucus being in a fluid state.

Mr. Hinton thought that with regard to children perforation of the membrana tympani was more frequent than was imagined. He had often used to look when there were no symptoms pointing to this condition, and yet found mischief. With scarcely any pain and no deafness there might be slight perforation, which would heal up. These spontaneous openings seldom discharge all the matter formed in the inner ear, and it was difficult to keep any opening long patent. After such a healing, therefore, deafness might continue from imprisoned mucus. In cases of accumulation there was also a danger of loss of hearing from interference with the nerve as well as by mere pressure. Incisions might be made again and again, if necessary, to relieve accumulations. He thought Mr. Dalby's rules as to incision not quite certain. In recent cases we might usually abstain from incision, as the tympanum possesses considerable powers of absorption. Chronic cases were better for operation.

Mr. Harvey asked if they had seen the patients six and twelve months after operation. He had, and the results were not encouraging. It was hard to understand how so much could be removed from such a small cavity as the tympanum. Nothing was said as to constitutional management, though patients often got well with that. Patients were often very ill after the operation, and in some of the cases described he thought the operation was hardly justifiable. Often the disease was syphilitic or rheumatic.

Mr. T. Smith was glad to hear from Mr. Hinton such opinions as regarded catarrh and perforation in children. These perforations are not attended with any great loss of tissue, and are soon got over. He could testify to the good results of the operation, especially when other means had failed.

Mr. Hulke asked how the membrana tympani could be dragged inwards when the cavity was full of fluid.

Mr. C. Hawkins asked in what cases Sir Astley Cooper performed perforation of the membrana tympani. He had the instrument Sir Astley used to employ.

Mr. Dalby had tried to distinguish acute purulent from subacute mucous catarrh. Toynbee described maladies as primary which were the result of this. His records of cases extended, some over three years, all over six months. The curvature of the membrana tympani was always increased where the Eustachian tube was closed.

Mr. T. Spencer Wells communicated a paper by Dr. Richard T. Tracy, Lecturer on Obstetrics in the University of Melbourne, on "A case of Ovarian Dropsy operated on during an attack of Acute Peritonitis," in which the author gave an account of the case of a woman, aged 31, married five years, and the mother of two children. The patient had noticed the tumour fifteen months. When first seen she was in a hectic

condition, with a rapid and feeble pulse, and suffering great pain from the enormous distension of the abdomen. Some relief was at once obtained by tapping and drawing off two quarts of thick colloid fluid (the tumour was multilocular). After the tapping she was removed to the hospital, and carefully examined. She measured thirty-eight inches in circumference, nine inches from the ensiform cartilage to the umbilicus, and eight inches and a half from the umbilicus to the pubes. Her stomach was very irritable, and she had to be supported by nutrient enemata. Her temperature was 102°; pulse 120; the abdominal tenderness extreme. As it was evident she would soon sink unless something could be done to relieve her, ovariotomy was performed on March 19. The tumour was multilocular, semi-solid, and almost universally adherent; the peritoneal surface was deeply congested, much thickened, and full of flaky lymph, which was removed in large quantities. The pedicle was secured with a clamp, and the wound closed by deep silk sutures and superficial ones of horsehair. Two hours after the operation there had been a considerable fall in the temperature. On the fourth day there was a large escape of gas and fetid fluid from the wound, and from this time recovery was rapid and finally complete. The author expresses his opinion in favour of bichloride of methylene as an anæsthetic, and recommends the extra-peritoneal treatment of the pedicle by the clamp wherever it is practicable.

Dr. Heywood Smith asked if there was any record of the quantity of blood lost. That sometimes did good.

Mr. Spencer Wells said the letter contained nothing about it; but it was hardly a case where loss of blood was likely to do good. He thought it remarkable how often patients did well after rupture of the cyst into the abdomen.

CLINICAL SOCIETY OF LONDON.

Friday, October 11.

Sir William Gull, Bart., M.D., F.R.S., in the Chair.

Dr. Southey related a "Case of Acute Rheumatism with Cerebral Symptoms and High Temperature treated unsuccessfully by Cold Affusion" in a well-built man, aged 35, of highly nervous temperament, in the habit of drinking wine and beer, but not intemperate. This was his first attack of acute rheumatism. The rheumatic articular inflammations were not established until after he had been ailing for fourteen days, with a temperature ranging between 100° and 102·5°. The rheumatic symptoms were well marked. The invasion of several joints with swelling and redness, the tongue, the pulse, and the sweating were highly characteristic. On the eighteenth day of illness pericarditis set in, the joint-inflammation suddenly subsided, and delirium of a peculiar kind, preceded by head-pain and obscurity of vision, presented itself; the temperature now ranged between 104° and 105° in the axilla for ten days, while twelve grains of quinine, from six to ten ounces of brandy per diem, and various opiates, as well as chloral, were administered with little sedative effect. Bronchial symptoms now ensued, with great failure of power, although food and stimulants were freely taken. Delirium, akin to coma vigil, still continuing, and his temperature marking 105°, the patient was immersed in a bath quickly cooled down from 96° to 71°. The effect was immediate dissipation of delirium, with reduction of temperature to 100·5°, followed by short repose; but, the bodily temperature quickly rising again, he was maintained wrapped in a wet sheet exposed to the air of the room at 65° for an hour. After this his temperature fell and remained between 101° and 102° for two days. Some rest was now obtained, the pulmonary symptoms relieved, and respirations fell from 36 to 28 per minute. Subsequently, the wet sheet was frequently employed, on four occasions as often as three times in the twenty-four hours, with invariable relief of the delirium and subsultus. From the eighteenth day of his illness up to the fortieth, quinine was given in doses varying from twelve to twenty-four grains in the twenty-four hours, as well as brandy, from four to ten ounces, without noticeable good or ill effect. On the thirty-third day of his illness his temperature fell spontaneously to 100·5°; he was then quite rational for twelve hours, and there was a slight return of the rheumatic pains in the joints, which lasted, however, only for a few hours. The patient gradually sank with low broncho-pneumonic symptoms on the forty-second day of his illness. The post-mortem examination revealed that swollen condition of the glandular viscera ordinarily discovered after all acute febrile diseases, but no tubercle anywhere in the body, and no apparent mischief in the brain or its membranes. The author of the communication considered the case one of cerebral rheumatism, and thought that the cold water treatment had prolonged life and relieved the delirium.

The President, who had seen the patient, thought the bronchitis was produced by the cold water.

Dr. Buzzard asked if the man was suffering from alcoholism. He remembered seeing, in the London Hospital, a patient (a sailor) suffering from acute rheumatism. He was delirious, and the delirium was like that of delirium tremens, and his temperature was about 102°. They decided that this was not a case of cerebral rheumatism, but rather that the delirium was due to alcoholism.

Dr. Southey had known the patient for years, and never saw him intoxicated. He made careful inquiry, and found that very little alcohol upset him, so that he could not take it.

Dr. Wilson Fox thought the relation of temperature to delirium exceedingly interesting. This was almost the first case of cerebral rheumatism which had proved fatal with the cold water treatment. The temperature of the patient was comparatively low for cold affusion. He considered that they had better not adopt any active treatment in these cases until they should see whether nature was to prevail and the temperature fall of its own accord. We often see cerebral symptoms come and go with low temperature; and, on the other hand, we often have high temperature and no delirium. He thought it better, in such cases, to wait until there was a high temperature—say 107°—before applying the cold water. Cerebral symptoms did not of themselves threaten a fatal issue; no more did a temperature of 105°. He would wait till a temperature of 106° was passed, or even 107°. There were no deaths recorded under 109°, and a temperature of 106·5° had been recovered from naturally. Bronchial complications did arise after cold water, but they might arise from the high temperature itself. He felt some little doubt of the propriety of using cold water in typhoid till after the study of the records, which showed that bronchial complications occurred as frequently without it.

Dr. Hermann Weber was inclined to think this case was different from those recorded in which heretofore cold was used. His own cases were entirely different. The temperature in these was not very high, when suddenly it rose to a great height. The delirium, too, was different. In this case of Dr. Southey's the delirium came on before the temperature was high. Dr. Southey's case was really like what was commonly called cerebral rheumatism. He had seen two such. In these he used the wet sheet, which did much good, giving the patients sleep and rest.

Dr. C. T. Williams said with regard to the bronchitis he had been using the cold baths to keep down temperature in cases of phthisis, and though such subjects were prone to bronchitis, no evil result followed.

The President fancied the man was intemperate, and thought he was falling into a low typhoid state through bad nutrition. The case was totally different from Dr. Weber's cases.

Dr. Southey said the cold sheet always removed the delirium.

Dr. Powell asked what was the effect of cold on the joints—did it check the inflammation?

Dr. Weber said he had seen the joints get better before the head was affected, and the joints get worse as the head got better.

The President mentioned a case where the temperature suddenly rose to 107·5°. They put the patient in a bath at 90°, and cooled it down to 47°. The patient was in it for two hours, and the temperature was very greatly reduced. The pain in the joints was relieved. At night the patient was put in the bath again for a shorter time, and was cooled down to 80°. The joints did not get bad again. It was a question how far this rise of temperature was due to mechanical injury to the brain.

Dr. Greenhow also read elaborate notes of an interesting case of acute rheumatism with high temperature unsuccessfully treated by cold water.

Dr. Wilson Fox said we had yet a good deal to learn with regard to the use of cold in such cases. There seemed to be two kinds of them. In one the reduction of temperature followed immediately on the bath, and was permanent; in other cases there was a long-continued attack of fever, requiring long-continued bathing. In these he would only use cold as a means of treating hyperpyrexia, leaving the disease to run out, or act on it by other remedies. If the high temperature returned, it might be well to wait to see if it would fall of its own accord.

Mr. Hulke thought the process rough and exhausting.

Other means might be employed—cold air, for instance. He had known in pyæmia the temperature fall from 108° with scruple doses of quinine.

Dr. ANSTIE thought if quinine were to be used at all it must be in very large doses—even a drachm or two might be given.

Mr. COOPER FORSTER said they had been using quinine largely in pyæmia. He thought it the only efficacious remedy.

Mr. LAWSON said the temperature was reduced certainly in such cases by quinine, but the disease went on, and the patient died.

OBITUARY.

LEONARD MORSE GODDARD, M.R.C.S. ENG., L.S.A.

WE regret to announce the death of this gentleman, from disease of the heart and dropsy, on the 6th inst. In him the Profession has lost one of its best types of the general practitioner. A man of great mental power, breadth of thought, and intellectual attainments, together with remarkable force of character and high tone of mind, he was just the kind of man to make and leave a mark in his day and generation. Unfortunately, however, in the commencement of his practice he became a Poor-law Medical Officer, and for many years the immense work entailed on him in this limited sphere, and the contests he was continually involved in with the guardians to secure for the paupers adequate relief and suitable treatment, prevented his large powers being available in a sphere which would have been worthy of him. Nevertheless, he secured a large private practice, which he retained till within a few months of his death. He had great aptitude for business, and was well known in the City in connexion with many undertakings, the most unfortunate of which was the Royal British Bank, by which he was a considerable loser. Being of robust constitution and great activity, he went through an enormous amount of work in the several epidemics of cholera, fever, and small-pox which have visited London during the last thirty-seven years. He contracted typhus many years ago, and nearly lost his life. Later on he sustained a disastrous post-mortem wound, when again his life was despaired of; but his splendid constitution and careful habits of life enabled him to survive both calamities. He required very little sleep, and was a great reader, so that his professional knowledge was always of the latest kind. His acquaintance with English literature was very wide, and his happy and ever fresh quotations lent a charm to his conversation which attracted friends to his side even within two days of his death. His loss is not only widely felt, but is not easy to be replaced; for a man of such power, character, and mind is seldom to be found except in the higher walks of life. He leaves two sons, the elder of whom, Dr. Eugene Goddard, who has been established some years in Pentonville, succeeds him in practice.

FRANCIS DA CRUZ McCOWAN, M.D. EDIN., L.R.C.S.,

WAS born in Calcutta, January 25, 1819. Dr. McCowan was a graduate of Edinburgh University and licentiate of the Edinburgh College in 1840. He became Surgeon to the Canongate Dispensary shortly after graduation, which post he held for several years. For the last twenty-six years, and until his death, he held the appointment of District Surgeon to the City Parochial Board. He also acted as Medical Officer to the Greenside Kirk Session during the years 1847-48. Dr. McCowan was a Freemason, and foremost in advancing the interest of the craft. He was senior representative of foreign grand lodges, for which office his acquirements as a linguist rendered him well fitted. The Lodge of St. Mary's Chapel, for which he did great service when it was in difficulties, resolved to present him with his portrait in full Masonic costume, but the intention of the donors has been frustrated by Dr. McCowan's death. For several years he had been suffering from chronic ulceration of the bowels, which at last carried him off on October 6, at the age of 53. Dr. McCowan was interred at Inveresk churchyard, on October 9, with Masonic honours. Dr. McCowan's medical thesis was "On the Induction of Premature Labour." His loss will be much felt by many among rich and poor. The street in which he lived showed on the day of his funeral many a wet eye among his pauper patients.

E. LESLIE FALLOON, L.R.C.P. EDIN., M.R.C.S.

THE late Mr. Falloon, of Liverpool, was the youngest son of an Irish rector. He studied first in Dungannon, next in Belfast as assistant to the late Dr. Wales, and finally in the city of Dublin as clinical clerk in Steevens's Hospital to his cousin, the late Sir Henry Marsh, of that city. He passed his final examination in London in 1840, and, after serving as medical officer on board emigrant ships for two or three voyages, he finally settled in Liverpool in the year 1845. He had very considerable practice, and was highly esteemed by a large circle of friends and patients. He was Assistant-Surgeon to the Liverpool Rifle Brigade, also medical referee to the Marine Life and Casualty and Briton Assurance Societies, and had a medal for services as Assistant-Surgeon to the Bengal Volunteer Regiment, China Expedition. He was contributor to the *Medical Times and Gazette* and to the *Dublin Quarterly Journal*. In 1865 he became a Licentiate of the Royal College of Physicians, Edinburgh, by examination. Mr. Falloon's health began to give way during 1871. He struggled on in his profession till the spring of 1872, and, after suffering extreme agony by reason of a malignant tumour at the base of the brain, he died on August 13 last, to the grief of family and friends, at the age of 53. His remains are interred in the Toxteth-park Cemetery, near Liverpool.

JOHN MACRAE, M.R.C.S. EDIN.,

THE son of a merchant at Forres, Morayshire, was born at that town in 1811. He qualified for practice at Edinburgh in 1832. He then went out to India as a surgeon in the H.E.I.C. service, but was obliged to return to England in consequence of ill-health, caused by the climate. On his return to England, in 1834, he first practised his profession at Hurstmonceux, Sussex, from whence he removed to Lewes, the county town of Sussex, in 1843. For the last twenty-nine years he carried on an extensive practice of the highest class up to the very time of his death, which occurred suddenly from an attack of syncope caused by weakness of the heart's action, on September 27, 1872, in the 61st year of his age. He leaves a widow, a son (who is in Australia), and seven daughters to mourn his loss.

JOHN PEARSON HUGHES, M.D. LOND., M.R.C.S., L.S.A.

DR. HUGHES was born near Llandovery, and entered as a student at University College in 1862. He was very successful as a student, being generally liked by his brethren and the Profession. He took his M.B. at the University of London in 1866, and his M.D. in 1867. He soon after went into practice at Llandovery, where he was highly successful, and much esteemed and beloved. He died of acute phthisis at the early age of 28. He was generous-hearted, and an upright and honourable man.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At examinations held on Tuesday, Wednesday, and Thursday, October 8, 9, and 10, the Licence to practise Medicine was granted to—

Booth, Brabazon Shiels.	Daniel, James.
Counsellor, William Parkinson.	Weld, James Charles.

The following received the Midwifery Diploma :—

Booth, Brabazon Shiels.	Daniel, James.
Counsellor, William Parkinson.	Weld, James Charles.

THE QUEEN'S UNIVERSITY IN IRELAND.—The annual meeting of the Senate for the purpose of conferring degrees, honours, and diplomas, was held in St. Patrick's Hall, Dublin Castle, on the afternoon of Thursday, October 10. The Most Hon. the Marquis of Kildare, Chancellor of the University presided, and in the course of some introductory remark, referred to the great success of several of the medical graduates of the University at various recent competitive examinations. In the Faculty of Medicine within the past year there had been 138 candidates for the previous examination, and 78 for the final examination for the degree of M.D. Eighty-eight of the former and 67 of the latter had satisfied the examiners. Fifty-three candidates had presented themselves for the degree of Master in Surgery, and 41 for the diploma in Midwifery. Forty-two of the former and 30 of the latter had come up to the requirements of the examiners. At the conclusion of an admirable speech the noble Chancellor conferred the following degrees in Medicine and Surgery :—

DEGREE OF M.D.

First Class.

R. J. Anderson, M.A., Belfast. | J. K. Houston, Belfast.
J. Magrath, Belfast.

Second Class.

M. J. Malone, Cork. | H. M. Maybury, Belfast.

Third Class.

J. Strahan, Belfast.

Passed:—

J. G. Adamson, Belfast.
A. Adams, Belfast and Cork.
G. W. F. Armstrong, Cork.
J. B. Bailey, Belfast.
G. Barkley, B.A., Belfast.
P. L. Benson, M.A., Cork.
S. Browne, Belfast.
R. E. Burges, B.A., Cork.
J. Bryans, Belfast.
J. Burke, B.A., Galway and Cork.
R. Campbell, Belfast.
N. W. Colahan, Galway.
J. G. Collis, Cork.
T. Crowly, Cork.
R. Davis, Belfast.
H. A. Davis, Belfast and Cork.
J. S. Dill, Belfast.
J. Fleming, Belfast.
C. Forsythe, Belfast.
H. A. Fogarty, Cork.
M. J. Gillespie, B.A., Galway.
J. Graham, Belfast.
J. Hegarty, Galway.
W. Hickman, Galway.
J. J. Holland, Galway.
J. Hurley, Cork.
H. M. Johnstone, Cork.
S. Johnston, Cork.
F. B. Kane, Cork.
J. R. Leech, Cork.
C. A. Macaulay, Galway.
S. M'Cutcheon, Belfast.
D. P. M'Donald, Cork,
S. M'Kee, Belfast.
P. J. M'Quaid, Belfast and Galway.
P. J. Macnamara, Cork.
H. J. Madders, Cork.
J. A. Malcomson, Belfast.
W. Molloy, Belfast and Cork.
T. Molony, Cork.
W. E. B. Moynan, Galway.
D. Mullen, Galway.
R. J. Munro, Belfast.
B. O'Brien, Cork.
P. O'Connell, Cork.
B. O'Connor, B.A., Cork.
S. H. Owen, Belfast.
T. Patterson, B.A., Belfast.
R. Read, Galway and Belfast.
J. Ring, Cork.
J. N. Ryan, Belfast.
J. M. J. Scott, Belfast.
W. J. Smyth, Belfast.
T. F. Sparrow, Cork.
W. F. Spencer, Galway.
W. Simpson, Belfast.
W. Thomson, B.A., Galway.
J. Wheeler, Cork.
T. B. Whitton, Cork.
H. C. Wilson, Belfast.
A. Wylie, Belfast.

DEGREE OF M.CH.

J. G. Adamson, Belfast.
A. Adams, Belfast.
S. Agnew, B.A., M.D., Belfast.
G. Barkley, B.A., Belfast.
M. Black, M.D., Belfast.
S. Browne, Belfast.
J. Bryans, Belfast.
R. E. Burges, B.A., Cork.
N. W. Colahan, Galway.
J. G. Collis, M.D., Cork.
T. Crowly, Cork.
R. Davis, Belfast.
H. A. Davis, Belfast and Cork.
J. S. Dill, Belfast.
W. Fleming, M.D., Galway.
H. A. Fogarty, Cork.
J. Graham, Belfast.
J. Hegarty, Galway.
W. Hickman, Galway.
J. J. Holland, Galway.
J. Hurley, Cork.
J. K. Houston, Belfast.
F. B. Kane, Cork.
J. R. Leech, Cork.
C. A. Macauley, Galway.
S. M'Kee, Belfast.
D. P. Macdonald, M.D., Cork.
S. M'Cutcheon, M.D., Belfast.
H. M. Maybury, Belfast.
P. J. M'Quaid, Galway.
T. Molony, Cork.
W. E. B. Moynan, M.D., Galway.
B. O'Brien, Cork.
P. O'Connell, Cork.
B. O'Connor, B.A., Cork.
T. Patterson, B.A., Belfast.
R. Read, Belfast and Galway.
J. Ring, Cork.
J. M. J. Scott, Belfast.
W. F. Spencer, Galway.
J. Strahan, Belfast.
W. Thomson, B.A., Galway.

Diplomas in Midwifery were granted on the same occasion to—

J. G. Adamson, Belfast.
S. Agnew, B.A., M.D., Belfast.
P. L. Benson, M.A., Cork.
J. Bryans, Belfast.
J. M'M. Browne, M.D., Cork.
M. Black, M.D., Belfast.
R. E. Burges, B.A., Cork.
N. W. Colahan, Galway.
J. G. Collis, Cork.
T. Crowly, Cork.
R. Davis, M.D., Belfast.
H. A. Davis, Belfast and Cork.
H. A. Fogarty, Cork.
J. Graham, Belfast.
F. Healy, M.D., Cork.
J. J. Holland, Galway.
J. Hurley, Cork.
J. K. Houston, Belfast.
W. E. Johnston, M.D., Belfast.
G. Johnstone, M.D., Belfast.
J. K. Kerr, M.D., Belfast.
J. Knox, M.D., Belfast.
C. A. Macauley, Galway.
R. M'Bride, M.D., Belfast.
S. M'Cutcheon, M.D., Belfast.
D. P. Macdonald, M.D., Cork.
S. M'Kee, Belfast.
H. J. Madders, Cork.
J. A. Malcomson, Belfast.
W. A. Maybury, M.D., Galway.
H. M. Maybury, Belfast.
W. E. B. Moynan, Galway.
B. O'Connor, B.A., Cork.
P. O'Connell, Cork.
S. H. Owen, Belfast.
T. Patterson, B.A., Belfast.
J. Ring, Cork.
J. M. J. Scott, Belfast.
E. E. Sloane, M.D., Belfast.
J. Strahan, Belfast.
W. Thomson, B.A., Galway.
A. Young, M.D., Belfast.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 3, 1872:—

Moore, Henry Cecil, King's Norton.

On October 10:—

Jennings, William Oscar, Trinity-square, Borough.
Pearde, Henry, New Romney, Kent.
Smith, Thomas Bower, University College.
Talbot, Russell Main, Guildford-road, Poplar.

As an Assistant in Compounding and Dispensing Medicines:—

Pearce, Percy, Guilford-street, W.C.

APPOINTMENTS.

BRADY, JAMES WILLIAM, M.B. Dub., L.R.C.S.I.—Medical Officer for the Clara Dispensary District of Tullamore Union, King's County.

DEANS, JOHN, M.R.C.S.I., L.S.A. Lond.—Medical Officer for the Coleridge District of Crediton Union, Devon.

DOIDGE, J. G., M.R.C.S., L.S.A.—Medical Officer for the Lewtrenchard District of the Tavistock Union, Devon.

DOUGALL, JOHN, M.D.—Medical Officer of Health for the Burgh of Kinning-park, Glasgow.

DUNN, WILLIAM ALLISON, M.R.C.S. Eng., L.S.A. Lond.—House-Surgeon to Carlisle Dispensary.

GOODFELLOW, W. R., M.R.C.S.E., L.S.A.—Medical Officer for Roche District (No. 2) of St. Austell Union, Cornwall.

HALL, F. DE HAVILLAND, M.B. Lond., M.R.C.S.E., L.S.A.—Physician to the Metropolitan Dispensary, Fore-street, Cripplegate, *vice* Eustace Smith, M.D. Lond., M.R.C.P. Lond., resigned.

KIBBLER, W. AMBROSE, L.R.C.P. Lond., M.R.C.S.E.—Resident Medical Officer to the London Hospital, *vice* Mr. Stephen Mackenzie, M.R.C.S.E., resigned.

MOFFAT, ALEXANDER COWAN, L.R.C.P. Edin. and L.F.P.S.G.—Assistant Medical Officer to the Barony Parish Poorhouse, Barnhill, Glasgow.

MORRIS, DAVID E., M.R.C.S.—Assistant Medical Officer at the County Lunatic Asylum, Hereford.

STEPHENS, R. F., M.R.C.S. Eng., L.S.A.—Medical Officer for District No. 7 of St. Austell Union, Cornwall.

STOCKER, CHARLES S., M.R.C.S.—House-Physician to the Seamen's Hospital, Greenwich, *vice* Dr. Lyell, whose appointment has expired.

NAVAL APPOINTMENTS.

ADMIRALTY.—F. G. Toms, Staff Surgeon to the *Invincible;* T. G. Haran, Staff Surgeon to the *Glasgow;* Dr. Leonard Hayne, Surgeon to the *Doris;* James Thompson, Surgeon to the *Immortalité;* Benjamin H. M'Cardy and Henry M. Levinge, Assistant-Surgeons to the *Doris;* Charles J. Wordsworth, Issac H. Anderson, W. H. E. Roberts, and Robert Wright, Assistant-Surgeons to the *Immortalité;* W. J. Volatti, Assistant-Surgeon to the *Pembroke.*

BIRTHS.

BOILEAU.—On September 18, at Newcastle, Jamaica, the wife of Assistant-Surgeon John Peter Boileau, B.A., 29th Regiment, of a daughter.

BOND.—On October 14, at 50, Parliament-street, Westminster, the wife of Thomas Bond, F.R.C.S., of a daughter.

BROWN.—On September 5, at Arnar Rullee, Lahore, Punjaub, the wife of E. Burton Brown, M.D. Lond., of a son.

GODWIN.—On August 7, at Agra, N.W.P., the wife of C. H. Y. Godwin, Assistant-Surgeon Royal Artillery, of a son, stillborn.

HEATH.—On October 4, at Clifton Villa, Aldershot, the wife of R. E. Heath, M.D., the Connaught Rangers, of a daughter.

MURRAY.—On September 14, at Karachi, Scinde, the wife of Surgeon-Major William Sim Murray, M.B., 66th Regiment, of a daughter.

SLADE.—On October 7, at Puddletown, Dorchester, the wife of Robert Slade, M.R.C.S. Eng., L.S.A., of a son.

SMITH.—On October 9, the wife of Joseph Smith, M.R.C.S. Eng., L.S.A., of 41, Elgin-road, Notting-hill, London, and Preston Cottage, Sussex, of a son.

MARRIAGES.

ABBOTT—ROBINSON.—On October 12, at St. John's Church, Notting-hill, W., Thomas Abbott, Esq., Shepherd's-bush, to Frances Eliza, second daughter of R. R. Robinson, F.R.C.S., Newbury, Berks.

BUSS—DIX.—On October 9, at Christ Church, Highbury, Henry Buss, M.D., of George-street, Hanover-square, to Jane, daughter of Thomas Dix, Esq., F.R.G.S., of Amwell-street, Claremont-square.

GILLESPIE—PEPPARD.—On October 8, by special licence, at the residence of the bride's father, Robert Gillespie, B.A., M.D., Army Medical Staff, to Sarah Robertine, daughter of John Peppard, M.D., Cookestown House, co. Kilkenny.

GUINNESS—BOXWELL.—On October 2, at the British Ambassador's, the Embassy, Stuttgart, Würtemburg, the Rev. R. Wyndham Guinness, M.A., to Sarah Victoria Dora, youngest daughter of the late William Boxwell, M.D., of Abbyleix, Ireland.

LEGG—HOUGHTON.—On October 15, at the parish church, Sephton, John Wickham Legg, M.D., of St. Bartholomew's Hospital, to Eliza Jane, elder daughter of Richard Houghton, of Sandheys, Great Crosby, Lancashire.

PARSONS—MARSHALL.—On October 7, at the British Legation, Stuttgart, George Parsons, M.A., M.B., of Hawkshead, youngest son of Joseph Parsons, Esq., of Dublin, to Marianne Jefcoate, daughter of the late Joseph Marshall, Esq., of Edgbaston, Birmingham.

RAMSAY—CHAPMAN.—On October 26, at All Soul's Church, Langham-place, William Frederick Hutchinson Ramsay, M.D., of Somerset-street, Portman-square, to Sarah, widow of the late Joseph Chapman, surgeon, of Woodville House, Hounslow.

RUTHERFORD—BREDIN.—On October 10, at St. Thomas's Church, Dublin, the Rev. W. A. Rutherford, D.D., Royal Navy, H.M.S. *Asia*, Portsmouth, to Elizabeth Frances, third daughter of Hall Bredin, M.D., 181, Great Brunswick-street, Dublin.

TOMLINSON—MERES.—On October 2, at the parish church, Lower Peover, John Tomlinson Tomlinson, M.R.C.S. Eng., L.M., L.S.A., of The Crescent, Salford, to Louise Fitz Patrick, only daughter of John Meres, Esq., of Moss House, Hale, Cheshire.

TURNER—BETTS.—On October 9, at St. Mary's, Watford, Herts, Sydney Turner, second son of John Turner, Esq., solicitor, London, to Alice Louisa, second daughter of George Harvey Betts, M.D., of Gatten House, Shanklin, Isle of Wight.

WRIGHT—WHITWORTH.—On October 9, at Sion Chapel, Halifax, J. Hodgson Wright, M.R.C.S. Eng., L.M., L.S.A., to Mary, only daughter of the late John Whitworth, Esq., of Kirby Leas, Halifax.

DEATH.

BAINES, EDWARD MAY, M.R.C.S. Eng., at Chipping Barnet, Herts, on October 14, in his 79th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Candidates must possess a registered qualification from some corporation or corporations examining in Medicine and Surgery. Applications, with testimonials, to Alexander Bottle, M.D., on or before October 23.

BIRMINGHAM HOSPITAL FOR WOMEN.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

HOSPITAL FOR DISEASES OF THE THROAT.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of England, and must produce evidence of having acquired skill in the use of the laryngoscope. Applications, with testimonials, to George C. Witherby, Esq., Honorary Secretary, on or before October 22.

MIDDLESEX COUNTY ASYLUM, HANWELL.—Apothecary. Candidates must be Licentiates of the Royal College of Physicians or Society of Apothecaries, and duly registered under the Medical Act. Copies (only) of testimonials, to Richard William Partridge, Clerk to the Visitors, on or before October 24.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART.—Consulting and Junior Physician. Applications to W. F. Portlock-Dodson, Honorary Secretary.

UCKFIELD UNION.—District Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to H. Jones, Clerk to the Guardians, on or before October 31.

UNIVERSITY COLLEGE HOSPITAL.—Assistant-Physician; Assistant-Surgeon; Assistant Medical Officer for the Skin Department. Applications for any of these appointments must be addressed to John Robson, B.A., Secretary to the Council, on or before October 31.

WARNEFORD, LEAMINGTON, AND SOUTH WARWICKSHIRE HOSPITAL.—Surgeon. Candidates must be M.R.C.S. of London, Edinburgh, or Dublin, Licentiates of Apothecaries' Company or the College of Physicians of London. Applications, with testimonials, to the Secretary, on or before October 29.

WEST LONDON HOSPITAL, HAMMERSMITH-ROAD.—Two Junior Physicians. Candidates must be Fellows or Members of the Royal College of Physicians of London, and send in their applications on or before October 23.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Islington Parish.—The St. Peter's District is vacant; salary £120 per annum.

Westbourne Union.—Mr. W. F. Bennett has resigned the First District; salary £62 per annum. Also the Workhouse; salary £12 per annum.

APPOINTMENTS.

Alston with Garrigill Parish.—Stewart Carson, L.R.C.S. Edin., to the Second District.

Brentford Union.—Henry R. C. Litchfield, L.R.C.P. Lond., M.R.C.S. Eng., to the Ninth District.

Evesham Union.—Allen L. Haynes, M.R.C.S. Eng., L.S.A., to the Second District.

Leyburn Union.—John Cockcroft, M.R.C.S. Eng., L.S.A., M.D. St. And., to the Leyburn Western District.

Penzance Union.—Robt. Dunstan, L.S.A., M.R.C.S. Eng., to the Third District.

WE regret to hear that the health of Sir Charles Locock, M.D., is in such a state as to cause grave apprehensions.

DR. JOHN MUTER, F.C.S., of the South London School of Chemistry and Pharmacy, has been appointed by the Lambeth Vestry the Public Analyst for that borough.

THE Vestry of St. George's, Hanover-square, has appointed a committee of fifteen to sift candidates for the appointment of Medical Officer of Health. The election will take place on November 7.

THE Clerkenwell Vestry, influenced probably by our strictures which their conduct has called forth, appear to have reconsidered the question of appointing an analyst. The appointment is forthwith to be made.

THE Sanitary Committee of the Corporation of Bradford, Yorkshire, have recommended the appointment of a Medical Officer of Health at a salary of £500 per annum.

IT is stated that the Managers of the Central Sick Asylum Infirmary at Highgate have issued orders for the discontinuance of smoking by the patients in either the Infirmary or grounds. On an inquiry being made it was found that twenty-three of the patients, although paupers, had pipes and tobacco in their possession.

THE Admiralty have consented to lend H.M.S. *Rhin* to the Thames Shipping Inspection Committee as a hospital ship, should it be required in the event of the appearance of cholera among the shipping in the Thames. The *Rhin* will be lent on the same conditions as she was to the Metropolitan Asylum Board as a small-pox hospital-ship.

THE LATEST THING IN STRIKES.—The workmen at the Chapelball Iron Works, belonging to the Monkland Iron and Coal Company, have struck, the principal cause being the exaction of a penny per week for the medical officer. What next?

A FEVER HOSPITAL is forthwith to be erected at Darlington, at a cost of £9000.

A YOUNG GENTLEMAN (says the *Swiss Times*) has just died in Chur from the effects of drinking of the water of the Roseg glacier. He was advised by his tutor not to partake of it, but did so, and died after four days' illness.

MR. CLEMENT HAMERTON, of Navan, F.R.C.S. Ire., has been presented with a carriage, a purse containing £46 10s., and a highly complimentary address, as a mode of evincing the gratification of his friends at his recovery from a severe and protracted illness.

A MILK-DEALER in Golden-lane, Dublin, has been fined £10 and costs for selling milk adulterated with no less than 80 per cent. of water. When we consider that milk enters universally into the daily fare of invalids and children, it seems absurd that we should continue to tolerate its conversion into a deleterious or a worthless liquid.

AT the last meeting of the Board of Management of the Bradford Infirmary, the following resolution was passed:—"That this Board, referring to the expiration of Mr. Miall's ten years' term of office as Honorary Surgeon to the Bradford Infirmary, desires to record its high sense of the very valuable services which Mr. Miall has rendered to the institution, and gratefully recognises the great assiduity and professional skill which has been shown in the discharge of the important duties of his office."

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The first meeting of the session 1872-73 will be held at the Scottish Corporation Hall, Crane-court, Fleet-street, on Saturday, October 19, at 7.30 p.m. The President, Dr. Henry Letheby, will deliver an address, entitled "Sanitary Legislation of 1872."

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY—(Incorporated with the Owens College).—The total number of entries for this session registered to October 15 is 121: of this number 40 are new students.

THE FRENCH CONSEIL SUPÉRIEUR DE LA GUERRE.—The friends of military medical reform in France have just had their hopes of progress excited by the nomination of Baron Larrey, Président du Conseil de Santé des Armées, as one of the members of the Conseil Supérieur, the body having in charge the consideration of all measures relating to the amelioration of the army.

SUICIDE OF PROFESSOR TREITZ, OF PRAGUE.—Dr. Treitz, who has been for the last twenty years a most popular Professor of Anatomy in the University of Prague, has recently, in a fit of melancholy, destroyed himself by means of cyanide of potassium. Notwithstanding the great popularity of his teaching among his pupils, out of his theatre Treitz was never accessible, having had for years past the reputation of being a "man-hater."

MEDICAL LECTURES AT CAMBRIDGE.—The Downing Professor of Medicine, Cambridge, or his deputy (Dr. Latham) will deliver a course of lectures on Materia Medica and General Therapeutics during the ensuing Michaelmas and Easter terms. The lectures will be delivered in Downing College on Tuesdays, Thursdays, and Saturdays, at 9 a.m., commencing October 22. The Professor of Chemistry will begin a course of lectures on Chemistry on Monday, October 21, at noon, in the chemical lecture-room, Downing-street, and continue them on succeeding Mondays, Wednesdays, and Fridays at the same hour. The Professor will attend to give instructions in practical chemistry on Mondays, Wednesdays, and Fridays, at 1 p.m., beginning October 16, and the Demonstrator of Chemistry (Mr. Hicks) will attend for the same purpose daily, in the mornings and afternoons alternately.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The first meeting of the session was held on Friday evening, October 11, at 8 p.m., Prior Purvis, M.D., in the chair. The following gentlemen were elected officers of the Society for the session 1872-73:—*President:* Ralph Gooding, B.A., M.D. *Vice-Presidents:* John Anderson, M.D., M.R.C.S.; Charles Nind, M.R.C.S. *Council:* John Moulden Burton, F.R.C.S.; William Carr, M.D., F.R.C.S.; Samuel Giles, B.A., M.D.; William Lockhart, F.R.C.S.; Frederick Moon, M.B., M.R.C.S.; John Prior Purvis, M.R.C.S.; H. W. S. Sturton, M.R.C.S. *Treasurer:* Prior Purvis, M.D. *Secretary:* Harry Knight Hitchcock, M.R.C.S. *Librarian:* George Granville Bothwell, L.R.C.P.E., M.R.C.S.E. After the election the President delivered a highly interesting inaugural address, being an exhaustive epitome of the recent advances made in Medicine and Surgery. The night of meeting is on the first Friday in the month, at 8 p.m.

THE MEDICAL OFFICERS OF THE SOUTH DUBLIN UNION.—At the meeting of the Board of Guardians of the South Dublin Union held on October 10, a letter was read from the eight Dispensary Medical Officers who had laboured among the poor on the south side of the city. The purport of the letter was that, as 2000 cases of small-pox had been attended at their own homes, the Medical Officers looked for a permanent increase of salary as a substantial recognition of their services in the trying time just past. After some conversation the following resolution was adopted:—"That the eight gentlemen receive £20 each as a gratuity, and that it be referred to the several rural dispensary committees to report as to their medical men, and the number of cases, for the information of the Board, in case they may desire to recommend them for gratuity."

ROYAL MEDICAL COLLEGE.—On Friday, October 11, the memorial stone of a new master's house at Epsom was laid by Erasmus Wilson, Esq., F.R.S., in the presence of the treasurer of the College (Henry Sterry, Esq.), the chairman, and most of the members of the council, the secretary, the head master, and assistant masters of the school, the 200 boys, and many friends of the institution. The house is the free gift of Mr. Erasmus Wilson, at whose sole expense it is being erected on the College land, at a cost exceeding £5000. It is a handsome building of red brick, with stone dressings, corresponding in style with the rest of the College, and will afford accommodation for a master, with his family and servants, an assistant master, and forty boarders. The architect is Mr. George Elkington, of Cannon-street; the builder, Mr. Shepherd, of Bermondsey. After attending afternoon service in the College chapel, the company walked in procession to the site of the building, and the stone was formally laid by Mr. Wilson. Prayers were offered up by the Rev. Dr. West, head master, and appropriate psalms were chanted by the boys forming the chapel choir, under the direction of the Rev. C. Gray, one of the assistant masters.

LIVERPOOL SCHOOL OF MEDICINE.—The following gentlemen received prizes and certificates at the Liverpool Royal Infirmary School of Medicine at the public distribution on October 1:—*Winter Session.*—Exhibitioners: Messrs. D. L. Parry, E. Riding, W. T. Hayward, G. W. Joseph. Third Year's Subjects: Mr. W. T. Hayward, silver medal; Mr. H. J. Molyneux, bronze medal. Second Year's Subjects: Mr. T. L. Roberts, silver medal; Mr. D. T. Evans, bronze medal; Messrs. R. N. Pughe, D. D. Stewart, and G. G. S. Taylor, honorary certificates. First Year's Subjects: Mr. J. Bark, silver medal; Mr. W. F. Shain, bronze medal; Messrs. S. F. Bigger, A. H. Young, and W. J. Miskelly, honorary certificates. *Summer Session.*—Second Year's Subjects: Mr. R. N. Pughe, bronze medal. First Year's Subjects: Mr. S. F. Bigger, silver medal; Mr. E. S. Wood, bronze medal; Mr. A. L. Douglas, certificate. Comparative Anatomy and Zoology: Mr. W. F. Shain, prize; Mr. S. F. Bigger, certificate. During the past year the students have been examined for medals and certificates in the whole of the subjects taught in their respective sessions.

HEALTH OF SCOTLAND.—During the month of September last the deaths registered in the eight principal towns of Scotland were 2107, of whom 1078 were males and 1029 females. Allowing for increase of population, this number is forty-two under the average number for September during the last ten years. The comparison of the deaths recorded in the eight principal towns shows that during September the annual rate of mortality was 17 deaths per 1000 persons in Aberdeen, 18 in Edinburgh, 19 in Perth, 22 in Leith, 25 in Glasgow, 28 in Dundee and in Greenock, and 30 in Paisley. Of the 2107 deaths, 980, or 46 per cent., were of children under 5 years of age. In Perth, 29 per cent. of the persons who died were under 5 years of age; in Aberdeen, 34; in Edinburgh, 36; in Greenock and in Glasgow, 49; in Dundee, 50; in Leith, 53; and in Paisley, 56 per cent.

HEALTH IN ST. MARYLEBONE.—Dr. J. Whitmore states in his report for August and September last,—"I have great pleasure in reporting that during the Vestry recess the health of the parish has been unusually good, and but for the increased mortality from infantile diarrhœa—which during the hot months of July and August is always very prevalent, especially amongst the offspring of those whose hard lot it is to live in wretched overcrowded habitations and in the most dismal localities—the rate of mortality in St. Marylebone for the last nine weeks would have borne comparison with that of the healthiest towns in England; for by reducing the deaths from diarrhœa to the weekly average of the last sixteen years, I find the death-rate of the parish at less than 18 per 1000 of its living population. The deaths in August were 322—males 161, females 161; and in September 217—males 121, females 96. The rate of mortality for these nine weeks was equal to an annual average of 19·55 per 1000, being 2 per 1000 less than the death-rate of London during the same period, and 3 per 1000 less than that of the parish during the corresponding weeks of last year. Happily, at the present time the deaths from zymotic diseases are unusually low, and no one of them shows a tendency to become epidemic.

CONTRAVENTION OF THE MEDICAL ACT.—At the Dalkeith Justice of Peace Court, Lord Melville and Mr. Dundas of Arniston on the bench, James Horsburgh, veterinary surgeon, Dalkeith, was charged with having falsely represented himself as a surgeon. The complaint, which was at the instance of Mr. List, chief constable, was founded on an account sent to Mr. Kellock for medical attendance, etc., in which the accused described himself as, "surgeon, veterinary surgeon, and Member of the Royal College." Mr. Anderson, S.S.C., appeared along with Mr. List for the prosecution. On being asked to plead, the accused said he was a "human surgeon as well as a veterinary surgeon," and produced a diploma, which, however, only certified him as a veterinary surgeon. Mr. List: We cannot find your name in the list of licentiates for 1872. Mr. Horsburgh: I have a lot of Government letters to show that I am a human surgeon; and I have written to the Secretary of War on the subject since I received the summons, but I have not yet received an answer. I wish the case continued. Lord Melville: We shall hear your statement after hearing the evidence. Samuel Copland, sheriff-officer, deponed to having delivered the account on which the complaint was founded, along with a small-debt court summons to Mr. Kellock. He did so in consequence of instructions from the accused. He knew that the whole of the account was in Horsburgh's handwriting. James Wilson, farmer, Wester Cowden, deposed to the account being in the handwriting of the panel, as did also Mr. Kellock. The latter witness stated that he never employed the accused to attend any member of his household during illness. The account with which he was charged was alleged to have been incurred by his wife as far back as 1861. The accused: But he has paid portions of the account. Mr. Anderson: Well, that is all the worse for you. Lord Melville: Where are you registered as a medical practitioner? The accused: Here is my diploma. Lord Melville: But that is from the Veterinary College; you are not a medical practitioner. The accused; I have here papers from her Majesty's Government—more than a dozen of them—showing the service I have done. Lord Melville: What is the service you have done?—cured cows? (Laughter.) The accused: No; cured human beings. (Renewed laughter.) Mr. Anderson said that the accused must prove that he was recognised by law as a surgeon before he could practise. The Act distinctly set forth that any person taking the name or title of physician, doctor, surgeon, etc., without being a licentiate in Medicine or Surgery, was liable in a penalty of £20. The bench found the charge proved, and fined Horsburgh in the mitigated penalty of £5, with the alternative of one month's imprisonment.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

*** It should have been stated that the case recorded by Dr. Jago, of Truro, at page 328 of this journal, was also that of the patient with contracted stomach recorded last week, the same woman being the subject of the two anomalies. The engravings at page 409 were reduced to quarter-size, and not half-size, as stated in the text.

Will you or any of your readers inform me what diseases are rife during the various months of the year.—*Z.*

Constant Reader.—Apply to Mr. Van Praagh, Burton-crescent, W.C.

Mr. John Evans.—You may send us the receipts and particulars.

Inquirer.—A law of copyright has been introduced in Turkey.

A Constant Reader.—Consult the President of the Royal College of Surgeons, Mr. Hancock.

P. S.—Dr. Christopher Wirtzung's "General Practice of Physic" was translated from German into English at the latter end of Queen Elizabeth's reign by his countryman, Jacob Mosan, Doctor in the same Faculty.

Dissection.—Such things have been known. Bouchet, a French author of the sixteenth century, says that the physicians at Montpelier, which was then a great school of Medicine, had every year two criminals—the one *living*, the other dead—delivered to them for dissection.

P. N. T.—Yes; a man was sentenced to death at the Old Bailey who had a wen upon his throat weighing between thirty and forty pounds. To hang him was impossible without circumstances of revolting cruelty: The case found its way from the lawyers to the surgeons; the latter obtained his pardon, and took off the tumour. John Hunter was the operator. The man, his offence not having been of a very heinous kind, though the laws made it at that time capital, was taken into his service, and used to show his own wen in his master's museum. The facts are narrated in Southey's "Doctor."

An Assistant.—1. No. 2. As follows :—

"See here, see here, a doctor rare,
Who travels much at home;
Come take his pills, they cure all ills,
Past, present, and to come.
Take a little of his nif-naf,
Put it on your tif-taf."—*The Bishoprick Garland.*

COMMUNICATIONS have been received from—

Mr. Haynes Walton; Mr. Rivington; Mr. Morris; Mr. J. Chatto; Dr. Fayrer; Dr. Grace Calvert; Dr. F. R. Hogg: Mr. James Dixon; Mr. Bengough; A Sufferer; Mr. P. Beattie; Mr. P. Bevan; Z.; Mr. Teevan; Mr. Anderson; Mr. J. Evans; Dr. Macnab; Mr. Hitchcock; Mr. J. T. Williams; Dr. Dale; Mr. Page; Mr. Kibbler; Dr. Home; Mr. G. Southam; Dr. R. E. Power; Mr. E. A. Lauranoe; Mr. G. Lawson; Dr. Goddard; Mr. Jobson.

BOOKS RECEIVED—

On the Treatment of Diseases of the Skin, by McCall Anderson, M.D., F.F.P.S. Glasg.—Outlines of Surgery and Surgical Pathology, second edition, by F. Le Gros Clark, F.R.S., F.R.C.S., assisted by W. W. Wagstaffe, F.R.C.S.—Sanitary Education, a paper by F. W. Headland, M.D., Honorary Associate of the Order of St. John in England—Review of Mr. Banks's Compendium of Irish Poor-law, by D. Toler and T. Maunsell, M.B.T.C.D.—Report of the Association of Medical Officers of Health—Annual Report on the Health of the Parish of St. Mary Abbott's, Kensington, for 1871, by T. Orme Dudfield, M.D., Medical Officer of Health—Statistical Tables of the Patients under Treatment in the Wards of St. Bartholomew's Hospital during 1871, by the Medical and Surgical Registrars.

PERIODICALS AND NEWSPAPERS RECEIVED—

Nature—Anti-Game Law Circular—Pharmaceutical Journal—Irish Times, October 10—Edinburgh Medical Journa—Liverpool Daily Courier, October 14—Canada Medical Record—Medical Press and Circular—Chemist and Druggist.

APPOINTMENTS FOR THE WEEK.

October 19. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

Association of Medical Officers of Health, 7½ p.m. The President (Dr. Henry Letheby) will deliver an Address, entitled "Sanitary Legislation of 1872."

21. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Opening of the Hundredth Session. Communications by the President (Mr. Thos. Bryant), Dr. Richardson, F.R.S., Dr. Wiltshire, Mr. Francis Mason, and others.

22. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Dickinson, "On the Morbid Effects of Alcohol as shown in Persons who trade in Liquor."

23. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

24. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

25. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Clinical Society, 8½ p.m. Dr. Anstie, "Case of Syphilitic Paralysis, with rapid Atrophy, and Repair of Muscle." Mr. Cooper Forster, "Case of Cystitis treated with Injection of Opium into the Bladder." And other Papers.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 12, 1872.

BIRTHS.

Births of Boys, 1096; Girls, 1039; Total, 2135.
Average of 10 corresponding weeks, 1862-71, 2053·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	574	644	1218
Average of the ten years 1862-71	661·5	640·0	1301·5
Average corrected to increased population	...	...	1432
Deaths of people aged 80 and upwards	...	...	51

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	...	5	2	7	...	2	2	1
North ...	751668	2	1	1	...	6	1	6	2	12
Central ...	333887	1	1	2	1	7	1	3	...	6
East	638928	2	5	4	...	4	2	2	4	11
South	966132	2	...	9	2	10	...	3	3	15
Total	3251804	7	7	21	5	34	4	16	11	45

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·686 in.
Mean temperature	47·3°
Highest point of thermometer	63·4°
Lowest point of thermometer	34·0°
Mean dew-point temperature	42·9°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·64 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 12, 1872, in the following large Towns:—

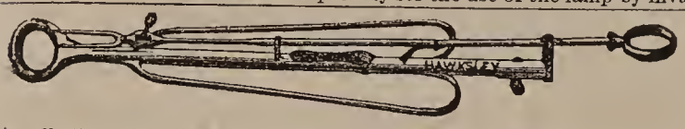
Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Oct. 12.	Deaths Registered during the week ending Oct. 12.	Temperature of Air (Fahr. Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2135	1218	63·4	34·0	47·3	8·50	0·64	1·63
Portsmouth ...	115455	12·1	71	53	61·8	31·2	47·7	8·72	0·64	1·63
Norwich	81105	10·9	43	33	58·0	31·8	44·6	7·00	0·65	1·65
Bristol	186428	39·8	122	54	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	47	35	59·1	33·6	45·3	7·39	1·85	4·70
Birmingham ...	350164	44·7	290	178	59·8	35·4	47·0	8·33	1·07	2·72
Leicester	99143	31·0	91	48	58·7	32·7	45·3	7·39	0·96	2·44
Nottingham ...	88225	44·2	64	42	60·9	31·7	46·8	8·22	0·81	2·06
Liverpool	499897	97·9	316	246	58·8	41·5	48·0	8·89	3·06	7·77
Manchester ...	352759	78·6	243	187	...	...	...	...	...	...
Salford	127923	24·7	97	59	58·5	31·9	45·5	7·50	1·34	3·40
Oldham	84004	20·2	53	55	...	...	...	...	...	...
Bradford	151720	23·0	118	62	57·8	35·0	46·9	8·28	0·86	2·18
Leeds	266564	12·4	103	132	58·0	32·0	45·4	7·44	1·30	3·30
Sheffield	247847	10·9	202	117	60·0	30·5	45·8	7·66	1·54	3·91
Hull	124976	35·1	97	49	57·0	27·0	44·2	6·78	1·42	3·61
Sunderland ...	100665	30·4	71	56	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	89	65	...	...	...	...	...	...
Edinburgh	205146	46·3	107	80	56·0	30·7	45·3	7·39	0·75	1·90
Glasgow	489136	94·8	383	246	56·7	30·8	45·4	7·44	0·89	2·26
Dublin	310565	31·9	161	128	69·5	31·5	48·7	9·28	1·21	3·07
Total of 21 Towns in United Kingd'm	7393052	34·0	4903	3143	69·5	27·0	46·2	7·89	1·19	3·02

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·69 in. The highest was 30·20 in. on Sunday evening, the 6th inst., and the lowest 29·16 in. on Thursday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

PORTABLE
HOT-AIR AND VAPOUR LAMP.

Temperature attained, as a vapour bath, in ten minutes: With thick flannel cloak, 120°; with mackintosh ditto, 130°. Temperature attained, as a hot-air bath, in ten minutes: With flannel cloak, 150°; with mackintosh ditto, 170° to 180°. The above temperatures may be sustained for forty-five minutes. The lamp is very portable, burns methylated spirits, and is without trouble or difficulty in preparation: it may be used with an ordinary bed-room chair. Each bath costs about 3d. Three kinds of cloaks are provided—1st, a mackintosh cloak, lined with flannel, with sleeves in front; 2nd, a mackintosh cloak alone; 3rd, a double flannel cloak; 4th, a single flannel cloak. The 1st and 4th are most usually used. Special covers are adapted to the lamp for hot air when calomel, iodine, or sulphur is to be used. Chairs and bed-cradles provided especially for the use of the lamp by invalids. Price-list forwarded.



IMPROVED TONSIL GUILLOTINE,

By Mr. JOHN EWENS, of Cerne Abbas.

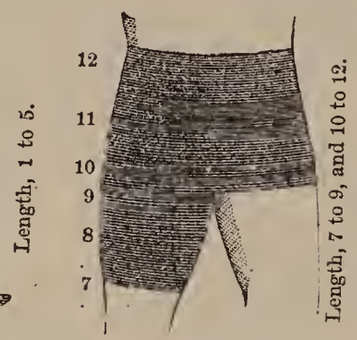
This instrument has metal guards passing from the two finger-rings to near the circular blade. Their use is to prevent the patient closing his mouth while the tonsil is being transfixed by the barbed spear, or during the excision of the tonsil, thus obviating the necessity of a separate gag, and rendering the operation less difficult.

Inventor, Patentee, and Sole Maker, HAWKSLEY, 4, Blenheim-street, Bond-street, London, W.

HOOPER'S SPIRAL ELASTIC BANDAGES.

The Measures should be taken next the Skin, as follows:—

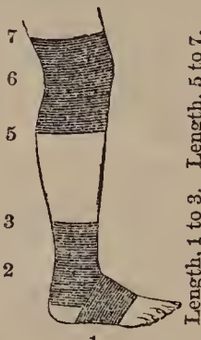
Stocking.



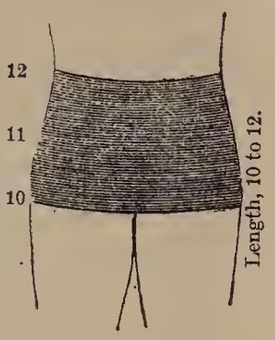
Abdominal Belt & Thigh-piece.

1, Round thickest part of instep.
2, Round ankle-bone.
3, Round small of leg.
4, Round thickest part of calf.
5, Round leg just below knee.
6, Round knee-cap.
7, Round leg just above knee.
8, Round middle of thigh.
9, Round top of thigh.
10, Round body at hips.
11, Round body at umbilicus.
12, Round waist.

The Length should also be given.



Knee-cap & Ankle-sock.



Abdominal Belt.

HOOPER, Manufacturer, 7, Pall-mall East, and 55, Grosvenor-street, London.

CHLORODYNE.

SPECIAL NOTICE.

The absurd statements that have recently appeared in Medical and other Journals respecting the constituents of CHLORODYNE (each analysis differing widely), J. T. DAVENPORT is compelled to further CAUTION the Profession against using any compound under the name of Chlorodyne but the genuine, which alone has gained such extraordinary celebrity.

J. T. DAVENPORT appends Medical testimony in confirmation of the above.

The wonderful efficacy of Chlorodyne being universally acknowledged, it must be evident to all that the assumption of the name to any other Compound than the Genuine is not only improper, but unprincipled, as it is liable to injure the health of the Patient and cause discredit to the Physician. Even death has resulted from the use of spurious Chlorodyne when benefit had been previously experienced from the genuine; and this melancholy circumstance has no effect in restraining these heartless proceedings.

From Dr. J. WILSON, Castleton, Yorkshire.

"I require to use a considerable quantity of Chlorodyne in cases where no other medicine is of the least avail; and my object in wishing a supply from your own establishment is that I am frequently deceived by getting a *Spurious* article from other places, although I never order anything but the genuine Browne's Chlorodyne."

From JAS. ATKIN, M.D., Medical Officer, Fever Hospital, Oldcastle, Co. Meath.

"Having ordered from our Druggists 'Chlorodyne,' I was not only *disappointed in its effects*, but annoyed when I received a spurious compound. I have been in the habit of using your Chlorodyne with great advantage to my patients and satisfaction to myself."

From F. E. BARTON, Esq., Surgeon, Dover.

"I have now used your Chlorodyne in numerous cases, and have much pleasure in adding my testimony to its very great efficacy as an Anti-spasmodic and Anodyne, having found it especially valuable in those cases in which Opium does not agree well with the patient."

From THOMAS F. HALE, Esq., Surgeon, Saundersfoot, Pembrokeshire.

"Sir,—I should be much obliged by your forwarding three bottles of Dr. J. COLLIS BROWNE'S CHLORODYNE, which I have found most useful in allaying pain. I have used twelve ounces of it, and, in nearly every case in which I have employed it, have every reason to be satisfied with the result; and although I object, as a rule, to use any preparation of a secret nature, and whose composition I am not fully acquainted with, still, having once tried the Chlorodyne, and found that it really did produce the effects stated, I do not think I should be justified in withholding such a preparation from my patients, when I see the value of the remedy."

From Lord FRANCIS CONYNGHAM, Mount Charles, Donegal, December 11th, 1868.

"Lord Francis Conyngham, who, this time last year, bought some of Dr. J. Collis Browne's Chlorodyne from Mr. Davenport, and has found it a most wonderful medicine, will be glad to have half-a-dozen bottles sent at once to the above address."

"Earl Russell communicated to the College of Physicians that he received a despatch from her Majesty's Consul at Manilla, to the effect that Cholera has been raging fearfully, and that the ONLY remedy of any service was CHLORODYNE."—See "The Lancet," 1st December, 1864.

CAUTION.—Vice-Chancellor Sir W. Page Wood stated that Dr. J. Collis Browne was undoubtedly the Inventor of CHLORODYNE, that the whole story of the Defendant was deliberately untrue, which, he regretted to say, had been sworn to."—See "Times," 13th July, 1864.

The Sole Manufacturer of Dr. COLLIS BROWNE'S Chlorodyne is

J. T. DAVENPORT, 33, Great Russell-street, Bloomsbury-square,

who alone received the Recipe, and who is the Only Authorised Maker.

ORIGINAL LECTURES.

LECTURES DELIVERED IN THE

COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

Purulent Ophthalmia in Adults.

(*Continued from page* 401.)

Modifications in the degree and in the severity of the developing symptoms occur in different individuals, who may be suffering at the same time, at the same place, from the same source of infection. This would seem to depend on the state of health of each when attacked, the sex, and the age. The disease is more severe in those who are scrofulous, and as the age is nearer to that of puberty on either side. Men suffer more than women.

Cessation of Objective Symptoms.—The swelling of the eyelids first declines, then the chemosis, and afterwards the ocular conjunctiva clears from behind to before in patches, so that red and white spaces alternate.

The caruncle and the semilunar fold, the fornix, and the palpebral conjunctiva remain long swollen, or hypertrophied and vascular, and unless well managed, or even under any treatment, may never completely recover.

The eyelids may return to their normal state, or they may be damaged—the under one falling away from the eyeball, the effect of the inflammation on its fibro-cartilage, and causing a gaping appearance. Pus generally collects in the corresponding sinus. The upper one falling (ptosis) from the weight of its infiltrated tissues and the impaired action of the levator palpebræ, or altogether mechanically pushed down by the swollen retrotarsal fold.

This remnant of the affection may last for weeks or months, and so long as it is present a relapse may ensue from any imprudence in diet, or from exposure to the atmosphere, and be quite as severe as the original attack, so far as the conjunctiva is concerned.

The destructive influence of the ocular inflammation may extend to other ocular tissues before penetration of the cornea ensues. The iris may inflame, and if through the swelling of parts it touches the cornea, it will adhere. The vitreous humour, the retina, and the choroid may be partially or quite spoiled. The sclerotica may become softened, and, yielding to internal pressure, admit of enlargement of the eyeball. When the crystalline lens is present in association with these pathological changes, it becomes quite yellow.

The disease, from the development of the inflammation to its destructive effects on the eyeball, may have a course of from a few days to three weeks.

Constitutional symptoms do not generally appear till the local action becomes severe, so that they are never primarily developed. When they intensify there may be much irritative fever. If the cornea have been penetrated by either of the above-mentioned processes, a very debilitated condition of the system always ensues. There may even be alarming prostration.

Diagnosis.—It is only necessary to point out that catarrhal ophthalmia is the sole affection with which purulent ophthalmia is likely to be confounded. In the former the inflammation appears simultaneously over the whole of the conjunctiva. In the latter it begins in the palpebral conjunctiva, and is for a time confined to it. Then this complaint is of long standing, is subject to relapses, is attended by chemotic and palpebral swelling, with intense conjunctival inflammation, and a profuse purulent discharge, and the eye frequently perishes through affections of the cornea. However, it must be admitted, if the mere attack of the two diseases be regarded irrespective of the whole history, that they differ more in degree than in kind, and that while a mild catarrhal and an acute purulent ophthalmia have very distinct features, a mild purulent and a severe catarrhal ophthalmia are not so easily distinguishable. In consequence of this it has been suggested to use the term blennorrhœa to the inflammation when the mucous element seems to prevail, and pyorrhœa when the pus element seems to predominate. We cannot make a practical difference; fortunately one is not needed. Catarrhal ophthalmia does not run into purulent ophthalmia. I have never seen such progressive development in any case.

Prognosis.—This is the most dangerous of all the inflammatory affections to which the eye is liable.

While the cornea is yet clear, and the chemosis not very hard, and grooving ulceration is not present, there is hope of recovery.

A rapidly developing chemosis is the beginning of a very intense and wide-spread inflammation, and therefore foretells great peril to the eye. Early implication of the eyeball, evinced by deep-seated pains in it, or by inflammatory changes in the cornea, declares the same. Under such conditions complete recovery is most uncertain.

Fortunately there may be saving of useful sight, without or with practical surgery, if the cornea be damaged at the circumference rather than at or towards the centre.

Every form of prolapse of the iris must affect the integrity of the pupil by altering its size or position, or by closing it, and the scope for surgical relief turns on the possibility of making an available artificial pupil, and on the integrity of the retina.

Causes of Purulent Ophthalmia.—The disease may occur from atmospheric causes, and be sporadic or epidemic. It would seem to have an intimate etiological relation with other miasmatic disorders. It may be, and is usually, propagated by infection. It may therefore arise without the application of morbific matter to the eye, but, when once established, it can be transmitted from person to person under circumstances which cannot be distinguished from infectious propagation.

It is not always that the application of the purulent discharge to a healthy eye, by design or by accident, will be followed by inoculation. The infection is most marked under such local circumstances as atmosphere vitiated by human effluvia, crowded and ill-ventilated dwellings, and absence of domestic comforts. The escape of some persons under the most probable favourable conditions for its development is common to purulent ophthalmia and all infectious diseases; none of which act uniformly and invariably on all who come within their range. The presence of the source of the infection is only one of the many conditions necessary for the production of the morbid phenomena. The condition of health and the state of the eye in the exposed person, and the surrounding influences, are no doubt equally important for the effects, although not well understood. It may be produced also from mechanical causes, such as the irritation of the conjunctiva by foreign bodies, or from a wound of the conjunctiva rudely inflicted, as from the thrust of a stick.

It appears, then, that the disease is chiefly endemic; that it is mostly chronic; very intractable; is irregular in its course; has a tendency to return; leaves indelible marks. In these respects it bears a strong contrast to catarrhal ophthalmia, which is mostly acute; is easily contracted; does not return without renewal of the exciting cause; and leaves no trace of injury.

Gonorrhœal Infection.—I mean by this the development of purulent ophthalmia by infection from the urethra. I recognise no other origin. Intense symptoms quickly occur, both when the matter is derived from another individual or from the person himself. The eye is exposed to far more danger than it is in ordinary purulent ophthalmia. The entire conjunctiva at once inflames; chemosis quickly rises up, and is very hard; the eyelids soon inflame; and the tissues of the eyeball are early affected. The cornea may suffer after the manner I have described above. It is particularly liable to the grooving ulceration. It may slough superficially, or through its entire thickness. Serous infiltration occurs; coloration of a part or of the whole ensues, and its transparency is lost, while it yet shines; the vitality is destroyed, the polish is lost, and a yellowish or brownish piece separates.

The rarity of the infection has always been a matter of marvel, considering the frequency of the chance.

Gonorrhœal ophthalmia is not to be readily distinguished from the purulent discharges of the conjunctiva excited by other means, especially at a late period of the disease, there being no very determinable pathological difference. It is one and the same kind of inflammation, only intensified. The diagnosis must rest on the history of the case. There may be strong suspicions of the gonorrhœal origin, but unless the patient has a urethral or vaginal discharge, or can give assurance of the probability of having received infection from someone, a decided diagnosis ought not to be pronounced. If a correct recognition can be made it is valuable, for we are then better prepared to treat this destructive malady. It is too important to be able to tell the friends of a patient when his disease is such as to excite serious apprehensions. For

these reasons, whenever a severe case of purulent ophthalmia is met with, inquiries ought to be made respecting its origin.

Treatment.—The object is to check the inflammation, and so prevent any of its effects extending to the eyeball. If this be accomplished there will be stopped also the usual damage to the conjunctiva inseparable from the disease in full development, as well as the prostration of the vital powers.

Certain general and also hygienic measures are necessary. These are—to keep the patient lying down, and for the most part in bed, in order to obtain all the advantages of rest of body, the avoidance of excitement, quickness of circulation, and the easier return of the blood from the eyeball and the orbit; to endeavour to procure pure air; to ventilate the apartments, but not to overheat them; to exclude bright light, and to keep the patient's mind generally tranquil, and especially free from apprehension as to the fate of his eye.

For the more direct treatment, let it be supposed that the patient is seen at the commencement of well-marked sthenic disease. The indication is to reduce the sthenic action, which is chiefly manifested in hyperæmia, swelling, increased heat, and pain. The eye should be washed with tepid water, the eyelashes closely cut off, and the edges and both corners of the eyelids thoroughly greased with warm beef or mutton suet, or with any greasy application if these cannot be obtained, and the greasing repeated at least three times in the twenty-four hours. When a brush is not at hand, the end of a stiff feather will suffice. Blood should be taken freely from the temple by cupping or by leeching, and, if the latter, the bleeding encouraged by a hot poultice. A brisk purge is very salutary. A light nutritive diet, without alcoholic stimulants, is best suited. Wet cold should be applied over the eye, the temple, and the cheek, to diminish the afflux of blood and to reduce the exalted temperature, by means of a single layer of old linen, wetted with iced or very cold water. When the water has evaporated, there should be a reapplication with a fresh piece of rag. On each of these occasions of renewal the eyelids should be opened, and the conjunctiva cleansed with tepid water. The nurse should be instructed to turn the patient a little on his side, to open his eyelids as far as she can, and to wash away the discharge with a syringe or an elastic bottle with a fine pipe, and slowly, so as not to spatter, and to wash under the upper eyelid. Cleansing may be done—less effectually, however—by moving the eyelids backwards and forwards, so as to press out the discharge, and then wiping the surface of the eye with a piece of rag. The tumefaction of the eyelids may require a retractor to be used in order to expose the conjunctiva at all. A nurse could hardly be expected to do this.

Hard chemosis which is overlapping the cornea should be freely incised. I have very great faith in the measure. The operation may be readily performed by standing behind the patient (who should be seated on a low chair), raising the upper eyelid with a retractor, while an assistant depresses the under, introducing the point of the knife at the spot of reflection of the chemosed conjunctiva on the cornea, and carrying it along the sclerotica to the sinus of the lid; then depressing the handle of it, and including within the curve of the blade the swollen conjunctiva of the lid. I generally endeavour to make four such incisions at equal intervals. The incising of the upper part of the chemosis is not so readily effected as that of the under, since the knife cannot be carried so far on the lid; but it may be done by applying the retractor first on one side of the lid, to make room for the knife, and then shifting it to the other. The discharge should be wiped off, and the place for the entrance of the knife made apparent. With common care the sclerotica will be uninjured. It is so imperative to make these incisions thoroughly, that, unless there be a certainty of the patient being submissive, chloroform should be administered. When the chemosed conjunctiva protrudes between the eyelids, the exposed surface should be kept well greased. Scarifications do not produce any after damage.

At this stage some surgeons recommend slitting through the eyelids near the outer canthus, from the tarsal edge to the margin of the orbit, to relieve the eyeball from pressure.

To protect the other eye from infection is as essential as to treat that which is diseased. The readiest method is to strap the eyelids together with court plaster, pack the surface with cotton, and apply a bandage. If the patient will not submit to the discomfort arising from loss of use of the eye, the less certain protection of covering it carefully with cotton or a handkerchief must be resorted to whenever the diseased one is to be dressed or attended to, during which time infection is certainly more imminent.

The constitutional measure of giving the perchloride of iron in large and repeated doses, and well diluted, does yield a marked result. These measures should be persevered with till the intensity of the inflammation is subdued.

I rarely give an opiate; I trust rather to reduce any local pains by local bleeding and cold. To subdue pain by these measures is to check the inflammation and to save the eye. A patient may be sufficiently narcotised not to feel the pain while the inflammation is progressing, to say nothing of the directly injurious effects of the opium.

An astringent to the conjunctiva is called for as soon as the acute inflammatory stage is reduced and that of relaxation has set in. It is hurtful to apply it before.

Of late years I have employed pure astringents, not escharotics, and chiefly alum or tannic acid. The former I use of the strength of five grains to an ounce of distilled water, the latter of strengths varying from eight to fifteen grains to the ounce of water, with half a drachm of glycerine. The eye should be cleansed after the manner I have described, and the lotion applied with a large camel- or sable-hair brush on the temporal side of the internal surface of the lower eyelid. If the eyelids be now closed, and the eyeball gently rubbed with the finger a few times, the lotion will traverse all parts of the conjunctiva. As the brush must touch the eyelid to discharge the lotion, it ought to be washed after each using. The towel which catches the washings of the eye should be changed two or three times a day. The objects, therefore, which are to be obtained are—to prevent the eyelids from sticking together and retaining the discharge, to wash away the discharge so that it shall not become stale and irritate the conjunctiva and macerate the cornea, and to apply an astringent which shall act on the weakened and distended bloodvessels. These therapeutic measures should be repeated till an effect be seen, every two hours, unless the patient is asleep. As the cornea is more or less irritated by the lotion, the sooner the frequency of its application may be reduced (declining symptoms give the indication) the better.

Much harm is done by the use of escharotics: they add to the already existing irritation, prolong the disease, and damage the structure of the conjunctiva and that of the cornea. In spite of the strongest evidence to the contrary, many surgeons believe that the disease can be at once arrested by them, and that the more acute the symptoms the stronger should they be. Those who have attended my practice have renounced them.

If the temperature of the eyelids should at any time rise above that of the rest of the body, the cold application must be again resorted to.

When the disease begins to decline, the patient may be allowed to leave his room, and as soon after as possible to take gentle out-door exercise.

Antiphlogistic measures are uncalled for when the secondary and destructive effects of inflammation, such as ulceration of the cornea or sloughing, with or without penetration, have been produced. Warm, soothing, and anodyne local applications only are admissible so far as the eyeball is concerned; and if it should seem prudent to continue with the astringent lotion on account of the conjunctival discharge, the strength of it should be reduced by half, while four applications of it a day will suffice. An ulcer of the cornea and prolapse of the iris should not be touched with nitrate of silver, because repair is effected better without it. It imperils the eye to puncture the ulcers. Should the posterior elastic lamina protrude as a vesicle through an aperture of cornea, caused by ulceration or otherwise, it should be punctured and allowed to collapse.

The corneal repair is well established when vascularity appears.

Let it be supposed, on the other hand, that the patient is seen early in a sub-acute attack of inflammation, a condition manifested by less swelling of the eyelids, less vivid redness, less discharge with a less consistence, and perhaps no pain. The principles of the treatment are the same, shaped in detail to meet the lower inflammatory action. Less local bleeding and a shorter application of cold will suffice. The astringent is earlier applicable. Already there will be feebleness of body, so that a purgative would be injurious. Whatever may be the condition of the tongue, the iron should at once be given, together with a diet as full and nutritive as the appetite and digestive powers will allow. The period of confinement to the house need not be so long.

I forbid sponges to be used in this complaint, because it is impossible to wash them clean from pus once imbibed. A piece of soft old rag answers every purpose for the process of cleansing.

I have never punctured the cornea for the purpose of evacuating the pus of an abscess, a practice which I advocate so

strongly when an abscess forms there after mechanical injury. Probably it is suitable, and in future when an opportunity occurs I shall test the practice of it.

Prevention.—A great deal may be done to prevent the spreading of the disease by instantly sending away the infected person from those with whom he is in daily communication; this also applies when relapses occur. Where separation to a sufficient distance cannot be accomplished, in consequence of the community in which the patient may be, he should be isolated as far as possible, and the remainder of the individuals placed under healthy sanitary arrangements, so that there shall be avoided those unhealthy conditions above mentioned under the head of causes, which tend to promote the contagious power and spread of the disease.

Those persons who are exposed to the disease should be forewarned of its infectiousness and its danger. The use of an infected towel is a very common source of inoculation.

The same persons ought not to attend those who are diseased and those who are well.

No article of clothing which has been worn by a diseased individual ought to be used by a healthy one. This includes bedclothes.

ORIGINAL COMMUNICATIONS.

NOTES ON THE

PATHOLOGY OF PULMONARY PHTHISIS.

By T. HENRY GREEN, M.D.,

Senior Assistant-Physician to Charing-cross Hospital, and Lecturer on Pathological Anatomy in the Medical School.

II.—Introductory.

(*Continued from page* 403.)

Acute Tuberculosis—Microscopical Characters of Yellow Nodules—Pathology—Relation between Grey and Yellow Nodules—Severity of the Irritant determines the Nature of the Lesion—Diffuse Lesions—Analogy between Lesions in Acute Tuberculosis and those which result from other Inflammatory Processes—Definition of Tubercle—Conclusions.

The microscopical examination of the *yellow* nodules shows that most of them differ somewhat in their constitution from the grey. The latter may, as has been stated, undergo retrogressive changes and become caseous, so that some of the smaller yellow growths may be simply the grey which have degenerated. The majority of them, however, do not originate in this way. When examined with a low magnifying power, it is seen that they are not like the grey nodules, simply interalveolar growths involving merely the alveolar walls), but that their more external portions, at all events, are made up of *accumulations within the alveolar cavities.* (See Fig. 3.) The outline

Fig. 3.

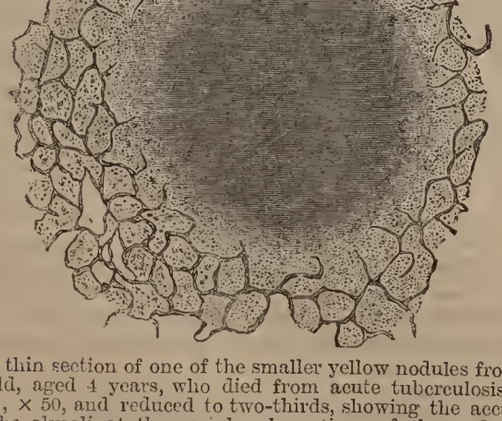


Fig. 3.—A thin section of one of the smaller yellow nodules from the lung of a child, aged 4 years, who died from acute tuberculosis (a yellow tubercle), × 50, and reduced to two-thirds, showing the accumulations within the alveoli at the peripheral portions of the nodule and the degeneration in the centre. Both lungs were thickly studded with similar growths. There were very few of the grey nodules. The tissue between the nodules was much congested, and in many parts consolidated.

of the nodules is much less defined than that of the grey, and the alveoli with their contents, which are quite distinct in the peripheral portions of the growth, gradually become lost as one passes towards the centre; whilst in the central parts there is no indication of structure such as is seen even with a low power in the grey nodule. (See Fig. 1.) When examined with a somewhat higher magnifying power, the constitution of the nodule at once becomes apparent. (See Fig. 4.) Its central

Fig. 4.

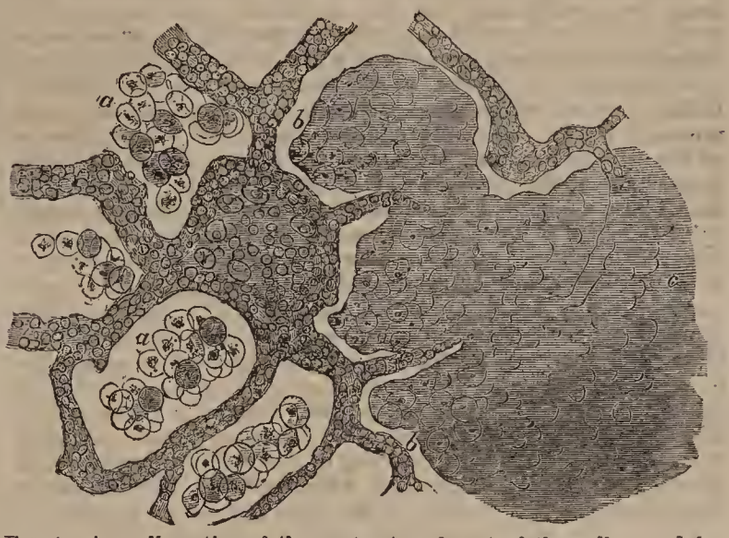


Fig. 4.—A small portion of the most external part of the yellow nodule represented in Fig. 3, × 200, and reduced to two-thirds. Most externally at *a* are seen the alveoli filled with epithelial-like cells. More internally at *b* both the alveolar walls and the epithelial contents are seen in the process of degeneration; whilst in the more central portions, *c*, the degeneration is so far advanced that all trace of structure is lost. The alveolar walls are thickened by a small-celled growth, and at one part a minute mass of this small-celled tissue is visible. N.B.—The space which exists in the figure between the alveolar walls and the epithelial accumulations is due to the skrinking of the latter, caused by the process of hardening to which the specimen was subjected.

portions (*e*) consist for the most part of a structureless granular *débris*, in which, perhaps, here and there, traces of formed elements are visible. More externally are seen indications of alveoli which are filled with partially degenerated epithelial-like cells (*b*), with, in some parts, small tracts of a small-celled tissue resembling that met with in the grey nodules; whilst in the peripheral portions of the growth, *a*, the alveoli are quite distinct, their walls are infiltrated with a small-celled growth, and their cavities are filled with large nucleated cell-forms, similar to those which are always to be found in the alveolar cavities of the healthy lung. In short, it is clear that in most of the yellow nodules we are dealing with a structure which more closely resembles a lobular catarrhal pneumonia than that met with in the grey growths; and that although the walls of the alveoli are thickened by a small-celled tissue similar to that which constitutes the grey growths, and small tracts of the same tissue may be found in the central portions of the nodule, the nodule consists in the main of alveoli stuffed with epithelial-like cells which have a *special* tendency to undergo rapid retrogressive changes.

Respecting the pathology of acute miliary tuberculosis, I presume it to be an infective disease resulting from the dissemination of infective substances (probably minute particles) from some primary inflammatory lesion. The results obtained from the artificial production of tubercle in the lower animals by Villemin, Wilson Fox, Sanderson, Cohnheim, and others, the general dissemination of the secondary lesions, together with the clinical characters of the disease, appear to render this view tolerably conclusive, and I shall not therefore discuss further this part of the subject. What I am particularly desirous of bringing somewhat prominently under notice are certain differences which we have seen to exist between many of the grey and yellow nodules. These nodules we must admit to be inflammatory growths resulting from the irritation of substances derived from the infective centre, and distributed by means of the bloodvessels or lymphatics. Their dissemination is characteristic of their infective origin. Dr. Sanderson, to whom we are indebted for so much of our present knowledge on this subject, terms the nodules *secondary* or *infective* inflammatory growths, inasmuch as the focus of infection is itself the product of inflammation.

What, then, is the relation between the grey and yellow nodules? The latter are certainly not in all cases simply an advanced stage of the former—grey nodules which have become caseous. On the contrary, although the grey nodules may, as we have seen, undergo retrogressive changes, so that many of the smaller yellow growths may be simply degenerated grey ones, the majority of the yellow differ anatomically from the

grey. Whereas the grey nodules consist of a small-celled tissue often known as "adenoid," the greater number of the yellow growths are largely constituted of nucleated epithelial-like cells crowded together within the pulmonary alveoli. This association with some of the miliary nodules of more or less accumulation of epithelium within the alveolar cavities has long been recognised, but the epithelial accumulation has generally been regarded as a *secondary* part of the process—as being either a merely mechanical result of some obliteration of the terminal bronchioles, or as resulting from an irritating influence exercised by the primary nodule upon the adjacent pulmonary tissue. It is any such explanation of the occurrence of the epithelial accumulation which so frequently constitutes a part of the miliary lesions in the lungs in acute tuberculosis that I now venture to question. I believe the accumulation of epithelium within the alveolar cavities to be the result of a catarrhal process; a process, however, which is not secondary to any primary adenoid nodule, but one which is the *direct result* of the irritant derived from the focus of infection. My grounds for this conclusion are mainly two. Firstly, in the larger nodules, in which the epithelial accumulation in question is most frequently met with, it is not common to find any distinct central growth of small-celled (adenoid) tissue which might be regarded as the cause of the peripheral epithelial growth. It is true that in many of the nodules small tracts of small-celled tissue are met with, and the alveolar walls themselves are thickened by it; but this is so intimately mingled with the accumulation of epithelium within the alveolar cavities that I cannot help regarding them both as the direct result of one common cause. (See Fig 4.) Again, it is exceedingly common to find the small-celled growth almost entirely absent, the nodule consisting merely of accumulated epithelium. Secondly, in a large number of cases of acute tuberculosis the nodules consist simply of the small-celled tissue, any accumulation within the alveoli being entirely absent. It cannot be argued in these cases that the disease has run a rapid course, and that death has ensued before the nodules had had time to cause any epithelial proliferation in the adjacent alveoli, because the fibrillation of many of the nodules is so marked that their development must evidently have extended over a somewhat lengthened period. These considerations appear to me to be tolerably conclusive, and I submit, therefore, that the small-celled growth and epithelial accumulation do not stand to one another in the relation of cause to effect, but that *both are the direct result of one common cause—the irritant derived from the focus of infection.*

Granting that both the small-celled and the epithelial growth are the direct result of the irritant derived from the focus of infection, it may be asked how it is that this irritant produces in some cases the one form of lesion and in others the other. To this I reply that *the nature of the lesion depends upon the severity of the irritant.* The more severe the irritant, the greater is its tendency to produce epithelial proliferation; the less its severity, the more does its influence tend to be limited to the elements immediately adjacent to the blood-vessels and lymphatics. The firm grey nodule, which consists of small-celled tissue, and which is in the main an inter-alveolar growth, I believe to be the result of an irritant of less severity than that which gives rise to the majority of the yellow nodules—*i.e.*, those in which an accumulation of epithelium within the alveolar cavities constitutes so large a portion of the growth. Further, inasmuch as the greater the severity of the irritant the greater is the injury sustained by the tissue, and the less is the tendency of the newly-formed elements to undergo further development, we find that those nodules which consist largely of epithelial elements, and therefore presumably result from an irritant of considerable severity, tend to undergo retrogressive changes and to become caseous; whereas the nodules which consist entirely of small-celled tissue, being the result of an irritant of less severity, have a much greater tendency to become fibrous. The differences which we have seen to exist in the intervening pulmonary tissue in those cases of acute tuberculosis in which only the firm grey nodules are met with, and in those in which the majority of the growths are of the yellow variety (see page 402), appear to me to support this view. In the former, the influence of the irritating substances being limited mainly to the inter-alveolar elements, it is exceedingly common to find the tissue between the miliary nodules perfectly normal; in the latter, on the other hand, in which the irritant is more severe, and exercises its influence over a wider area, the intervening tissue is almost invariably either much congested or consolidated. In these latter cases, indeed, extensive tracts of consolidation are sometimes found associated with the miliary lesions—consolidation which, although mainly consisting in a catarrhal pneumonia, is occasionally partially the result of an exudation of liquor sanguinis and leucocytes into the pulmonary tissue (croupous pneumonia). Such *diffuse* lesions are much more common in the artificially-induced tuberculosis in the lower animals than they are in man.

If the above view of the cause of the differences in the anatomical characters of the pulmonary lesions in acute tuberculosis be correct, it tends, I think very materially to increase the analogy, which is already by many admitted to exist, between these lesions and those which result from other inflammatory processes. If we study the process of inflammation as it occurs in the several organs and tissues, we must admit that the severity of the injury upon which the inflammatory process depends, and the duration of its action, determine to a great extent the nature of the resulting anatomical changes. We know that in many inflammations, both primary and infective, the injury sustained by the bloodvessels is so great as to give rise to an abundant exudation of liquor sanguinis and emigration of leucocytes, the latter often being so numerous as to form an abscess. This occurs in pyæmia. In those inflammations, however, in which the injury sustained is less severe, and at the same time for the most part more prolonged in its action, the exudation from the vessels constitutes the least prominent part of the process, the principal change consisting in an increase in the nutritive activity of the elements of the inflamed tissue—an increase which usually leads to the production of new elements, which either become the seat of retrogressive changes or undergo progressive development. Our knowledge of these less severe and more chronic forms of inflammation is at present somewhat incomplete; but I think it is sufficient to justify the conclusion, that the less intense the irritant, and the more prolonged its action, the more does its influence tend to be limited to the elements immediately adjacent to the bloodvessels and lymphatics; whereas it is only in inflammation of somewhat greater severity that the more distant elements become involved. We see this, for example, in inflammatory processes in the kidney and in mucous membranes. In the former, the less severe and more chronic inflammations are characterised anatomically by the development of a small-celled tissue around the inter-tubular vessels—a tissue which tends to become fibrous; whilst in the more acute forms of inflammation, the earlier stages, at all events, are attended either by swelling or proliferation of the tubal epithelium. The same is true of mucous membranes. Here, also, we have both epithelial proliferation and small-celled growth in the submucous tissue, the latter being an invariable consequence of prolonged inflammatory action. Thus this association of epithelial proliferation and small-celled growth occurs both in primary inflammations and in the disseminated infective inflammations of acute tuberculosis; and in both I believe the epithelial growth to result from an irritant of greater severity than that which gives rise to the small-celled development. Lastly, it must be borne in mind that, whereas the small-celled growth tends to become fibrous—although this tendency is undoubtedly much less marked in the lungs than in many other organs—the epithelial elements, being incapable of organisation, tend to undergo retrogressive changes.

Having thus considered the anatomical characters and pathology of acute tuberculosis, we are in a position to endeavour to answer the question, *What constitutes tubercle?* In the first place, then, I think it is evident that it must be impossible to frame a definition of tubercle upon a purely anatomical basis. The miliary lesions in the lungs resulting from the infective process known as tuberculosis present different anatomical characters, some consisting simply of a small-celled tissue, whilst others are constituted largely of epithelium. A similar anatomical difference is observable in the miliary nodules in other situations. In the omentum the nodules consist of a mass of small cells covered by endothelial elements. In the kidney and spleen the nodules are constituted solely of the small cells. It would thus appear that the precise anatomical constitution of the nodules varies somewhat with the tissue in which they originate. It would, I think, on many accounts be advantageous to get rid of the term "tubercle" altogether, as it implies no definite anatomical characters. At the same time it must be admitted that it has a certain practical value as indicating the anatomical result of a definite infective process. By tubercle, then, I understand a miliary nodule resulting from an infective chronic inflammatory process; a nodule which, although it does not possess any absolutely definite anatomical characters—inasmuch as it is the product of a more or less *chronic* inflammation,—usually consists largely

of small lymph-like cells which are associated with a varying amount of fibrillated tissue. Such a definition is, I must admit, by no means satisfactory, as it implies a knowledge of the process by which the nodule was produced; but if we are to continue the use of the term "tubercle" at all, I think we must do so in this somewhat indefinite sense. The small-celled tissue, which is the most typical constituent of the miliary nodules, is, I believe, by no means characteristic of tubercle, but is the invariable result of all chronic inflammatory processes, whether these be limited to minute circumscribed areas, as in tuberculosis, or whether they involve wide tracts of tissue, as in the chronic indurations of the liver, kidney, and mucous membranes. The microscopical characters of the tubercular grey granulation and of the new tissue met with in the early stage of these chronic inflammatory processes are so similar that in most cases it is impossible to distinguish between them. This was pointed out long ago by Dr. Bastian.(a) The fact that the miliary lesions in tuberculosis originate from elements which have been shown in many organs to have a close relation to the lymphatic system, will, I suspect, prove not to be peculiar to this disease; but as our knowledge of other chronic inflammatory processes becomes more complete, it will be found that in this respect they all resemble one another.

I have entered thus somewhat fully into the subject of acute tuberculosis, not with the object of attempting to make any fine anatomical distinctions between "grey" and "yellow tubercle," but with the hope that, by pointing out the close analogy which subsists between this and other inflammatory processes, I might do something towards clearing up some of the difficulty with which the pathology of tubercle is still involved, and with the belief that the proper understanding of this subject is a necessary preliminary to the study of phthisis itself. In order to be perfectly clear, and to avoid any misunderstanding, I will conclude this part of the subject by summing up the conclusions which the facts appear to warrant under the following heads:—

1. The lesions in acute tuberculosis are inflammatory growths, resulting from the dissemination of infective substances derived from some primary inflammatory product.

2. Inasmuch as these lesions are the result of infection, they usually occur as disseminated miliary nodules, although in exceptional cases they may consist of diffuse tracts of consolidation.

3. Anatomically these lesions in the lungs present certain differences, depending upon the severity of the irritant by which they are produced.

4. The less the severity of the irritant, the more does its influence tend to be limited to the elements immediately adjacent to the bloodvessels and lymphatics, from which elements a small-celled tissue is produced, similar to that which results from chronic inflammatory processes in other organs.

5. The greater the severity of the irritant, the more liable are the epithelial-like cells contained within the pulmonary alveoli to become involved, in which case the nodule is made up of alveoli stuffed with these epithelial elements, together with a varying amount of small-celled tissue.

6. The small-celled tissue tends to become developed into a fibrillated structure, although it very frequently undergoes retrogressive changes. The latter is especially the case when it is associated with epithelial accumulations within the alveoli. The epithelial-like elements, on the other hand, being incapable of further development, quickly degenerate.

7. The lesions in acute tuberculosis are precisely analogous to those which result from other chronic inflammatory processes. They differ merely in their extent and in their mode of origin.

(*To be continued.*)

A CASE OF FRACTURE OF BASE OF SKULL.

By R. EATON POWER, L.R.C.P. Lond.,
Medical Officer to Dartmoor Invalid Prisons.

J. H. was struck on the right ear by the sudden canting of the power extremity of a long lever which was employed lowering a block of granite about a ton weight. Death was instantaneous.

Post-mortem Examination.—Body well nourished, muscular; no abscess-scars or other indication of constitutional disease; age 52; weight 160 lbs. Never suffered from typhus or scarlet fevers, or from epilepsy. No history of phthisis, scrofula, gout, or insanity. Has not been sick since he first came under observation (1870). The blow was said to have been inflicted on the right ear (a fact subsequently verified by inquiry), from which a small quantity of blood trickled. The skin at the back of the ear was slightly discoloured, but there was no other trace of injury. Blood streamed more freely from ear of the opposite side, and there was considerable swelling and contusion, with laceration of the skin, over the left temple (the ground whereon he fell was generally clayey, but probably a small prominent pebble caused this wound). Fracture at the base of the skull was of course presumed. On removing the calvarium, the dura mater was found adherent—in some portions so intimately that it was impossible to separate it from the skull. This condition was most marked at the vertex, along the portion corresponding to the course of the longitudinal sinus, and in the occipital bone. The skull in every place was remarkably thin, the thickest part not having greater substance than the thinnest parts of a normally constituted skull. The regions along the sagittal suture were diaphanous, and as thin as notepaper, the osseous matter being totally deficient in one point about the area of a split pea. There were no indications (to ordinary inspection) of brain lesion (non-traumatic); considerable effusion of coagulated blood at the base indicated the approach to the seat of injury, on removal of which the cause of death was apparent. The petrous portions of both temporal bones and the body of the sphenoid were comminuted to such an extent that small portions were lying loose driven into the brain. The force of the blow was chiefly expended at the side most distant from impact.

Remarks.—A very slight blow indeed on the top of the head would have killed this man—entailing perhaps, as the case might be, a verdict of murder or homicide, whereas the amount of force exerted might be such that no one could anticipate a fatal result. Such an idiosyncrasy should have some weight with a jury, and I think conveys a lesson, that, no matter how evident the cause of death (*post hoc, propter hoc*) from injury, still a post-mortem examination should not be neglected.

Dartmoor.

(a) *Transactions of the Pathological Society.* London, 1868.

PUERPERAL DISEASES TREATED WITH TURPENTINE.

By E. COPEMAN, M.D., F.R.C.P., F.R.C.S.

(*Continued from page* 195.)

Case 21.—Mrs. B., aged 28. Summoned to her on October 6, 1870, and found her suffering from obscure puerperal disease about a fortnight after labour. Her pulse was 108, and there were several other threatening symptoms. She had had several rigors; at the time of my visit she had decided but not severe uterine tenderness and a very moist skin; but her sensorium was clear and her tongue clean. The severity of the symptoms varied from hour to hour. Bowels not acting well; lochia had been very offensive, but were not so now. Injections of water with Condy's solution had been used. The discharge became less coloured, but what there is is of a purulent character. She has had quinine, chloral at night when required, and to-day turpentine has been applied externally over the uterine region. We agreed to continue the treatment, to give a turpentine injection next morning, and half-drachm doses of sp. tereb. internally every four hours should her pulse increase in frequency and her brain become more obscure. To take as much mild nourishment as the stomach will bear, and occasionally wine with egg or milk.

On Sunday, October 9, I was summoned in great haste, the gentleman who came for me expressing a fear that I should not be able to get there in time to see her alive, and stating that she had been taken rapidly worse the day before, and the family were all in despair about her. I found her alive, however, and in my judgment not materially worse, although her nervous system was much upset and she was in a state of alarm and hysterical excitement. This was in a great measure calmed by my assurance that the material symptoms in her case were not of a more threatening character. She was ordered an enema, and half-drachm doses of spirits of turpentine every four hours, with the same directions as before as to diet and general management.

I visited her again on the 11th, and found her pulse under 80, and there was no tenderness on pressure. The bowels were opened yesterday after an enema, but defæcation was difficult,

and the matter solid. Has been taking the half-drachm doses of turpentine every four hours, and we now reduced it to half a drachm three times in twenty-four hours, as it seemed to be producing a slight degree of nausea and strangury. We gave her also a little ammonia and calumba, and fomented over the pubes.

I did not see her again; but, after several ups and downs, she upon the whole gradually improved, and after a few weeks was quite well.

Case 22.—On Thursday, June 27, I was requested to visit a lady about 33 years of age, who had been confined on the previous Saturday with her third or fourth child. The labour was natural, and for a day or two all went on well, but after that she became restless at night; her pulse rose to nearly 100; the lochia became scanty, slightly offensive, and pale; and the abdomen was flatulent and distended. There had been no chill, nor was there at the time of my visit any unusual heat of skin, but there were evident signs of mischief brewing, which led to my being consulted. The surgeon in attendance had very properly applied turpentine stupes to the abdomen, for there was some tenderness in the situation of the right ovary, and pain there on moving in bed. Her general health had been very good; she was in good spirits, and had suffered no ill-consequences from her previous confinements. The bowels had not acted well, and we ordered a dose of turpentine and castor oil; also a drachm of turpentine every six hours. On the following day she appeared to be so much better that we thought all would go on right, and on the 29th I did not see her. On the 30th, however, I was again summoned, and found her suffering from acute pain in the right flank; the abdomen was in a degree tympanitic, and her pulse 96. She could not turn or move in bed, and deep inspiration gave her pain. We then applied turpentine very freely all over the painful part, and gave a grain of opium every two hours. She also had an injection with turpentine, which brought away some unhealthy fæcal matter. No return of healthy lochia. These remedies had the effect of materially relieving the abdominal pain, and the turpentine stupes caused a good deal of vesication, as she had the courage to keep them on a longer time than usual, from a feeling that they gave her so much relief. But after a few days, when the local mischief had apparently been quite overcome on the right side, she was fiercely attacked with similar, and even more severe pain, in the situation of the ovary on the opposite side, with considerable tenderness and fulness in the abdomen; and I felt sure that the sigmoid flexure and descending colon were loaded with lumpy fæcal matter. I should have remarked that a few days before this happened she had a very copious liquid stool, almost without colour, but offensive, which passed from her so quickly and suddenly that the bed was saturated; and, fearing the occurrence of diarrhœa, her surgeon ordered her a dose of chalk mixture and laudanum, which prevented any return. The pain in the left side was treated with turpentine stupes and frequent doses of opium, in the same way as before the relapse, but the pulse continued too frequent, although it never exceeded 100, and her temperature increased to 104°. As the pain diminished under the use of opium, she began to have solid relief from the bowels, and the quantity passed day after day was very considerable, but no recurrence of diarrhœa took place. On July 11 I found her so much better that I thought I might cease my visits, and we endeavoured to dispense with both the turpentine and opium. The extensive vesications on the abdomen, together with no little amount of angry-looking ulcerations of the skin, were healing very satisfactorily; the hard, solid feeling indicative of loaded sigmoid flexure, as well as the tenderness over the left ovary, had departed, and the bowels had from day to day unloaded themselves of a large amount of solid contents; the pulse had gone down to a natural standard (about 70), and the temperature was normal—indeed, she seemed tolerably safe. But after a day or two there was another threatening of pain over the left groin, and I was requested to see her on the 16th; but I found her better again after resuming the opium in smaller and less frequent doses, and she was in good spirits about herself. Surface of abdomen almost healed; moving in bed did not hurt her. She had no sickness throughout her illness, but looked pale and weak. She had been taking a dessert-spoonful of steel wine for some days, which seemed to agree well. On the 22nd she was so far recovered as to be able to leave her bed and rest on a sofa, and soon afterwards could dispense with the services of her nurse.

It is worthy of remark that the quantity of opium taken by this patient, which was considerable, scarcely at all affected her head, producing only once a little incoherency and appearance of slight narcotism, but without headache; neither did it at any time confine the bowels, but, on the contrary, appeared to allow the bowels to act well by relieving spasm and pain.

The foregoing series of cases has been published in compliance with the request of several medical friends that I would give them my further experience of turpentine in the treatment of puerperal disease. In December, 1869, I received the following letter, which I am allowed to publish, and it affords ample concurrent testimony in favour of the treatment I have so strongly recommended:—

"Eye, December 1, 1869.

"Dear Dr. Copeman,—As conversation turned to-day upon your successful treatment of puerperal affections of a low character by turpentine, and each of us had alike to acknowledge that we learned from yourself the value of this treatment, we feel it due to you thus to record our sense of indebtedness, and unite in urging you to bring still more prominently before the Profession an agent which, from our individual and united experience, we are willing to regard as the remedy *par excellence* in the treatment of these affections. With every wish that you may be long spared to practise amongst us,

"We beg to remain, yours very truly,

"W. W. Miller, M.D., Eye, Suffolk.
Wm. Cuthbert, Mendlesham, Suffolk.
Arthur Pearse, M.D., Botesdale, Suffolk.
C. G. Read, Stradbroke, Suffolk."

In the twenty-two cases recently reported, five died and seventeen recovered—viz., 1 death in 4·4.

In my "Records of Obstetric Consultation Practice" I related twenty-one cases, of which six died. In my "Illustrations of Puerperal Fever" there are thirty-six cases recorded, of which thirteen died. The total stands thus:—

		Deaths.	Recoveries.
Cases first published	21	6	15
Second series . .	36	13	23
Third series . .	22	5	17
	79	24	55

In my next communication I propose to relate some cases of phlegmasia dolens which will exemplify the value of turpentine treatment in that generally tedious and troublesome, although not often fatal, disease.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

COLOTOMY FOR EPITHELIOMA OF THE RECTUM.

(Under the care of Mr. HOWSE.)

J. D., engine-fitter, aged 47, came under treatment amongst the out-patients at Guy's Hospital at the beginning of August, 1870, for an obstinate ulcer at the lower part of the rectum, giving rise to repeated and serious hæmorrhage. He had been for six months under the care of Mr. B. Duke, of Kennington, who, suspecting the nature of the case, sent him up to the Hospital. On examination, the ulcer was felt to be deep, punched-out, and with an indurated edge, though of small extent, not more than a quarter of an inch in diameter. Although the diagnosis of epithelioma seemed pretty certain, yet it was resolved to give the patient the benefit of the doubt by treating him with iodide of potassium. This was accordingly done for some weeks, but no good result followed, and it was finally abandoned. He remained under observation amongst the out-patients for more than a twelvemonth, and then, in consequence of increasing difficulty in defæcation and numerous attacks of hæmorrhage, he was admitted into Job ward on September 17, 1871.

When examined after admission it was found that the ulcer had extended completely round the whole internal surface of the gut. It had hard prominent edges, very painful when touched, and so vascular that hæmorrhage followed the examination. The growth thus formed a kind of malignant stricture, which had so narrowed the calibre of the gut that it would only admit the tip of the forefinger. He had great difficulty in defæcation; indeed, he was obliged to keep the motion constantly fluid by aperient medicine, and even then the hæmorrhage after stool was often considerable.

As it was clear that the growth must soon terminate his life if nothing could be done to stop the exhausting hæmorrhage, and as it was plain that the passage of the fæces through the rectum was the principal cause of the rapid increase of the growth and of the hæmorrhage, colotomy was proposed, and the various chances that it offered fully explained to the patient. His assent was readily given, but the operation was delayed for some weeks by a severe mastoid abscess. During this time he had two or three attacks of fæcal retention, the last of which was accompanied by tenderness over the abdomen and other symptoms which looked very much like a slight attack of peritonitis. It was evident that the operation could no longer be delayed, so on November 10 chloroform was administered, and left lumbar colotomy performed by the transverse incision following the line of the crest of the ilium, but about midway between it and the last rib. The outer edge of the quadratus lumborum having been defined, the lumbar and transversalis fasciæ were incised, and the bowel found lying in the usual layer of fat. Sutures were passed through it, and the artificial anus connected with the skin in the ordinary way. No fæces passed at the time of the operation, and a piece of dry lint was fastened over the opening so as to prevent if possible the escape of any, it being thought desirable to allow as much time as possible for immediate union to take place in the wound before the fæcal matter passed over the cut surface. Opium was given with the same object. The patient went on without a bad symptom. On the 15th the sutures were all withdrawn, and on the 17th he passed a considerable quantity of motion from the artificial anus. On December 1 the wound had entirely cicatrised.

This patient remained under observation in the Hospital until March 23. He was then removed to the Cancer Hospital, Brompton, where he still remains under the care of Mr. Hayward. The dresser of the case, Mr. W. J. Heddy, has taken the trouble on several occasions to see him there, and reports that the general result is quite as satisfactory as the nature of the affection would permit. Of course at the time of the operation no prospect was held out to the patient that it would *cure* him, only prolong his life, relieve him from the misery and pain attending defæcation, and probably save him a painful death from obstruction of the bowel. This it may fairly claim to have done. He was last seen on October 13, and then gave the following account of himself:—He was able to be up and about, assisting with the other patients for a certain portion of the day. He had passed no motion from the normal anus since March, but a certain amount of discharge came away at times from it. There was some tendency to constipation, and he was obliged to take at intervals aperient medicine to keep the bowels open; scybalæ being then often discharged together with the liquid motion from the loin. He had had one or two small abscesses about the perinæum and buttock. One of these, close by the anus, had remained open since April, and occasionally discharged a little blood; this was probably connected in some way with the growth. The cancerous mass has probably extended considerably, though to how great a degree is uncertain. He expressed himself as very thankful for the relief afforded by the artificial opening.

CHARING-CROSS HOSPITAL.

SYMPTOMS RESEMBLING GENERAL PARALYSIS OF THE INSANE—IRREGULAR PARALYSIS OF LIMBS, FACE, AND NERVUS MOTOR OCULI—SYPHILITIC CEREBRAL TUMOUR (?)

(Under the care of Dr. SILVER.)

[Communicated by Dr. BRUCE, Registrar.]

W. C., aged 32, formerly a coffee-house keeper, was admitted on May 28, 1872. The patient stated that he had scarlatina when a child, not followed by discharge from the ear or other sequela. About twelve years ago he contracted syphilis, and suffered from severe secondary symptoms. Three years afterwards he married; his wife has been uncommonly healthy, has never miscarried, but has had four children enjoying tolerable health. The patient has not had acute rheumatism, nor symptoms of disease of the heart.

Exactly eight years ago the patient, according to his wife's account, had the first of a series of fits, from which he has suffered up to the present time. This first fit came on rather suddenly in the morning after an attack of diarrhœa. The patient was unconscious for twenty-four hours. His arms, legs, and face were convulsed—always bilaterally. The fit was followed by left hemiplegia, but by no affection of the mind. The use of the arm was not perfectly restored, and still less that of the leg, when, three years after the first fit, the patient had a second. This seizure was also sudden, and in the morning. The patient was unconscious for twenty-four hours. His limbs were not convulsed, but he rolled his eyes and bit his tongue. After this fit all the four limbs were found to be paralysed—the left more completely than the right, and the arm than the leg; the face also was drawn to the left side for several days; and there was aphasia, which continued for two months, with no other mental symptom. The right limbs recovered rather soon, but the hand never perfectly; the left also imperfectly, especially the leg. The third attack was much like the second, and happened exactly two years ago. The left side was as completely paralysed as before, the right slightly—recovering in fourteen days. In six months the patient could "get about" again, the limbs having partially recovered, as before. The fourth attack happened before Christmas, 1871, the patient having for a fortnight before had a wild and vacant look, and occasionally an excited manner of conversation. On this last occasion no fit was observed. His wife found in the morning that he had lost the power of his hands, of sitting up, and of standing. There was no loss of consciousness, but his memory was considerably impaired. From this condition there has been slow improvement up to the patient's admission. He has been almost confined to bed; he has had headache "on and off"—sometimes so severe as "almost to drive him mad"; and more than once he has vomited. The patient himself states—but this information is not perfectly trustworthy—that he had neither local spasms, headache, nor sickness before any one of his attacks; also, that his right upper eyelid dropped some three years ago, and that he has had double vision ever since.

On admission his state was as follows:—The patient wears the aspect of tolerable health. He is not confined to bed. There is distinct œdema of both ankles. Movements of the upper limbs are perfect; no evident diminution of grasping power; no wasting. Both ankles somewhat stiff; the left especially. Walking attended with a slight but decided limp, apparently due to a flat manner of planting his left foot, which is also swung somewhat, while the toes occasionally catch the floor. At long intervals there are spasmodic twitchings of the legs, and slight tremors of the left foot. Electrical muscular irritability in legs, arms, and face not evidently impaired on either side. Extremely slight paralysis of right side of face. There is a squint of the right eye; the globe can be turned normally both outwards and inwards, but not downwards, and but very slightly upwards, with an inward roll; slight ptosis of the same side. Left pupil responds to light; the right less readily. It is dilated to nearly twice the diameter of its fellow. Double vision corresponds with the strabismus. Left eye hypermetropic; with the right even very large type cannot be read. Posterior staphyloma of both eyes; right disc decidedly paler than the left, but no atrophy of the vessels. Tongue and voice normal. Common sensibility perfect; no pain in any situation. The patient can read and write on a given simple subject. His memory is, however, bad. He suffers at times from hallucinations of sight. Heart and lungs healthy. Appetite good; no sickness. Bowels continent, confined. Bladder continent; urine contains no albumen. Sexual desire unimpaired. ℞. Potassii iodidi gr. x. ter in die.

August 12.—Physical condition scarcely altered. The patient has, however, more than once exhibited symptoms of mental change—of feelings of exaltation, with corresponding delusions—especially when visiting his wife at his own house. On being cautiously questioned on the subject of his personal identity, he was induced—at first with some difficulty, but soon very easily—to make a full statement of his beliefs. He is the Prince of Wales, and his wife the Princess; the public in the street stare at him, and make way for him. He has also told the nurse that he is the "Son of God."

24th.—Delusions partially lost. The patient says he has got "rid of his notions," but still believes that when he walks in the street "a path is cleared for him" by the passers, who look at him as if they meant "Here he comes again."

October 5.—Physical condition almost unchanged. However, his walking is somewhat improved. Frequent symptoms of mental alienation have been observed since last note. The patient has heard voices, seen lights at night, received the spirit, which entered at his mouth, and made him perfectly happy for a week. At times he declares he is the "king of the world." He does not express these beliefs unless questioned on the subject. His aspect is perfectly quiet; he is never excited or requiring control, and he prefers some simple

occupation to remaining idle. He was discharged to-day as unfit.

Remarks.—Dr. Silver, in directing the attention of the students to this case, dwelt chiefly on one of its phases—viz., its alliance with what is commonly called the general paralysis of the insane, the more especially as such cases seldom occur in hospital practice. Some time before a true instance of the so-called general paralysis of the insane had occurred in the hospital practice, the patient being a skilled stonemason, who had been employed in a post of much responsibility on the restoration of St. David's Cathedral. He had apparently given way under the pressure of over-hard mental wear and tear, and constituted an accurate example of that terrible malady; but the patient whose history is here recorded, though also in the prime of life, as such patients usually are, had a history totally different from that ordinarily met with in general paralysis, although his condition at the time closely resembled that of a general paralytic.

Dr. Silver further said: "This man's history is instructive. Note the mode of seizure; not by a true apoplectic fit, as we are apt to consider is the ordinary mode in which paralytic attacks begin, but rather by convulsive movements, which we should term epileptiform in character, again and again repeated. It would be useless to speculate as to the immediate cause of these attacks, but it is plain that the causes affected a considerable tract, inasmuch as speech, which we associate with the third frontal convolution on the left side, was affected. The motor centres or motor tracts were also affected on both sides, as was also the nervus motor oculi on the right side, either at its root or, as is more likely, in its course. The injury, too, on the right side of the brain was evidently permanent, for he never recovered the perfect use of his left leg and foot after the first attack. Besides all this, latterly his mind was giving way, and his memory was especially affected—changes we are wont to associate with alterations in the grey matter of the cerebrum. No effusion of blood could give such a history; and, knowing the man's antecedents, we are fain to refer all the symptoms to syphilitic disease at the base of the brain, affecting especially the right side of it.

So much with regard to the site and kind of the disease which we can roughly guess at. But to turn to the symptoms which the man now exhibits. You observe the man's slow, hesitating utterance, his tremulous tongue, and loose-hanging upper lip—all found, too, in general paralysis. The vacillating gait, also seen in those patients, is not so well marked here, owing to the remains of the former paralysis masking it. The man's expression, too, is worth noticing. All the marked lines are apparently obliterated from it, except when he smiles a self-complacent smile. His delusions, too, are peculiar—he conceives himself no feeble person, but among the mightiest. That is an invariable characteristic; but from what you have heard you know that they vary from day to day. He forgets to-day who he was yesterday—only the idea remains that he is someone very great indeed.

Such are invariably the delusions in general paralysis of the insane. The unfortunate patient is always rich and powerful; but he forgets to-day who or what he was the day before. Very often these ideas steal on insidiously, and the poor man may do much harm before it is discovered that he is really insane. He may squander his estate, believing it to be inexhaustible, and yet present no delusions you can lay hold of. When these are developed, they are always of the kind described. Then, too, the progress of the disease becomes defined; for such patients always go from bad to worse, and the end is miserable in the extreme. Moreover, such patients are often dangerous and troublesome, and, being commonly men in the prime of life, it is no easy matter to cope with them. Now, though this man who has been our patient here does not present all the symptoms of general paralysis, he has quite enough to show us that this so-called general paralysis is not a disease by itself, but that it merges insensibly into those complaints we more commonly see in hospital practice. Nevertheless, this man presents too many symptoms in common with those of general paralysis to render it desirable that he should longer continue in the general ward of a hospital; and so we must dismiss him, well warning his friends of his condition."

The United States Census of 1870.—"Not enough Girls to go round."—It is reported that the complete census returns give us these startling statistics of our population:—Men and boys 19,493,665, women and girls 19,064,806; surplus of men and boys 428,859.—*Medical Record*, September 16.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1	8	0
" "	*Six* "	0	14	0
The Colonies and the United States	*Twelve* "	1	10	0
" "	*Six* "	0	15	0
India	*Twelve* "	1	15	0
"	*Six* "	0	17	6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*			

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0	4	6
Each additional line (10 words)	0	0	6
Half-column, or quarter-page	1	5	0
Whole column, or half-page	2	10	0
Whole page	5	0	0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, OCTOBER 26, 1872.

MIND AND BODY.

The influence of the mind on the body is an old though not a threadbare subject. There are few members of the medical profession who would deny that hope is a powerful tonic, and fear as powerful a depressant, that the will may have much to do with recovery, or that the imagination may inflict upon its unlucky possessor real and even fatal suffering. That the mind acts on the body and the body reacts on the mind is a saying in everyone's mouth, but it asserts the existence of two classes of phenomena which may possibly have no connexion and little analogy. Mental disturbance arising from pathological conditions, known or surmised, we can in a certain measure understand. We say the functions of the brain are disturbed by malnutrition, or imperfect circulation, or impaired structure, or by abnormal stimuli, reflex or direct. But the influence of mental conditions upon bodily cannot be reduced to this category. In mental conditions depending on the body the cause is more or less clear, it is presumably tangible, and its effect is disturbance of function; but in bodily conditions the result of mental states the cause belongs to the metaphysical and intangible. If we accept the materialistic theory, we are only thrown a step further back in our difficulty; for, if thought be altogether a material process, and the cure of a disease by hope be merely an instance of one healthy organ acting upon an otherwise diseased organism, we have yet to explain the process by which the curative influence is aroused in the healthy organ. A leading American physician has lately asserted that the few cases of pulmonary phthisis which have ultimately recovered, within his experience, have all been those of persons of strong will who were determined to get well. But the determination of those persons, if it be a material process, or the result of one, has at least been roused by an appreciation of danger, which idea, whether derived from the doctor or their own sensations, was certainly something that could neither be weighed, measured, nor tested by any materialistic standard. The fact is, that matter being objective, and the *ego* subjective, in tracing the effect of the organism on the mind we proceed from the known

to the unknown; but in reasoning on the effect of the mind on the body we start from the unknown and probably unknowable. If it be said that the unknown agent is the result or outcome of the known structure,—that mind is force, and brain is living matter, and that the force is generated by the living matter,—we have yet to explain how psychical force, external to the organism, is capable of exciting that organism to the generation of fresh force. For instance, how on any physical theory is an abstract idea met with in a book comprehended?

We have been led into these somewhat prosaic intricacies by the perusal of Dr. Daniel Tuke's book,(a) and by the reflection that, however little we know of the nature of mind—or, if we prefer the term, of that form of force to which we give the name of mind,—the effects capable of being produced by mind on body are very clear, real, and considerable; and that whilst in all ages they have been the chief therapeutic agents on which the charlatan and quack has relied, they have probably been trusted and utilised by the scientific physician far less than experience might warrant, or the study of physiology and psychology suggest. The inquiry of how mental influences may be practically applied, controlled, and directed for therapeutical purposes is certainly one well worthy the pursuit of the scientific physician. In some fashion we all endeavour to kindle hope to a certain extent in our patients, knowing well its curative potency. But we question if we, as a profession, sufficiently study the art of inspiring confidence of recovery in every case where the chances of recovery are not utterly lost. In like manner the help of confidence in all other therapeutic measures ought to be systematically obtained. We know that inert substances, under a confident expectation of their producing certain effects, will often act as purgatives, narcotics, or sedatives. How much more would the well-directed efforts of the physician produce their effect with certainty if aided by probably the most powerful therapeutic force in the human organism. Dr. Rush has left it on record that he never prescribed remedies of doubtful efficacy in the critical stage of acute diseases until "he had worked up his patients into a confidence bordering upon certainty of their probably good effects. The success of this measure has much oftener answered than disappointed my expectations." His practice was founded upon the truest physiological principles, and was accordingly successful.

Besides hope and confidence, fear is capable of exercising marvellous therapeutic activity. But for obvious reasons it cannot be so frequently or so safely employed. More powerful than either hope or fear as a curative influence is probably the patient's will. Dr. Laycock tells us that the will can excite such changes in the patient's brain as to arrest an attack of angina or epilepsy. It can at least check choleraic diarrhœa; and Dr. Tuke quotes the most interesting case of Crosse, the electrician, who, bitten by a cat which died the same day from rabies, was seized three months afterwards with all the symptoms of commencing hydrophobia—pain in the cicatrix extending up the arm, spasm in the throat at the sight of water, etc.,—and who, by a strong effort of the will, took his gun and went out shooting, walking all the afternoon, and exerting at every step he went a strong mental effort against the disease. The result was that he got perfectly well. Whether it was hydrophobia or not with which Crosse was affected, at least a stronger faith may be placed in the therapeutic effect of a strong volitional effort than in the secret cures for rabies of which we have heard so much lately. Whether the production of artificial hypnotism, as practised by Mr. Braid, can ever be largely used as a means of exciting the therapeutic influence of the mind, we cannot at present determine, but that it is capable in certain cases of being so employed no reader of Dr. Daniel Tuke's book would doubt. Our present article is intended to recommend that book, and especially the portion of it which treats of psycho-therapeutics, to the study of our readers. In neglecting the systematic and scientific employment of mental influence in the cure of disease, medical practitioners throw aside a weapon for combatting it more powerful than all the drugs in the Pharmacopœia. "An empirick," says old Burton, "oftentimes, or a silly chirurgeon, doth more strange cures than a rational physician. Nymannus gives a reason—because the patient puts his confidence in him, which Avicenna prefers before art, precepts, and all remedies whatsoever. 'Tis opinion alone (saith Cardau) which makes or mars physicians; and he doth the best cures, according to Hippocrates, in whom most trust."

(a) "Illustrations of the Influence of the Mind upon the Body in Health and Disease." By Daniel Hack Tuke, M.D. London: J. and A. Churchill. 1872. Pp. 444.

"RATIONAL THERAPEUTICS."

Such is the title of a very excellent and suggestive little essay from the pen of Dr. Meryon, and such also is the text we would choose for a few observations. Dr. Meryon was struck in his researches on the sympathetic by the fact that each ganglion is supplied with motor, sensory, and the so-called ganglionic nerve-fibres. He further concludes that the "sensitive nerves of every ganglionic centre impart an influence which I would call the vital sense of an organ, affecting its histological tissues without operating immediately upon its bloodvessels; that the motor nerves having their terminal fibres extended to the extreme ramifications of the arterial system, incite vascular action and secretion in response to the vital sense; and that the grey fibres of Remak, having a correlative ramification, restrain and regulate the stream of nutriment which is conveyed by the arterioles into the cell territory for secretion or assimilation." Taking this for a basis, he says—"I will further endeavour to interpret, by the aid of the experiments and observations which I have adduced, the *modus operandi* of many medicinal agents, and to found upon the knowledge so acquired a rational system of therapeutics."

Now, we are not going to say a word against Dr. Meryon, nor yet against his book, which will well repay perusal, but we are bound in all earnestness to protest against any system of therapeutics so founded. What, after all, are the phenomena on which Dr. Meryon would found his system? They are phenomena connected with the most highly specialised mode of force found in the body; but the very evolution of this force depends on a score of things anterior to its evolution, interference with which would effectually interfere with the manifestation of any nerve force whatever. Before a substance can reach a nerve-centre, to stimulate or depress its action, it must be soluble and it must be diffusible; but neither of these properties find any place in Dr. Meryon's system of therapeutics. Before a centre can duly respond to a nerve stimulus it must be properly nourished; but the condition of the blood finds no part in Dr. Meryon's system. Many stimuli act on nerves, but, as far as we know, the response is one of two kinds only—either the nerves are stimulated or they are depressed. Is it our experience that all medicinal substances act in one of these two ways only? Do pepsine and hydrochloric acid stimulate or depress the nerves of the stomach when they help us to digest our food? and which is it that has the beneficial action? How is the ganglionic nerve-force brought to bear on the leucocytes as they change their shape in the blood or permeate the various structures of the body? In short, how can this system of rational therapeutics be brought to bear on a hundred articles of our Materia Medica well known and highly esteemed for their valuable properties? When a man poisons a tapeworm, does he do so by virtue of the ganglionic system of nerves? We trow not.

Let no one suppose we desire to pooh-pooh the importance of studying the influence of this system. *Litera scripta manet*, and we have testified to the contrary; but, *pace* Dr. Meryon, we hold that overestimating its importance is exactly the way

to secure its ultimate neglect. The principles laid down may hold good in a certain number of instances, but in a certain number more they fail; and under such circumstances men are too apt to throw away the good with the bad.

The truth is this. A certain number of very powerful remedies, by virtue of their marked action on the nervous system, are rightly called neurotics: some act on one part, some on another, and it is highly desirable that we should know exactly how and where they do act; but many other remedies act by virtue of purely chemical properties, and in others still we can perceive a yet more simple physical mode of action. It is useless to attempt to reduce chemical action to the laws which govern the sympathetic system or cerebro-spinal system of nerves. Let us by all means study both,—let us try to find out the principles which rule the action of all; but neither chemistry, physics, nor electro-biology will explain everything. In therapeutics there is one ultimate appeal—*i.e.*, experience. Does a given substance do good under given conditions?—let us use it when these conditions present themselves. If we can find another and a better rule to guide us, let us adopt it, subject to the other; but in the meantime experience is the only rational guide to therapeutics. Hereafter it may be different: meanwhile we should neither neglect any guiding principle which may be of use to us, but we must equally beware of the opposite error of straining that principle so as to apply to conditions not included in its terms. Up to a certain point the ganglionic system of nerves and their functions may constitute an admirable guide to the uses of certain remedies, but to the employment of others they can constitute no such guide. Besides this, the body is composed of something more than nerves; the laws which govern its other constituents are not those which govern nerve action. A system of therapeutics founded solely on nerve action, and which took cognisance of any other structure or any other force, would not be rational, but irrational.

HINTS ON EPILEPSY.

Very wonderful are the theories which have been "evolved from the inner consciousness" of medical authors on the subject of epilepsy and epileptiform convulsions; and a bare enumeration of them, from the demoniacal possession of the old Greek and Arabian writers to the cerebral anæmia, which is now so ably and eloquently advocated by Dr. Dickinson, would fill several columns of this journal. And hardly less wonderful or less voluminous is the list of drugs and remedial measures advocated, now by one physician, now by another, in accordance with some pet or fashionable 'theory,' or as the outcome of his own experience. Much, however, of the apparent discrepancy and contradiction between the advocates of rival methods of cure disappears when the earnest student of Medicine adopts the mathematical methods of endeavouring to discover the greatest common measure and the least common multiple of the multiform articles of the Materia Medica employed in the relief or cure of these distressing symptoms. We write the word "symptoms" advisedly, for if anything at all is clear in this chaos of conflicting theories and opposing methods of medication, it is that what we call an epileptic fit, or an epileptiform convulsion, is nothing more than a symptom,—a symptom, indeed, which our reasoning faculties induce us to refer to some ultimate common cause, or common condition of nervous matter, either of brain, spinal cord, or of sympathetic ganglia; yet no less a symptom, which our clinical experience teaches us is induced, as far as exciting and secondary causes go, by a great variety of toxic agents, and apparently dissimilar pathological agencies. It is quite worth the while of even our Gamaliels and Past Grand Masters of Medicine, and most certainly of all of us who are engaged in the daily practice of Physic, to fling aside for a moment all prejudices and preconceived notions, in order simply to review the general conditions which are associated with, if not the exciting causes of, epileptic and epileptiform convulsions. If we mention a few of these as aids to our readers' memory, they will be such as occur and recur frequently in our note-books, and we shall, as far as practicable, eschew mere refinements of diagnosis, and the tempting allurements of transcendental medicine. Perhaps our very earliest experience of convulsions is associated with imperfect aëration of blood; such are the convulsions of half-born or newly born infants, in whom the lungs are as yet but imperfectly expanded, or in whom there is some mechanical impediment to full and perfect respiration. A little reflection will show us that these are very closely allied to the convulsions which occur in hooping-cough, and sometimes in pneumonia, bronchitis, spasmodic asthma, and to those induced by suffocating animals (it may be human beings) by throttling, hanging, choking, or some other means of violent death—whether that of the young princes in the Tower who were the victims of Tyrrell, or rather of Richard III., or it may be the last culprit despatched by Calcraft. Closely allied, again, to these are the convulsions met with in infants suffering from congenital cyanosis. Whether the mixture of venous and arterial blood depends upon an open foramen ovale, absence of one or more normal cavities in the heart, or stenosis or absence of any of the vessels which serve as inlets or outlets to the heart and lungs, or upon abnormal communications between these vessels or the heart's chambers. And it is rather a forced style of argument which would lead us to place far apart from these the convulsions which so commonly occur in those forms of heart disease—such as tricuspid regurgitation, or dilatation of the right heart—in which the free circulation of the blood in the lungs is especially hindered. Common sense would and must lead us to class with these many toxic agents which cause death either by spasm of the glottis or by sooner or later impeding the free aëration and circulation of the blood. Prussic acid, chloroform, carbonic acid, carbonic oxide, alcohol, and a host of others instantly rise before the mind's eye; and others, such as opium and the numerous sedatives and narcotics of the Pharmacopœia, probably act in the same direction, although less obviously and more slowly. However, it would be rash to build hastily upon this foundation the theory that the cause of convulsions, and hence of epilepsy (a word which simply means, in medical language, a habit of having fits of a certain type), was to be referred to a want of oxygenation, or, in other words, of aëration of the blood; for convulsions and epilepsy are met with in various conditions where this is very slightly or not at all interfered with. To come back to the infants, with whom we began, we find convulsions caused by hæmorrhage from the funis, when its vessels have been imperfectly secured, and ceasing when they were properly tied; occurring also when the infant has lost much blood, either from circumcision or some other surgical operation, or, as we have known occur in infants, from polypus of the rectum or ulcers of the bowels. Those who rear and blanch calves for the London market are perfectly familiar with the convulsions caused by bleeding these animals, to suit the tables and the taste of epicures in veal; and every obstetrician is familiar with convulsions from loss of blood—as, indeed, is every practical surgeon. It may of course be said, that failing muscular power, or the want of a sufficient column of fluid, prevents the free passage of blood through the lungs—as, indeed, has been assumed in the case of cholera-collapse. But it is quite clear to practical men that in many of the instances we have named there is no adequate clinical proof of a stasis of the pulmonary circulation, although there may be good reasons for believing in a deficient supply of blood—for the moment, at least—to the bloodvessels of the brain. Shall we class with the latter cause the convulsions which are met with so frequently in dilated conditions of the heart's walls?—

which, in our experience, are excessively common in patients with dilated left ventricle. It is quite true that in these the right ventricle, and perhaps both auricles, are often dilated; also that they often have considerable emphysema, and sometimes fatty or other degenerations of important muscles, such as the diaphragm, or of large arteries and their offsets; and with these, again, the convulsions associated with valvular disease of the heart, which, if less common, are certainly sufficiently numerous to attract attention. Let us return to our infant once more, and we find him apt to be convulsed at the onset, in the course, and at the end of almost all acute diseases, notably of the exanthemata. But a burn or scald, the eruption of a fresh tooth, the deposition or disintegration of a tubercular or syphilitic deposit, or the presence of some malignant or other rapidly growing tumour of his cerebrum, cerebellum, or adjacent parts, will excite him in an equally disagreeable manner. And there is strong clinical evidence (much as reflex causes are out of fashion) for believing that the older writers were correct in assigning convulsions to the irritation produced by intestinal worms of various kinds. Nor are adults exempt from the operation of similar causes—especially as regards syphilis, tubercle, and the primary or secondary effects of fevers, paludal poisons, and mineral toxæmia. Lead, mercury, and arsenic form a mineral triad of great malignancy in this point of view. Baryta, thallium, antimony, and many other metals might almost dispute the palm of predominance in this evil potency with those named above. Nor must we exclude many vegetable poisons, whose exact *modus operandi* is still unknown to us. Ergot of rye, many blights of the wheat or other grain, sundry species of vetches, and fungi occur to us in this dismal category. Animal poisons, also, and (perhaps from the same cause) the effects of extreme heat, of extreme cold, of sections of nerves, and of obstructing or preventing the action of the skin, are equally well known as tending to induce convulsions of an epileptic type; so is the presence in the blood of urea, uric acid, of altered biliary acids, or other hepatic products, and even of the injection into the veins of the blood of another animal. Nor must the ill-effects of some articles of diet—notably certain crustaceous fish, pork, and cheese—be forgotten, or the poisonous results of a mother's milk after some violent mental excitement or depression. Even mental and moral shock, and over-study, or long-continued exertion of the mind, are so often followed by convulsions as to demand a place in our etiology of epilepsy. Sexual causes must probably be classed here, unless we consider these as due to the anæmia so often induced, or as the result of reflex irritations or local congestions. Our list of exciting or apparent causes is by no means exhausted, and it would surely be well for each of us to strive by some aids to memory, such as a neat and orderly synopsis, to keep them all in mind when studying the special cases of convulsions which come before us. Perhaps, for clinical purposes, such a grouping as the following might be of use, even though many exciting causes would thus be claimed by several of the groups, and thus repeated under several headings. This is unavoidable in such a scheme, and it need be none the less useful on that account, perhaps more so.

We shall class convulsions and epileptic seizures, as to causation, in such a grouping as—First, due to direct toxic agents (animal, mineral, and vegetable poisons, diseased conditions of blood—as met with in the exanthemata, syphilis, gout, and the like—including articles of diet or drinks when taken in excessive quantities, or when themselves impure or deleterious). Second, all causes of imperfect aëration of blood, whether heart or lung disease, or mechanical or other causes which either impede or prevent the access of air or blood to the lungs, or the due oxygenation of blood in the tissues. Third, losses of blood or other fluids, causing direct general or local anæmia, and local congestions or obstructions which may induce anæmia of nervous centres. Fourth, local causes of irritations, whether acting as direct excitants of nervous and muscular action, or by reflex action through or upon nerve centres (worms, teething, and tumours, etc.). Fifth, other causes not classified (here mental and moral shocks, perhaps.)

Can we classify the remedies, real or assumed, in a similar manner, or in any clinical relation to the above groups? We think we can.

(*To be continued.*)

THE WEEK.

TOPICS OF THE DAY.

Our article of last week on the working of the new Health Act has elicited two letters, which we publish elsewhere—one from Dr. Joseph Rogers, the President of the Poor-law Medical Officers' Association, and the other from Dr. Bakewell, late Medical Officer of Trinidad. With regard to Dr. Joseph Rogers's letter, we cannot agree with him that it would be at all for the benefit of the District Medical Officers of Health that there should be resident in the same district a Superior Medical Officer of Health debarred from practice, whose deputy the District Medical Officer should be. We believe that a far better plan would be the appointment of Medical Sanitary Inspectors by the Local Government Board—men who would hold similar positions in the eyes of the Profession and the public to those held by Drs. Buchanan and Ballard, and Mr. Radcliffe—whose duties would bring them in contact both with the Central Authority and the District Medical Officers, and whose influence with the local sanitary authorities would be far higher than that of any medical practitioner resident in the neighbourhood, who had simply laid aside private practice to obtain the post of Medical Officer of Health. We are of opinion that the influence of a Government Medical Inspector, both in supporting the Medical Officer of Health in the discharge of his duties and in advising and guiding the local sanitary authority, would be far higher and more valuable. We allow that we are entirely dissatisfied with the selection of Inspectors made by Mr. Stansfeld, and we trust that it will be vigorously attacked in the House of Commons when Parliament meets. Dr. Rogers's letter, in that part of it which refers to the Irish dispensary system, offers another argument in favour of our plan. In Ireland the Dispensary Medical Officers are practically Medical Officers of Health, but they have no County or Resident Medical Officers of Health over them to interfere with them in the discharge of their duties, and perhaps keep them in perpetual hot water with the inhabitants of their district. On the contrary, there are Government Medical Inspectors and a Medical Commissioner; in fact, a machinery perfectly resembling that which can be supplied by the Local Government Board, the Medical Officer of that Board being the analogue of the Medical Commissioner. Dr. Bakewell's letter is very entertaining. Medical Officership of Health work in the colonies must be a serious business. Fortunately, in England the climate and inhabitants are not so hot. Fevers, fomites, fungi, and firearms are all more rife in the tropics than with us, and therefore the duties of the Medical Officer in Trinidad and in the parish of Little Pedlington cannot very well be compared.

The alcohol dispute is now being shifted to the field of public institutions for the treatment of disease. An article in the *Pall-mall Gazette*, founded partly on the very questionable "Declaration on Alcohol" and on some statistics by Dr. Eastwood, of Darlington, recommends that there should be a general inquiry by committee into the amount of alcoholic stimulants consumed in public hospitals and infirmaries. There is no doubt that the quantity prescribed will be found to vary with the opinion and experience of the medical officers, but so will the amount of all food and medicines consumed by the patients. St. Thomas's Hospital is taken as the example of the largest consumption. A sensible letter from Mr.

Frederick Churchill in the *Times* of Wednesday rebuts the implied charge. Mr. Churchill writes—

"It would, in my opinion, be difficult to find a better illustration of the fallacy of statistics than that supplied by Dr. Eastwood in the paper above alluded to. It is unjust to conclude that, because the cost of spirits, etc., at certain workhouses and provincial hospitals is so much less than at a certain selected metropolitan hospital, therefore the medical officers of the latter prescribe an unnecessary amount of wine. If Dr. Eastwood will compare the statistics of all the metropolitan hospitals he will find that, judged by his standard, all the medical officers are 'extravagant.'

"The writer further adds that 'from the official reports it cannot be found that the recoveries or the deaths bear any reference to these expenses.' If Dr. Eastwood and others will kindly refer to the annual statistical reports published at St. Thomas's Hospital he will find a satisfactory reply to this statement.

"A very good estimate of the severity and urgency of the cases admitted to a hospital may be formed by the amount of stimulants prescribed for the patients. If St. Thomas's is to be quoted as the most 'extravagant' Hospital in the use of alcohol, I will challenge anyone to show a smaller death-rate and a larger percentage of recoveries in equally severe cases. Having spent many hours daily in the wards for a period of three years when I held the appointment of Surgical Registrar, I think I am entitled to form some idea of the value of stimulants in patients prostrated by disease.

"It is unfair to single out St. Thomas's Hospital, for during the ten years the Hospital was located at the Surrey-gardens the available beds were exceedingly limited. It was necessary to exclude almost all chronic cases, so that our beds on the surgical side were, as a rule, filled with accident cases and patients sent up from the country for the purpose of undergoing severe operations."

There seems to be a suicidal epidemic abroad. The last horror of the kind is the case of the foreigners who killed themselves in Golden-square. We may notice that the position in which the woman is said to have been found—sitting in a chair, with a Bible near her—is a very remarkable one in poisoning by strychnia. We should like to know where the strychnia was procured. What is the use of legislation to prevent the sale of poisons if people can procure arsenic, strychnia, and prussic acid as they please?

THE "EDINBURGH REVIEW" ON MEDICAL AND SURGICAL PROGRESS.

THE *Edinburgh Review* of this quarter contains an interesting article on "The Progress of Medicine and Surgery." The writer, taking for his text Holmes's System of Surgery, Spencer Wells on Diseases of the Ovaries, Sir W. Fergusson's Lectures on the Progress of Anatomy and Surgery during the present Century, Sir James Simpson on Anæsthesia and Hospitalism, and Dr. Markham on Bleeding and Change of Type in Disease, gives a very able review of what humanity has gained by medical and surgical progress during the past half-century. He looks upon anæsthesia, lithotrity, and ovariotomy as the three chief surgical triumphs, and gives such an account of them as the general reader can readily understand and the professional man will look through with interest to trace the effect with which his work is regarded by outsiders. In some respects he may be surprised to find the public in advance of the professional spirit. Here is a sentence full of suggestion—"The hygienic condition of great hospitals must either be wholly revolutionised, or the performance of dangerous operations within their walls must sooner or later be abolished;" and the plan of the reviewer for attaching cottages to all the large hospitals within easy distance in the country by railway is one which must be seriously considered before very long. It is gratifying to find the *Edinburgh Review* disposed to use its great influence in obtaining national rewards for our brethren, and acknowledging that it is "most unjust that while national honours are heaped upon those who have distinguished themselves by military courage or political talent, no public recognition beyond a baronetcy is given to men who have been pre-eminently benefactors to humanity," and we trust that some of our rulers may agree with their literary champion in the feeling that "it is extremely desirable that some tangible evidence should be given that the nation appreciates the sacrifices daily and hourly made by those who devote their energies and their talents to the promotion of its physical well-being." We commend the article to the special attention of our readers.

MEDICAL MEETING AT THE WEST RIDING ASYLUM, WAKEFIELD.

ON Tuesday, the 15th inst., there was a great assembly of the members of our Profession at the Wakefield Asylum. Last year Dr. Crichton Browne, the Superintendent, held a most successful *conversazione*, when the great bulk of the Profession in the neighbourhood attended. This year the experiment has been still more successful, the Profession in Leeds, Bradford, Wakefield, Sheffield, and many other towns being fully represented. The chairman of the Committee of Visitors, Mr. Walter Stanhope, took the chair, and a lecture was delivered by Professor Turner, of Edinburgh, on the "Convolutions of the Cerebrum." This was listened to with the attention a lecture on such a subject by Professor Turner deserves. There were also many objects of interest, pathological specimens especially connected with psychological medicine, new instruments and remedies, and microscopical specimens of various kinds. These are all very excellent, no doubt, as incentives to conversation and an easy means of introducing subjects of conversation a little less hackneyed than the weather and the price of coals, but we do not conceive the value of such meetings to rest so much on the acquisition of information or even of new ideas, but rather as affording the means of social intercourse so sadly lacking among the members of our Profession. Isolation is always dangerous; supreme rule in a limited sphere is most disastrous to mental improvement—in short, it is only by finding out that there are many men quite as clever as ourselves in the world that we learn to estimate others at their true value, and escape for our own part the intolerance of an overweening self-conceit. But such escape is only possible by contact with our fellows, and it is for this reason that meetings such as those inaugurated by Dr. Crichton Browne are so much to be commended.

We cannot stop without paying a tribute of praise to the present management of this Asylum. There can be no doubt but that Dr. Browne, by his energy and by the success with which he has been able to secure the hearty co-operation of the governing body, has been successful in raising the West Riding Asylum to one of the first places among English institutions of the kind. He has been able to secure the services of a large number of excellent clinical assistants, who have acquired a knowledge of insanity they could not elsewhere obtain. He has been able to publish two volumes of Asylum Reports, which we may say, regardless of the intrinsic merit of their contents, are a substantial sign of the activity which reigns in the institution. Now, all this is exceedingly creditable. We are not of those who are inclined to be over-lavish of praise, but neither are we of those who withhold praise when it is justly due, and we think Dr. Crichton Browne fairly entitled to his just meed, —and this is altogether independent of any merit in organising such assemblies as those we have been recording. In this respect he may be looked upon as a helper towards the advancement of social intercourse; but his success in raising an asylum, which when he took it in hand was a model establishment, to a still higher level, entitles him to take high rank in a different category.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

ON Tuesday evening there was read a paper by Dr. Dickinson, of St. George's Hospital, on the Effects of Alcohol as exemplified in those engaged in its sale, derived from the records of St. George's Hospital, extending over a period of thirty

years. What Dr. Dickinson aimed at showing was the effects of alcohol on those who from their position might be expected to partake of it freely as compared with the general bulk of the population. He was able to prove that it materially modified the conditions of the body,—wounds tended to suppurate, internal organs when irritated to undergo a kind of fibroid change. The lungs were often affected, but still more manifest were nervous symptoms—some due to changes in the arteries of the brain, some to what might be described as alterations in nutrition. In such patients, too, there was a tendency of inflammation in certain parts to end in suppuration: thus, pericarditis ended in purulent affusion, and so did pleurisy. The liver was prone to change, especially to cirrhosis; but, according to the statistics adduced, the kidneys did not suffer in the same proportion.

But there is one important feature commonly overlooked in these and such-like inquiries: that is, the nature and quality of the liquor consumed. Much more depends on these than statistics can show. Where, for instance, is the comparison between good old mellow wine and raw spirits, or between beer of the best Bass or Allsopp tap and that sold in a low beershop? Until these differences can be apprcciated by statistics, such papers only tell half their lesson, for it is vain to lay all the evils on the back of alcohol, and none on the other constituents of intoxicating liquors as ordinarily sold.

MEDICAL OFFICER OF HEALTH FOR ST. GEORGE'S, HANOVER-SQUARE.

THE vestry of this important parish are evidently proceeding with great deliberation in the choice of an Officer of Health. Personal canvassing is forbidden, and a committee has been appointed for the responsible office of sifting out the most promising candidates, and examining their testimonials. Out of fifty or sixty the committee have selected the twelve whose names we subjoin; these are to be favoured with a personal interview next Monday, and the twelve to be reduced to six, out of whom the Vestry will, it is said, make their final choice on November 7. The names are—Drs. Corfield, Adam Clark, Charles Mayo, Stocker, R. E. Thompson, Roberts, Bianchi, Seaton, Hudson, Brailey, Laking, and Turner.

A HAPPY UNION.

ONE of the most successful of our public institutions is the unsectarian and free College at Manchester, founded by the munificence of Mr. Owen. It has pursued a steady course of prosperity, and now has added to its usefulness and reputation by incorporating with it the Royal Manchester School of Medicine. In connexion with this transaction, a special fund has been raised of about £18,000 for building and endowment. The College has just attained the majority, having been first opened in 1851 with sixty-two students. The day students last session numbered 327, and the evening students 513.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS, IRELAND.

THE general annual meeting for the election of council and officers for the session 1872-73 was held in the College Hall on the evening of Wednesday, October 16. Owing to the very inclement weather the attendance was not large. Dr. Henry Kennedy presided. The report of the Council was read by Dr. Eames, Hon. Sec., who referred to the increasing prosperity of the Society, the members of which, now for the first time, numbered more than 100; to the loss sustained by the Society in the death of its past President, Dr. Thos. Edward Beatty; to the papers read during the preceding session; and to matters of detail connected with the working of the Society. The following office-bearers were afterwards elected:—*Council:* Lombe Atthill, Thomas Fitzpatrick, Samuel Gordon, Thomas Wrigley Grimshaw, Thomas Hayden, James Little, Henry Kennedy, George Johnston, Alfred H. McClintock, J. Hawtrey Benson, Robert D. Lyons, and Robert Law. *Honorary Secretary:* Henry Eames.

APOTHECARIES' HALL OF IRELAND.

THE Council, under the control of the Court of Directors, have made arrangements for a course of practical instruction in chemistry and pharmacy in their relations to Medicine. The course (the first of the kind ever carried out in Ireland) will commence early in November, and will be continued on four days each week during that and the three following months. It will comprise the general principles of chemistry, botany, and pharmacy; the history and description of the drugs and preparations of the British Pharmacopœia, their physical and chemical characters; the *rationale* of the different formulæ; the means of detecting impurities and adulterations in food and drugs; the uses and doses of medicines; the translation of Latin prescriptions, and the proper mode of compounding and dispensing them. The course will conclude with a description of the principal poisons, their effects, antidotes, and appropriate tests, in simple and compound mixtures; and an explanation of the chemistry and application of disinfectants. The main objects of the course are to enable medical practitioners, who dispense their own prescriptions, and persons who desire to qualify themselves as assistants to apothecaries, to recognise genuine articles, both of food and medicine, and to obtain instruction in the art and science of pharmacy. The importance of this step on the part of the Council cannot well be over-rated in relation to recent legislation on the subject of the adulteration of drugs.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION OF IRELAND.

A MEETING of the Medical Officers of the Abbeyleix (Queen's County) Union was held on October 17, under the presidency of Dr. Thomas Swan. It was proposed by Mr. Hanrahan, and seconded by Mr. Fitzpatrick—

"That we give our full adhesion to the rules and regulations of the Poor-law Medical Officers' Association of Ireland; that we approve of the project of having a meeting in Dublin of the county representatives of this Association for the purpose of submitting a report to Sir Dominic Corrigan, the other members of the City, County, and University of Dublin, and as many other members of Parliament as may attend, with the view of having our grievances brought under the notice of Parliament next session; that we will endeavour to secure the co-operation of our own county and borough members for the same object."

Proposed by Dr. Strong, and seconded by Mr. O'Kelly—

"That, our present salaries being inadequate to meet the increased rate of living, we trust that the friendly disposition evinced by the guardians in removing our legitimate grievances on former occasions will be manifested now by so increasing our salaries as to enable us to maintain the position befitting our profession. We respectfully submit that, owing to the additional expenditure incurred now, a salary of £120 a year would not leave us in so good a position as when we were originally appointed at £80."

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

AT the annual stated meeting of the College, held on Friday October 18 (St. Luke's Day), the officers for the coming year were selected, as follows:—*President:* Alfred Hudson, M.D. *Vice-President:* Robert D. Lyons, M.D. *Censors:* Robert D. Lyons, M.D.; James Little, M.D.; Wensley B. Jennings; and Thomas Wrigley Grimshaw, M.D. *Treasurer:* Aquilla Smith, M.D. *Registrar:* John Magee Finny, M.B. *Professor of Medical Jurisprudence:* Robert Travers, M.A., M.B. *Examiners in Midwifery:* Lombe Atthill, M.D.; John Ringland, M.D. *Representative on General Medical Council:* Aquilla Smith, M.D. *Librarian:* H. J. Fennell.

CHAIR OF ANATOMY AND CHIRURGERY, TRINITY COLLEGE, DUBLIN.

WE understand that the election of a Professor to this now vacant chair has been postponed from last Saturday (October 19) to this day. It is rumoured that the Board of Trinity College intend to divide the chair, setting apart a portion of the emoluments as an endowment for a Professorship of

Comparative Anatomy. Much as the creation of such a Professorship is to be desired, it appears a retrograde step on the part of the authorities to strip one valuable chair in order to endow another. The name of Dr. Thomas Evelyn Little, Demonstrator of Anatomy in the School of Physic, and Surgeon to Sir P. Dun's Hospital, is mentioned in connexion with the new Professorship.

INDIAN MEDICAL AFFAIRS.—CHOLERA IN INDIA—TREATMENT OF ASSISTANT-SURGEONS — SUPPLY OF EUROPEAN MEDICINES — MEDICINE IN CEYLON.

The *Times* correspondent, writing from Calcutta under date of September 27, says :—

"I am sorry to tell you that our cholera reports are still more discouraging than when I last wrote. I telegraphed to you the news from Bokhara, that at least 1000 people, and more probably 1200, were dying in that city alone daily. I should have hesitated to send you so startling a statement if it had appeared anywhere but in a Government report. It is made on the testimony of a merchant direct from Bokhara. In the Punjaub the last week's registry gave a total of 1084 deaths from cholera, or 336 more than in the previous week; 172 towns and villages are reported to have been attacked by the disease. In Cashmere nearly 6000 persons are said to have been attacked, and close upon 3000 to have died. In some districts the disease has greatly abated. The cholera camp at Kussowlie is stated to have been broken up. At Srinuggur there are from seventy-five to ninety-six deaths per day. The Maharajah of Cashmere appears to be behaving admirably. He has given orders for 100 dispensaries to be opened in the city, and that every means shall be placed at the disposal of the hakims and sub-assistant-surgeons to check the disease. This is rather different from the Lieutenant-Governor of Bengal ordering the young sub-assistant-surgeons down to Burdwan on half-pay. The young men (I was in error in saying, a fortnight ago, they were merely students) are, it is said, to be discharged from the service for insubordination—that is, for refusing to go at half the ordinary salary to one of the deadliest parts of India to do the most dangerous of all work. It is by acts like these that Mr. Campbell, in spite of his honest and public-spirited intentions, is really unpopular in Bengal. One would imagine that no human being but the Lieutenant-Governor himself would have thought of cutting down wages at the very time that he was ordering the young men to duty at the imminent risk of their lives."

The Government of India has placed at the disposal of the Local Government of Bengal an additional sum of 15,000 rs. for the supply of European medicines to all charitable civil dispensaries, in consequence of the prevalence of the dengue fever in several districts in the upper provinces of Bengal.

It is proposed to introduce a Bill into Ceylon for the better medical superintendence of labourers on coffee estates.

THE CLIMATE OF HONG-KONG.

Few climates are more injurious to Englishmen than that of Hong-Kong, particularly in some districts, and notably, we believe, where the barracks are stationed. The *Army and Navy Gazette*, in referring to this subject, alludes to the injuries effected by the climate on naval medical officers. It says it is well known that the late Dr. Bernard, Deputy Inspector-General, succumbed to a disease incurred there; and now we have to record that Deputy Inspector-General R. Pottinger has been compelled to resign his appointment on the station and return home invalided. Dr. W. Loney has been nominated to succeed Dr. Pottinger.

FROM ABROAD.—PROFESSOR POLITZER ON RUPTURE OF THE MEMBRANA TYMPANI—M. OLLIER ON EXCISION IN GUNSHOT WOUNDS.

In the *Wiener Med. Wochenschrift* (Nos. 35 and 36), Professor Politzer has published an interesting paper on "Traumatic Rupture of the Membrana Tympani in relation to Forensic Medicine." He observes upon how little has been written on the subject of injuries to the ear in works on forensic medicine, and attributes this in great measure to the little habit practitioners have of examining the ear. It may, however, be of great importance to determine whether a blow on the ear has produced injury to the organ, and to what extent. In the present paper he confines his attention to rupture of the membrana tympani, intending to take up other injuries on a future occasion.

In forensic medicine the rupture in question has in most cases arisen from a blow from the open hand,—a box on the ear; and the immediate cause of its production is the sudden compression of the column of air contained in the meatus. The objective examination is of the greatest importance, enabling us to determine during the early days after the accident whether the rupture discovered has arisen from the violence or disease. In all cases that the author has met with the rupture has consisted in a hole with gaping edges, through which the wall of the tympanum has been visible. Its locality is very various, but it is found more frequently at the lower and posterior than at the anterior part of the membrane, and is generally placed midway between the handle of the malleus and the annulus cartilagineus. In form it may be as round as if punched out, but is usually of a long oval, having its axis parallel with the radiated fibres. The edges of the aperture are sharply defined, and covered to a more or less extent with a coagulum of blood. The other portions of the membrane are normal, with the exception of an abundant injection of the venous plexus of the malleus. There is no marked injection of the wall of the tympanum seen through the rupture.

The degree in which hearing becomes impaired varies much, this being more considerable when the blow has also produced concussion of the labyrinth. When the force of the blow has been expended on the membrane, rupturing its elastic fibres, the labyrinth, as a general rule, remains intact, and the capacity of hearing, as tested by the watch and the tuning-fork, is but little diminished. The most unfavourable cases are those in which the membrane remains uninjured, the force of the blow not having been exhausted upon it, but propagated by the ossicula to the terminal nerves of the labyrinth, inducing great loss of hearing, accompanied by loud subjective noises. In quite exceptional cases a rupture of the membrane may be combined with concussion of the labyrinth, and in these the loss of hearing is great, and subjective noises are usually present. The employment of the tuning-fork is here of great importance, exhibiting the absence of tone on the injured side, which is not the case in simple rupture of the membrane. In determining the traumatic nature of the rupture another symptom of importance is derived from the Valsalva procedure of inflating the membrana tympani. When a perforation has been produced in this through disease, the air forced in through the tube passes out through the aperture, even when this is considerable, with a sharp hissing sound; but in traumatic rupture, occurring in a normal ear, it passes out with a very deep breathing sound. Moreover, when there is pathological perforation, a more or less considerable exertion of power is required to force the air through the tube; in traumatic rupture a surprisingly less amount is requisite. This arises from the altered condition of the capacity of the tube, which has been produced by the swelling and thickening consequent on inflammation.

The course of an uncomplicated rupture is usually very favourable, cicatrisation soon commencing, chiefly at the expense of the inner layer of the membrane; and at the end of some weeks even the place of the rupture is not discernible. Any adherent coagulum either falls off or is carried by the process of growth from the centre to the periphery of the membrane. In some exceptional cases inflammation of the membrane, and of the lining of the tympanum, together with suppuration, may be set up; but this has generally arisen from malpraxis in dropping oils or other substances into the ear. Even under these circumstances closure of the perforation may occur after a considerable lapse of time, and the hearing

remain unimpaired. In other cases the suppuration becomes chronic, and the aperture enlarging remains permanent. In the bulk of cases of rupture the hearing is completely restored; but different degrees of disturbance may remain, consequent on the changes from chronic suppuration or on the accompanying concussion of the labyrinth. Even in the cases in which, without rupture of the membrane, there are singing and deafness consequent on the concussion of the labyrinth, the hearing may be restored at the end of several weeks, but more frequently it remains impaired during life.

In treating the rupture all local applications should be avoided as likely to impede the healing process, care being, however, taken to protect the exposed lining of the tympanum from atmospheric vicissitudes by keeping cotton-wool in the meatus. In some cases of concussion of the labyrinth, the employment of the constant electrical current has been followed by improvement.

In order to be able to give a medico-legal opinion upon a case, the practitioner must have seen it a few days after the occurrence of the rupture; for if too long a delay has taken place, cicatrisation may have occurred or suppurative inflammation set up. It is of importance that he should not only verify the aperture, but watch its cicatrisation, in order to distinguish it from a persistent aperture that may have resulted from prior disease. This last remains unclosed, whereas the traumatic rupture always closes within the first few weeks, or in rare cases is accompanied by suppurative inflammation.

At the late Medical Congress at Lyons, M. Ollier read an interesting paper "On Excision in Gunshot Wounds." He observed that his remarks would be confined to injuries of the upper extremity. During the late campaign he had systematically abstained from excision of the bones of the lower extremity, the transport of the wounded being so bad that amputation was always the preferable operation. But at any time he is no strong advocate for excisions of the lower limbs, preferring expectation as a general rule for the hip, and almost always amputation for the knee. Excisions of the ankle usually succeed better than those of the other bones; but even with regard to these expectation is often the better practice.

It has been objected that in gunshot wounds the periosteal sheath cannot be retained; but this is an error, for, however crushed the bone may be, subperiosteal excision can be performed with almost as much regularity as when the bone remains intact—the periosteum being detached from each fragment in succession. This arises from the fact that while the bone, being fragile, breaks, the supple and resisting periosteum yields without rupturing. In aged subjects, however, it is adherent, and is easily torn away with the fragments.

During the late campaign M. Ollier performed subperiosteal excision of the elbow seven times. In one case fatal hæmorrhage, caused by an unperceived section of the brachial artery, came on on the twelfth day. In two cases there was complete anchylosis, in consequence of the apparatus having been retained too long a time without the necessary movements having been imparted. The four other cases had complete articular reproduction, and possessed active extension and flexion of the forearm, without lateral movements. In one of the cases these last existed to a slight extent, but without impeding the functions of the limb.

The question of the indications is sometimes a delicate one. If the elbow-joint be largely opened, and there is notable loss of soft parts, amputation is the sole resource; but if the soft parts remain sufficiently intact, excision may be performed, howsoever great is the lesion of the bone. The indication is precise when the fissures do not extend beyond a fourth of the shaft of the bone, but it is less positive if these extend to the half of its length. As a very general rule it is the state of the soft parts which determines the indication. The most difficult cases to decide upon are those in which there is a small wound of the joint and the bone. Expectation may produce a cure by anchylosis, but there is considerable danger of death from purulent arthritis; and excision, while it gives rise to very much less pain, is also less dangerous than purulent arthritis. When arthritis supervenes, and especially when the wound is small, the pains are fearful, and the large opening caused by excision at once assuages them. The indications for excision in the continuity of bones are less peremptory than are those for articular lesions. When the humerus is traversed and broken into numerous fragments, expectation should still be the rule. M. Ollier performed excision in only three such cases, and "expected" in more than twenty. When the fragments are considerable, we cannot tell where they extend to until after exploration under anæsthetics. If, after removing those of them which are loose, there is no fissure, it suffices to render the limb immovable; if there are fissures, each fragment should be caused to project, so that it may be examined. When with the fissure there exists a detachment or laceration of the medulla, the limits of this should be ascertained, and the bone removed at its level; in fact, it is the condition of the medulla that is to be taken into account rather than the fissure itself, and especially in young subjects.

In treating the case afterwards, we should bring the ends of the bones nearer to each other in proportion as we rely less on regeneration. In a child the entire sheath may be retained; but in older subjects upon whom primary excision has been performed not more than three or four centimetres must be allowed to intervene between the ends, and often less. The *ouato-silicaté* bandage is the best, rendering the limbs immovable, and allowing of the easy transport of the patient.

HEALTH OF CUSTOM-HOUSE OFFICERS.

GENERAL REGISTRATION OF DISEASE.

The Report of the Health of the Custom-house Officers for 1871 has just been issued by Dr. Walter Dickson, the able and indefatigable Medical Inspector. The Report embraces the health of the out-door officers, watermen, messengers, and other inferior officers of the Customs. The Report is peculiarly interesting, as being an instalment of what is so urgently wanted—viz., a general registration of disease as well as of mortality. It is true that the body of men is comparatively small (1047), but it is far less exposed to changes than those that are the subjects of army, navy, police, or post-office returns of like nature, as few alterations, except by deaths, occur in the course of a year. The medical history of the force is therefore more complete and accurate for comparative purposes than any other we are acquainted with, and is a fair exposition of the sanitary condition of the middle-aged middle lower class, who form so important a part of the adult male working population of the metropolis.

"The classification together with the nomenclature of diseases is that adopted in 1868, and now in general use in all the public departments. It differs in few particulars, and in none of essential importance, from that which has been used in these reports for the last ten years. The maladies that have occurred in each quarter of the year are tabulated in two great classes, general and local. The former comprises febrile and epidemic disorders which affect the whole frame, as well as those diseases, commonly called constitutional, which are apt to invade different parts of the same body simultaneously or in succession—as rheumatism, gout, scrofula, cancer, etc. The local diseases are arranged in groups according to the special organs which are affected."

This classification is well illustrated by tables for each quarter of the year under the divisions of "Diseases," "Remained from Last Year," "Admissions to Sick-List" (giving the various positions of the officers), and the "Number of Days' Sickness." In the first quarter the officers of Customs participated in the general ill-health of the metropolis. The sick-

list was heavy throughout the quarter, the mean daily number incapacitated for duty being 37·8, or 4·7 per cent. The inordinate severity of the winter caused much pulmonary and rheumatic disease of unusually serious and protracted character. There were severe cases of febrile disease, the most formidable being small-pox, which then raged in the East of London. Six cases occurred in this department, two of which, both in young out-door officers, terminated fatally. Two other out-door officers, well advanced in life, and who had been long ill, died, one of consumption, the other of heart disease, complicated, as usual, with asthma and dropsy. In the second quarter the health of this department was satisfactory, the number of cases of sickness admitted to the list (eighty-four) being below the average of the last four years, which was ninety-two. The mean daily number incapacitated for duty was twenty-six, or 3·2 per cent., but this included several cases of chronic and incurable disease awaiting superannuation. Sickness was of the ordinary character of the season, with the exception of small-pox, which was still epidemic in London, and from which five officers suffered more or less severely. Three deaths occurred in the quarter. In the third quarter the health of the department was good, the number of cases admitted being about the average of the quarter in the last three years, and considerably under that of previous years. The mean daily number incapacitated for duty was twenty-three, or 2·8 per cent. Two cases of small-pox remained on the list from the last quarter, but no fresh case presented itself. Disorders of the digestive organs occurred in their normal predominance, and seventeen cases of diarrhœa were of sufficient severity to require withdrawal from duty, but none of these exhibited the choleraic type, and the season ranked in this respect with the healthiest of recent healthy years. As cholera was known to be epidemic in Russia, great precautions were taken in the Customs department to meet the threatened emergency, and to these are attributed the comparative rarity of bowel complaints.

In the fourth quarter the force suffered from the cold and excessive rainfall. Cases of bronchitis and rheumatism, and acute affections of other organs, were more frequent and severe. Frost-bite occurred in some instances, followed by whitlow, and abscess, and wounds; and ulcers took on an unhealthy action; five deaths occurred. It should be stated of the number of the force 798 are stationed in London and 249 at Gravesend. The tables referred to above indicate the comparative health and mortality of the men at the two stations. The men at Gravesend are more frequently ill from slight ailments, but do not yield the same proportion of chronic and fatal diseases, inasmuch as when in broken health or threatened with maladies of a serious nature they are usually transferred to London. Some able and judicious remarks are made on the late epidemic of small-pox, and the meteorological reports are clear and concise.

The Report concludes:—

"The general results of the sanitary statistics of the department are these:—The mean daily number disabled by sickness has been 36, or 3·4 per cent. The ratio of admissions to sick-list, or individual cases, 70 per cent. on strength. The mean duration of each case, eighteen days. The time lost to the service by disease or accident has been, including Sundays, twelve days per man. The deaths have been five above the average; in the previous year they were as much below it. Those from disease have been sixteen, and from accident two in number, or 17 per 1000, the mean annual mortality in the last fifteen years from all causes being 12 per 1000. Superannuations have been at the rate of 4 per 1000, the average of the last fifteen years being 7 per 1000. The mortality has therefore been higher, chiefly by reason of small-pox and accident, than the mean death-rate of the force, while the superannuations have been below the mean."

We consider the Report of Dr. Dickson of the highest importance and interest, chiefly on the ground of its being the first complete publication of the registration of disease (we say "complete," for so it is as far as it goes); but also for the example it sets to others who may have the opportunity of following it.

REVIEWS.

The Science and Art of Surgery: being a Treatise on Surgical Injuries, Diseases, and Operations. By John Eric Erichsen, Sixth Edition. Vols. i. and ii. Longmans.

The fact that a new edition of this well-known text-book has been called for in little more than three years is strong testimony to its excellence. Considerable changes have been made in this edition, and nearly a hundred new illustrations have been added. It is difficult in a small compass to point out the alterations and additions; for, as the author states in his preface, they are not confined to any one portion, but are distributed generally through the various subjects of which the work treats. Certainly one of the most valuable sections of the book seems to us to be that which treats of the diseases of arteries and the operative proceedings which they necessitate. In few text-books is so much carefully arranged information contained. The chapters on deformities and on orthopædic surgery also are very full, and, indeed, form by themselves a treatise on this speciality. In the preface Mr. Erichsen acknowledges his obligations to Mr. Streatfeild for having brought up the chapter on ophthalmic surgery to modern requirements. A book of so large a size can hardly be of equal excellence throughout, but we can award Mr. Erichsen's work the praise of containing, together with one of the fullest and best illustrated accounts of modern operative surgery extant, an epitome of general treatment, and a well-compiled summary of surgical pathology.

A Treatise on the Causes of Heart Disease, with Chapter on the Reason of its Prevalence in the Army. By Francis W. Moinet, M.D. Edinburgh: Bell and Bradfute. Pp. 112.

This is a solid and sensible essay, although it contains but little that strikes the reader as new or original. Dr. Moinet, however, has his own theory of the cause of the prevalence of heart disease in the army. He thinks it is due to the long-continued maintenance of the erect position, constrained by rule and dress, and to the amount of exercise of the upper extremities in that position. He writes: In the erect position "the heart and the aorta are placed under certain disadvantageous circumstances. The heart has to overcome during each contraction the weight of the column of blood in the ascending aorta, and so requires to act with more strength. Still more so if exercise is taken in that position, especially exercise of the upper extremities. At the same time the arch of the aorta is exposed to the risk of having its curves made more acute by the weight of the suspended heart; and, the force of the current of blood being increased, acts all the more speedily at the point of obstruction, so that certain external circumstances, taken in conjunction with this mechanical arrangement of the heart and aorta, come to be considered as important causes of disease of the organs of circulation." The chapter on angina pectoris contains an argument to prove that the attack of angina depends, not on spasm, but on "paralysis occurring in and depending on a weakened heart."

Aids to the Diagnosis of Diseases of the Kidneys. By W. R. Basham, M.D. London: J. and A. Churchill. Pp. 48.

This unpretending but useful book is simply a description of nine plates, each containing six representations of urinary deposits obtained from the urine of patients suffering from albuminuria, with short abstracts of their cases. It is therefore a simple illustrated record of facts, and the author states that he has purposely omitted any matter or subject which might interfere with its purely clinical value. Accustomed to make drawings of the appearances presented by the urinary sediment in the various cases which came before him, and knowing from experience the mistakes in urinary microscopy made by students and practitioners, he determined to publish his drawings, in the hope that they might be useful for comparison. The drawings are exceedingly well executed, and speak highly for the artistic powers of Dr. Basham; the objects figured are carefully described, and the history of the patient's case is given shortly and succinctly, and, where it could be ascertained, the result is noted. A tenth plate representing adventitious objects occurring in urinary sediments, which often confuse and puzzle the unexperienced student, is added.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

October 22.

CONVERSAZIONE OF THE MEDICAL INSTITUTION — THE ROYAL SOUTHERN HOSPITAL.

The session 1872-73 of the Medical Institution was inaugurated by a *conversazione* on Monday evening. A hundred and twenty gentlemen, nearly all of whom were members of the medical profession resident in Liverpool, were present, and spent the evening in a most agreeable manner. The entire suite of rooms of the Institution was thrown open, and filled with objects of medical and general scientific interest, arranged under the following heads:—Microscopical specimens, pathological specimens (casts, photographs, and drawings illustrating disease and injury), surgical instruments and appliances, philosophical instruments, new drugs and chemical preparations, and miscellaneous objects of interest.

Many of the microscopic specimens were of very great merit; and, though it might seem almost invidious where all were good to select any for special comment, we cannot help mentioning a series of sections of diseased cartilage, prepared and exhibited by Mr. Rushton Parker, Demonstrator of Physiology to the Royal Infirmary School of Medicine; and some sections of rare fossil plants, exhibited by Dr. Braidwood.

A series of highly interesting coloured drawings of the various stages of the vaccine vesicle in the heifer and the human subject, according as it was excited by the application of human lymph or that directly obtained from the cow, were exhibited by Dr. P. M. Braidwood, who had prepared them.

Tea and coffee were served in the library, and after an hour's interval, during which the various preparations were inspected, the President (Dr. John Cameron) delivered a very interesting opening address in the larger of the two theatres of the Institution. From the very marked success of this *conversazione*, which has only now been revived after many years' interval, it is much to be hoped that the Society will see its way to a yearly inauguration of its sessions in a similar manner. Happily, the Institution is in a more prosperous condition as to funds, the number of its members, and its work (into which the utmost vitality is infused) than at any other period of its history.

A highly interesting inaugural service was held on last Sunday afternoon in the chapel of the Royal Southern Hospital, when a sermon was preached by Dr. Howson, the Very Rev. the Dean of Chester. The Hospital, though it was opened by Prince Arthur on May 21 last, was not occupied by patients until August 29, on which day those who had been kept in the old hospital were transferred, and quickly afterwards one after another of the spacious wards thrown open for the reception of others, so that at present 160 can be accommodated; and shortly the entire number of beds (220) will be ready, and no doubt occupied. The special occasion of the service in question, or at least of its being participated in by the Dean of Chester, was the adoption by the Hospital authorities of a new system of nursing, which bids fair to be a great blessing to the inmates and a credit to the institution.

Four years ago there were established in the diocese of Chester deaconesses' institutions, in which women of education who were desirous of benefiting their fellow-creatures could be trained for high and useful work in life. As part of this training a practical acquaintance with the nursing of the sick was essential, and application was made to the authorities of the Hospital to grant facilities for the acquisition of such knowledge within the walls of the former building. Permission was given, and so much confidence was inspired in the ability and fitness in every respect of those who thus from the highest motives desired to devote themselves to this useful work, that when the new hospital was completed a request was made that the deaconesses should take the entire charge of its nursing, leaving the administrative department under an entirely different management. At present, therefore, the nursing is under the management of two lady superintendents. Each ward, or a large and small ward where these are close together, is under the immediate charge of a sister, who is assisted by one or more of the lady probationers from the deaconesses' institution and a nurse.

It is too early yet to pass judgment on this system; but there seems to be no reason why it should not succeed. In one respect it has great advantages over the employment of uneducated nurses—viz., in the superior abilities which lady nurses have of influencing and agreeably engaging the minds of the patients. Thus they spend much time in reading by the bedside of those who are bedridden and unable (as, unhappily, very many are) to read for themselves, and thus do much to relieve the dreary monotony of days or weeks of forced inactivity—no mean aid, as every physician will be ready to confess, towards a successful treatment.

SCOTLAND.

THE LADY-STUDENTS AGAIN—EXTRA-MURAL COURSES—THE "POTESTAS DOCENDI."

Edinburgh, October 21.

The first indication of the approaching commencement of the university session in this city is again, as it has too often been of late, a spurt on the part of the lady medical students and their supporters. If their efforts have not hitherto proved profitable to themselves or anyone else, the fertility of their resources cannot be questioned. Sometimes the performance assumes a grave aspect, as when the Lord Ordinary is brought to sit in judgment on the University Court; anon it puts on a comic face, as in the present instance. Hope deferred generally maketh the heart sick,—but not of this buoyant party. Brought to a dead halt at the University and Royal Infirmary, and pending the settlement of their "rights" at these important institutions, they meanwhile amuse themselves with the exercise of feminine ingenuity. A happy and ready method has occurred to one of them by which a school of teachers may be extemporised in the twinkling of an eye.

In a letter to the University Court, Mr. Hoggan, M.B., C.M., begs leave to apply for recognition as an extra-mural Lecturer on Anatomy, it being his desire to deliver courses of instruction on that subject to the lady medical students during the ensuing session. Mr. Hoggan has acted as Demonstrator of Anatomy at Surgeons' Hall for a year. He is, moreover, prepared, if necessary, to pass any examination that the Court may appoint.

The University Court, in reply, refuse to recognise Mr. Hoggan as a Lecturer on Anatomy, in respect that he has presented no evidence of his qualifications; and they further state that it is not the practice of the Court to prescribe examinations for the purpose of testing the fitness of applicants for such recognition.

Mr. Hoggan produces a few testimonials from physicians, surgeons, and lady students, but offers these as minor evidence in favour of his right and title to lecture.

"First," he writes, "among the enclosed testimonials you will find the diplomas granted to me by the University of Edinburgh, and I can hardly doubt that they will be accepted by you as the best proofs of my qualification, since they distinctly confer on me 'amplissimam potestatem . . . . docendi.'

"Allow me to explain," he goes on to say, "that, though to meet all possible objections I offered, if desired, to submit to the crucial test of any examination you might appoint, I did so without any expectation that this would be considered necessary, as I have so recently passed every examination prescribed by the University, with the express view of ascertaining my fitness to be entrusted with the very power conferred by my diploma, for the exercise of which I now request the formal recognition of your honourable Court."

The University Court do not see the force of the evidence submitted by Mr. Hoggan, and "the Court are surprised that Mr. Hoggan should refer to the terms of his diploma, in which the University concedes to him 'potestatem medicinam ubique gentium . . . . docendi,' as entitling him to teach publicly any branch of Medicine he chooses, and thereby to qualify students for graduation, in face of University statutes which clearly limit the purport of these old terms of style in the diploma. The University retains the ancient terms, adopted by all universities, in virtue of their foundation by the Pope in times when the Pope alone could grant 'potestatem medicinam ubique gentium legendi, docendi, faciendi.' But the University has never pretended that in these days its diploma could, like the Pope in former times, overrule all statutes relative to the right of teaching, either here or everywhere else."

It has been the custom of the University Court to recognise extra-mural lecturers, who after due examinations by certain medical colleges had obtained the licences of these colleges to lecture on particular subjects. No application of the present kind has ever hitherto been made to the Court, and we cannot

but think that Mr. Hoggan, by insisting upon the literal interpretation of the terms in his diploma—"amplissimam potestatem . . . docendi"—gives very odd proof of the presence on his part of that calm and modest judgment so essential to a teacher of youth, and especially of young ladies. We cannot believe that he wishes the University authorities to recognise the right of all who hold their medical diplomas to lecture on any or every subject contained in the course of Medicine. We sincerely hope that Mr. Hoggan has qualifications to fit him for such a wide range of duties. Perhaps it is only Mr. Hoggan's way of eliciting such an explanation or alteration of the phrase as shall for ever put an end to the possibility of vain and absurd aspirations being again founded upon it. Perhaps it will become a law quibble, and we shall suddenly find ourselves blessed with some thousands of recognised possible lecturers. We hope, however, that we are right in looking upon the whole thing as a joke on the part of Mr. Hoggan and his supporter the *Scotsman*, and that the ladies' party are really above founding a new female medical school on so desperately wide a basis.

GENERAL CORRESPONDENCE.

POOR-LAW OFFICERS AND MEDICAL OFFICERS OF HEALTH.

LETTER FROM DR. JOSEPH ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—A cursory reader of the leading article in your last week's issue would infer that I and those who think with me are opposed to the utilisation of the Poor-law Medical Officer as a Health Officer; on the contrary, I have always advocated such utilisation. Thus, in the address from which you quoted, I reiterate the principle, which I have always contended for—namely, that every Poor-law Medical Officer should be a Health Officer in virtue of his appointment. The only point in which I differ from you is the relation which the District Medical Officer should hold to those to whom his reports should be sent. You consider he should be the sole Health Officer for his district; I, on the contrary, am of opinion that he should be the deputy of some superior Medical Officer debarred from private practice, in whom should vest the responsibility of ordering such works and alterations as the reports of the District Medical Officers would show to be necessary, and which, being in their execution more or less costly, would bring the Medical Officers acting alone into painful collision with their patients and with their sanitary authority. In this view I am supported by Dr. Rumsey, and by several other gentlemen eminent as sanitarians.

If such an opinion was supportable by several cogent arguments months ago, when the Public Health Bill was as yet in gestation, it has become absolutely necessary now that we learn that Mr. Stansfeld's notion of the fitness of things is so feonused that he has proceeded to make lay appointments only, seeing that it is obvious that the Poor-law Medical Officers will not be able to calculate on either scientific aid or moral support, in the performance of the novel and arduous duties now entrusted to them, from the superiors that have been set over them.

Passing to another point in your article,—the reference to the Irish dispensary system,—there is one feature of that system which should never be lost sight of in estimating the results that have accrued from it; it is, that when the Medical Charities Act was enacted it was provided that there should be a Medical Commissioner having equal power with a Poor-law Commissioner, and Medical Inspectors having control over medical relief matters. To these latter was delegated the power of directing what sanitary works should be executed consequent on the reports of the rural dispensary medical officers, and who also interfered, always successfully, when it came to their knowledge that the stipend voted by a board of guardians was insufficient or in marked contrast with that of neighbouring districts; in this action the Chief Commissioner always supported them. The analogue of this has never existed in England and Wales, and, as far as Mr. Stansfeld is concerned, it is evident it never will, or he would not have so suddenly followed the traditions of his department, as shown by his recent monstrous lay inspectorial appointments.

What would have resulted in this country, if some thirty-eight years ago, when the new Poor-law was introduced, medical commissioners and medical inspectors had been added to the Poor-law Commissioners, would not, I take it, be very difficult to determine. Of one thing I am satisfied: it would not have been necessary, so many years after, for the Poor-law Medical Officers to combine with the object of securing a reform of that medical relief system which Sir Dominic Corrigan has justly stigmatised as the worst in Europe.

I am, &c., JOSEPH ROGERS.

33, Dean-street, October 21.

MEDICAL OFFICERS OF HEALTH IN THE COLONIES.

LETTER FROM DR. BAKEWELL.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is an audacious enterprise to attempt an argument with an Editor in his own paper, and one that is very rarely successful, yet, with the hope that it may at least be said of me "*Magnis cecidit ausis*," I would venture to combat the principles laid down in your leader of to-day, and in others before, on the advisability of medical men in private practice accepting the appointment of Medical Officers of Health.

I speak from an experience of four years as head of the Public Health Department in Trinidad, and as First Medical Officer of Health of that colony; and, knowing as I do the difficulties and disagreeables of the work, I say most emphatically to my brethren in England,—Have nothing whatever to do with sanitary appointments if you value your peace or have the least wish to succeed in private practice. If a man does his duty as Medical Officer of Health, he must make enemies of everybody, he must be continually intruding where he is not wanted, he must be putting people to expenses they can often very ill afford, and taking legal proceedings against his neighbours and those who would be his friends. He is a perfect Ishmael: his hand is against everybody, and too soon he finds that everybody's hand is against him.

When I was appointed Medical Officer of Health matters had been so arranged, at my suggestion, in enacting the public health ordinance, that I had no immediate share in taking out summonses or issuing orders. All that was done by the sanitary inspector, for whose work, however, I was generally responsible. Nevertheless, that did not save me from any of the odium of the proceedings, and I made many bitter enemies although I tried to do my duty in as conciliatory a manner as possible. It is impossible to satisfy the public; if one is stint, everybody cries out, and one gets blackguarded in the press as only colonial newspapers can blackguard a man. If one is lax, then the very same papers attack one for that. An order is made, say for making a drain or a gutter; the person on whom it is made never thinks of obeying it without first trying to get off the thing altogether, or, if that fails, getting a longer time to do it in. To accomplish these ends he either bullies or tries to coax and persuade. In either case, if the unfortunate official does not comply, he makes another enemy. I got so unpopular at last that I had to carry a revolver constantly.(a) This was partly owing to my having offended the coloured people, who were exceedingly bitter against me, and would certainly have killed me if they had dared.

Besides the trouble with outsiders, there is worse trouble with your Board of Health, especially if any of your professional *brethren* are members of it. Such affectionate brethren they are—so amiable, so kind, so ready to help! The Lord deliver us from ever being Medical Officer of Health again if there are any doctors on the Board of Health! I believe I never brought forward any scheme at the Board which was not opposed by the doctors, or so mutilated as to be useless. In this last epidemic of small-pox, when I brought forward a plan for the complete and rigorous isolation of the first cases, the medical members of the Board outvoted me, because they did not think it was "necessary"; they would trust to vaccination, etc.; and so the epidemic was allowed to march on unchecked. Unfortunately the Governor, who knew better, was a very good-natured man, with no more backbone than a jelly-fish, and gave way to them.

These are some of the trials a Medical Officer of Health has to undergo. No one can tell what it is until he has experience of the life. I threw it up at last in perfect disgust. I could get none of my measures carried, the epidemic was raging furiously, and at last I brought forward a string of resolu-

(a) To show the feeling, the Governor's private secretary, an exceedingly good fellow, said to me one day at Government House, "Come and have a cocktail, Bakewell, and I'll defy public opinion by walking down to the ice-house with you!" It became quite a joke after that to talk of "defying public opinion" by walking with me.

tions, comprising a series of measures for its repression in the country districts, and told the Board plainly that if they would not adopt those measures I would resign. They would not adopt them, and I did resign; whereat everybody was greatly astonished, such a step, on such grounds, being unheard of in a Crown colony. And then I was abused by the papers for resigning in the middle of an epidemic!

To show what difficulties beset a man, the whole time I was in office I was trying to get the water-supply of Port of Spain filtered, and nothing whatever was done; and yet the Government undertakes the water-supply.

My advice to anyone thinking of taking an appointment as Medical Officer of Health is—Don't!

I am, &c., Robt. H. Bakewell, M.D.,
Late Medical Officer of Health of the Colony of Trinidad.

THE POOR-LAW MEDICAL OFFICER.

Letter from Dr. William Dale.

[To the Editor of the Medical Times and Gazette.]

Sir,—On September 28 there was a letter in your journal on "The Public Health Act," which I am surprised none of your correspondents have noticed, for it contains a sweeping charge against certain members of the Profession. Permit me, therefore, though thus late, a word in reply. The writer, Mr. Bulteel, states, as his settled conviction, that "there are lots of flunkeys among them [*i.e.*, the members of the medical profession], as is proved by their willingness to accept such positions as they do in some cases under the Poor-law Board."

Leaving the rest of the letter, I confine myself to this statement respecting certain Poor-law Medical Officers. The flunkeyism of our poor *confrères*, it will be observed, consists, as I understand Mr. Bulteel, in their accepting *a low salary*—or, as he says elsewhere, "a miserable pittance," for their services under the Poor-law Board and certain boards of guardians.

But is the salary the chief object they propose to themselves? Is it not rather an introduction to practice through the offices they hold? And do not medical men obtain *hospital* appointments on the self-same ground? I invite Mr. Bulteel, then, to consider the force of his own logic, as it appears to me I fairly state it below:—

All medical men who accept offices without salary, or at a low salary, are flunkeys; some medical men connected with hospitals accept their offices without salary; *ergo*, some medical men connected with hospitals are flunkeys.

This argument (the *argumentum ad hominem*) may not always be *proper*, but it never can be more so than in the case before us, for surely our poorer brethren claim our sympathy, and do not deserve our censure.

I am, &c., William Dale, M.D. Lond.

Plymouth, October 14.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, October 15.

Mr. Hilton, F.R.C.S., in the Chair.

Dr. Peacock exhibited a specimen of Hydatid Cyst embedded in the Walls of the Heart. The heart was of very large size, and its surface was covered with a layer of lymph which was of some few days' duration. In the posterior wall of the heart there was a tumour, when recent the size of a small orange, which projected into both ventricles on each side of the septum. On the left side the walls of the cyst were very thin, and it was on the eve of bursting into the left ventricle, but no rupture had anywhere actually taken place. The cyst on being cut into was found to contain numerous hydatids varying from the size of peas to that of plover's eggs. The specimen was removed during the summer by Mr. Hacon, of Hackney, from a man, aged 38, who had formerly been in the colonies, and had undergone much hardship, but who had resided at home and apparently enjoyed good health for several years. He complained about a week before his death of dyspeptic symptoms, but did not appear to be at all seriously indisposed till, on the morning of July 8, he was attacked with shivering and sickness, followed by collapse, and he died the same evening. The body was carefully examined, but no hydatids were found in any other part.

Dr. Peacock also exhibited specimens of Moulded Coagula which had been expectorated by a gentleman, about 45 years of age, after having laboured under hæmoptysis for ten or twelve days. The coagula were of large size, and had apparently been moulded in one of the large bronchi and its branches. When recent they were of a whitish-yellow colour, but intermixed with dark coagulated blood; and, on microscopic examination, they consisted of a homogeneous material, composed of delicate fibrillæ and granular matter mixed with blood globules, exactly resembling the decolorised coagula often found in the cavities of the heart. They were thus very different from the bronchial casts expectorated in cases of plastic bronchitis. The masses were stated not to have been expectorated before the time the patient was seen by Dr. Peacock; and after their expulsion the hæmoptysis, which was up to that time very profuse, ceased.

Dr. Murchison asked if the liver was examined in the case where hydatids were found in the heart; Dr. Budd had a theory that this was always the case.

Dr. Peacock said none were found in the liver; he was quite sure Dr. Budd's theory was not correct.

Dr. Duffin remembered a case under Dr. Budd's own care, where they were only found in the heart. There were no very marked signs in the patient till death suddenly came on. Hydatids were found in the septum: the sac had burst, and one had choked the pulmonary.

Mr. George Lawson exhibited some Tumours from the Groin and Liver of a woman who came into Middlesex Hospital suffering from constant vomiting. She had been ill a fortnight, and during all that time had retained only a very little food. In her right groin was a small tumour, which was supposed to be an epiplocele, for the bowels had not been obstructed. This was cut down upon, and found to consist of what looked an enlarged gland, filled with blood in a clotted state. Not long after she died, apparently exhausted, when a clot was found on the surface of the liver, which had separated the peritoneum from the liver below it. This was situated between the right and left lobes. Other tumours were found in the substance of the liver itself. In other places there were other tumours, apparently melanotic, and patches were found in the lung. The various tumours contained spindle cells, and, as a warty kind of growth had been removed from the patient some time before, it was concluded that these were secondary cancerous growths containing blood and melanotic matter.

Dr. Hilton Fagge exhibited plates of the post-mortem appearances in one of two cases of Xanthelasma he had brought before the Society in 1868. One of these patients died in 1870, and a post-mortem examination was made. Two other post-mortems had since been made. The spots and patches which had been most marked in the patient when exhibited had wasted away, but those round the eyelids were still marked. On the mucous membrane of the larynx, too, were altered patches. The heart was flabby and fatty, and the endocardium and adjoining structures were altered in parts. In the aorta were some soft yellow patches. The liver was large and smooth, yet its texture resembled that of cirrhosis. The spleen was large and soft. There was ulceration of the large intestine, and its muscular coat was thickened. The growth in great part resembled atheroma, and some cells in it had undergone degeneration. It was plain the permanent jaundice did not arise from obstructed ducts only, though in some cases there might be obstruction.

Dr. Pye-Smith then narrated the case of another patient, the subject of xanthelasma. The patient was a woman aged 49. In the month of October she was taken with pain in her abdomen, and next day her skin was a dark orange hue and her urine dark, her fauces being pale. In November, she in the meantime having improved, the jaundice recurred, and she vomited some yellow matters. In April she had the same sharp pain and dark urine. Under the eyelids were patches of yellow matter scarcely raised above the surface. The liver was large and tender. About the same time Dr. Moxon had a somewhat similar case, which was found to be due to stricture of the bile-ducts. The patches increased in size, and there seemed to be a history of passing a gall-stone in the month of June. She came again in September, and died in a day or two. The liver was cirrhotic; the gall-bladder small. It contained a stone, and the cystic duct was obliterated. The common and all other ducts were dilated and xanthelasmic. The same yellow material was found in the spleen. He thought the xanthelasma merely the result of chronic jaundice, and not a sebaceous disease as Hebra had supposed.

Dr. Wilks exhibited the Supra-renal Capsules from a case of Addison's Disease, sent by Mr. Marshall, of Preston. The

patient was a young woman, who had been ill three years, suffering from *malaise*, discoloration, sickness, and vomiting; she died vomiting. The apex of one lung was found cretaceous. and the supra-renal capsules cheesy. He pointed out that this was only another illustration of the fact that Addison's disease depended on one particular change, and one change only. There might be other maladies of the capsules, and no discoloration or other symptoms result; but it did in this, which might be described broadly as an inflammatory change of a slow kind in the capsules.

Dr. Crisp showed specimens and microscopical drawings of the *Syngamus trachealis*, the double worm that produces the disease called the "gapes" in young chickens, pheasants, partridges, and some other birds. He said, although the worm was so common, yet neither its anatomy was well made out, nor was anything known respecting its transmutations. Many helminthologists had described it. Dr. Cobbold, one of the last, had figured it in his work on the entozoa, and had made some curious mistakes. The tail of the female is represented as tortuous; the head of the male small, without a cup-shaped disc. He describes six lobes around the mouth instead of ten, and figures the egg flattened at the ends with a full-formed embryo. These errors arose probably from the examination of the worms and eggs which had been preserved in spirits. One great peculiarity of this worm, irrespective of the permanent union of the male and female, was the enormous length of the oviducts and the multitude of the ova, facts that he (Dr. Crisp) had not seen mentioned before. Probably half a million of chickens were yearly killed by it in this country, besides pheasants and partridges, so that the prevention and destruction of this worm was a question of national importance.

Mr. Spencer Watson exhibited a specimen of Cystic Epithelium from the lower eyelid of a man 50 years of age. The microscopic structure showed a number of minute areolar spaces occupied by tubular processes of epithelium, probably proceeding from the hair follicles of the eyelashes.

Dr. Kelly showed a Fibro-cartilaginous Tumour of the Heart, removed from the body of a woman aged 40. She was dropsical, but the cause of the dropsy was not apparent; it came on suddenly. She was much swollen, and the heart's sounds were muffled. All organs were found after death to be congested. The pericardium contained thirty ounces of dark fluid. Growing from the heart, and most numerous at its base, were a number of growths, smooth and glistening. These were only found on the outer surface of the heart, none elsewhere. They contained a good deal of hyaline cartilage with fibrous stroma, some parts being calcareous. He thought the specimen unique.

Dr. Wilks said there was a fibro-osseous tumour in Guy's museum.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, October 19, 1872.

Henry Letheby, M.B., M.A., President, in the Chair.

The minutes of the last meeting having been read by Dr. Vinen, one of the Hon. Secretaries, and confirmed,

Dr. Letheby made a few preliminary observations on the death of the late treasurer, and having referred to the notice of that event contained in the *Medical Times and Gazette*, August 3, expressed his deep sympathy with the widow and family of the late Dr. Aldis.

A letter was read from Miss Toulmin Smith, Hon. Secretary to the National Health Society, asking the co-operation of the Association with the objects of the former body. A letter was also read from Dr. Dunderdale, Medical Officer of Health for the Borough of Warrington, seeking admission as a member.

Dr. Tripe proposed the first resolution, which was seconded by Dr. Ballard—"That no President of the Association shall hold that office for a longer period than two years, nor be eligible for re-election until the lapse of one year after he has filled that office; and to alter any by-law to the contrary." The resolution was carried by 6 votes to 5.

Mr. Liddle proposed, and Mr. Burge seconded, a vote of condolence to Mrs. Aldis. Carried *nem. con.*

Dr. Letheby commenced his address "On the Sanitary Legislation of 1872" by reminding his hearers that last year an Act was passed, called the Local Government Act, 1871, for constituting a Local Government Board and vesting therein certain functions of the Secretary of State and Privy Council concerning the public health and local government, together with the power and duties of the Poor-law Board. The powers of the Board relate to the duties originally performed by Poor-law Boards, and to certain acts or functions of her Majesty's principal Secretaries of State, and of her Majesty's Privy Council. Foremost, therefore, of the sanitary labours of the last session was the Public Health Bill of Mr. Stansfeld. The declared object of the Bill was to amend the law relating to public health. Originally the Bill took cognisance of a great number of more or less important sanitary matters—the closing of foul pumps and wells, the closing of buildings unfit for human habitation, etc. All these were in addition to the main objects of the Bill—namely, the division of England into sanitary districts, and the appointment of sanitary authorities. When the Bill left Committee its clauses were reduced to fifty-three, and even in this condition, if it had not been for the loyal assistance of the political opponents of the Government, who could hardly join issue on the main principles of the Bill, it might have been lost. As it now stands, the "Public Health Act, 1872," provides for the division of England into sanitary districts, named respectively "urban sanitary districts" and "rural sanitary districts," both of which are subject to the jurisdiction of well-defined sanitary authorities, urban and rural. Urban sanitary districts are threefold—First, boroughs in which the mayor, aldermen, and burgesses, acting by the Council, are the sanitary authority; secondly, Improvement Act districts, having no part of their area within a borough or local government district, of which the Improvement Commissioners are the sanitary authority; and thirdly, local government districts, having no part of their area within a borough or Improvement Act district, of which the local board is the sanitary authority. The metropolis is excluded from the Act, as it is already divided into sanitary districts. Rural sanitary districts are the several rural unions not coincident with an urban sanitary district, nor wholly included in an urban sanitary district, and the guardians of the union are with certain exceptions the rural sanitary authorities. As regards the powers and duties of these authorities, it is declared that urban sanitary authorities shall possess and exercise, to the exclusion of any other authority, all powers, rights, etc., exercisable by a local board under the Local Government Act, and by a sewer authority under the Sewage Utilisation Acts, and so with regard to various other Acts of Parliament. The 10th section of the Act provides that it be compulsory on all sanitary authorities to appoint a Medical Officer of Health; but in the case of the rural sanitary authority the appointment is only for a period of five years after the passing of the Act. Subject to the approval of the Local Government Board, the same person may be appointed the Medical Officer of Health or the Inspector of Nuisances for two or more sanitary districts, and, with the like approval, any District Medical Officer of a union may be appointed a Medical Officer of Health. It is worthy of note that the Local Government Board have the same power in respect of the qualifications, appointment, duties, salary, and tenure of office of Health Officer or other officer of a sanitary authority, any portion of whose salary is paid out of moneys voted by Parliament, as they have in the case of a District Medical Officer of a union. He need hardly say that the trust thus reposed in the Profession demanded the most anxious consideration as to the manner in which it should be fulfilled; for, although the Act directed that the Medical Officer of Health should be a legally qualified practitioner, yet it was obvious that the duties of the office required something more than the mere knowledge of routine medical practice. He quoted from a pamphlet by Dr. Rumsey and a speech by Mr. G. W. Hastings, showing the varied duties of the Medical Officer, the necessity of an acquaintance with divers subjects besides Medicine, and the importance that such an officer should devote his whole time to public duties. He was of opinion that the Medical Officer should be free from the conflicting interests of private practice, for it might happen that the worst tenements in any neighbourhood might be the property of the Medical Officer's best patient. Too often, also, the owners of unwholesome tenements force themselves into the Local Board for no other purpose than to protect their own interests. Fault had been found with the Act because it gave enormous powers to the Local Government Board, without providing any intermediate authority between it and the Local Sanitary Boards. Not the least arbitrary part of the authority given to the Board was the right to send Inspectors to the meetings of sanitary authorities. Last year there were no port sanitary authorities for the execution of the Orders in Council for the Port of London; these orders were issued to the thirteen nuisance authorities whose jurisdictions abutted upon the river. It was obvious

that, unless the nuisance authority whose jurisdiction was first on the line of entrance—say Gravesend—took upon itself the whole duty, the Orders of Council could not be executed, and the whole Port would be in danger of choleraic invasion. Dr. Buchanan, the chief medical inspector of the Local Government Board, called these and other authorities together in view of the impending danger, and they held their first meeting on August 26, last year. They resolved on the necessity of joint action in following the Orders of Council, and made application to Government for the use of a ship as a hospital. The Mayor of Gravesend took it upon him, on behalf of his Local Board, to inspect every suspicious vessel. From the first, however, the Committee recognised the legal difficulties of their position, there being no law to justify conjoint action. The result was two clauses in the Public Health Act, creating a Port Sanitary Authority. When the Bill left Committee, the duties, rights, powers, etc., of the Port Sanitary Authority were extended to the whole of the Sanitary Acts, twenty-six in number, named in the Bill. "A port" was defined in the Act to mean "a port as established for the purposes of the laws relating to the Customs of the United Kingdom." He had been at some pains to ascertain what were the limits of the Port of London according to this definition. He had found that it was an almost impossible sanitary district. He would avoid discussion of the herculean labours which the Inspectors of Nuisances and the Medical Officers of Health would have to perform. Some notion might be got from the fact that within the jurisdiction of the City Commissioners of Sewers the number of vessels hitherto annually inspected by the Sanitary Inspector of Shipping was 2000, out of 40,000 or 50,000 entered and cleared by the Customs. Another effort of legislation during the year was an Act to amend the Law for the Prevention of Adulteration of Food and Drink and of Drugs. Its object was to amend the Act of 1860, which was a dead letter, for the adoption of it by the local authorities was optional. Referring to all previous legislation on the subject of adulteration, he said the analyses made under existing powers were ridiculously few, being only fifty-seven in twelve years. Then came the question, What was adulteration? It was necessary it should be accurately defined. In the case of drugs—valueless and useless, if not positively injurious drugs, divested of all their original virtues through having undergone decay, or never having possessed any active principles through having been produced in an unfavourable climate, or such principles having been fraudulently abstracted, might not have been subjected to any process of adulteration, and yet be vended as a fraud upon the public. It was observable that the penalties under the new Act were greatly enlarged, especially in the case of the adulteration of intoxicating liquors. The Adulteration of Seeds Act (1869) was a good move in the direction of treating worthless and perished seeds in the light of adulterated articles, and subjecting the sellers of them to the like penalties. In conclusion, the President said we required further consolidation of the law, especially in sanitary work. The Metropolis Water Act (1871) was a move in the right direction; but legislation on these subjects was as yet too fragmentary and disjointed to be effectual and such as the sanitary interests of a thickly-populated country like our own imperatively demanded.

Mr. Liddle, in moving a vote of thanks to the President for his interesting and practical address, referred to the Protection of Life Bill as a very important piece of legislation of the last session of Parliament. He rather severely criticised the appointment of legal men by the Local Government Board as inspectors under the Sanitary Act, and feared their want of practical knowledge to deal efficiently with the subject. He particularly wished to ascertain whether the penalties for adulterating drink under the Adulteration of Food, Drink, and Drugs Act could be enforced against publicans.

Dr. Tripe, in seconding the vote of thanks, expressed a doubt whether Medical Officers of Health should undertake the duties of analysts. To say nothing of the time they would have to devote to analysation, it would rarely happen that they would possess a sufficient laboratory, nor would they be competent, as analytical chemists, in the majority of instances, for the discharge of such duties.

Dr. Stevenson remarked that Officers of Health would, if they undertook such duties, require one or more analysing assistants.

Dr. Hardwick said that would also involve an extra salary for such assistants, and the question was whether the Boards would be prepared to act liberally in this respect. Almost all Medical Officers of Health, having private practice to attend to, could, at the best, only supervise and endorse the analyses made by their assistants, and must, therefore, engage the services of competent persons at a considerable outlay.

The President then invited any visitor present to address the Association, and introduced Lord Eustace Cecil to the meeting.

Lord Eustace Cecil, after acknowledging the practical suggestions made by previous speakers, gave a short history of the Act of last session for preventing the adulteration of food, etc., and explained the difficulties he had to contend with in shaping the present Act, and the struggle encountered by its supporters in their efforts to make it compulsory. His lordship amusingly related how that, being privately informed that unless he withdrew his amendments, which had been agreed to in Committee, the Government would defeat the Bill altogether on the third reading, he for once in his life resorted to strategem. He accepted the intimation and withdrew the amendments, and the Bill passed the third reading in its original state. He then arranged with his brother, the Marquis of Salisbury, to reintroduce the whole of the amendments in the House of Lords, where they were passed; and thus the Bill reappeared in the Commons, where at 2.30 a.m., in a House of scarcely more than half a dozen members, at almost the close of the session, the identical amendments were agreed to without scrutiny, and thus the Government opposition was defeated. Lord Eustace concluded an interesting speech by saying that, as the Pharmacy Act was incorporated in the Bill, and all the clauses had been drawn by eminent lawyers, he still had confidence in its practical working; but, if magistrates and courts of law felt any difficulty in construing its provisions or applying its definitions and enforcing the penalties, he pledged himself to renewed exertion for the future to effect the object which it was his endeavour to attain in the past.

Dr. Dudfield warned Medical Officers of Health not to place themselves in a false position. They were not necessarily appointed food analysts. To discharge such duties efficiently, £600 or £700 a year would be required; for no medical officer in practice could be properly remunerated with less, and such a stipend was not likely to be offered. He added that he thought the moral stigma attaching to a tradesman who was known to have sold adulterated articles would be equally effectual, even though he might not be legally convicted under the Act.

The President thought Medical Officers of Health should not slfirk the duty of analysts, and that £200 a year should be the amount to which all medical officers should be entitled for such additional services.

The discussion was then adjourned to the next special meeting.

OBITUARY.

ALEXANDER R. DUGUID, M.D., L.R.C.S. Edin.,

Died a few days since at Kirkwall, where he had resided for fifty-three years. His early education was obtained at the manse of Eire and Rendall, of which parishes his father was minister. At 14 years of age he went to Marischal College, where he met among others the late Mr. Thomson, the munificent proprietor of Banchory; Dr. Watson Wemyss, now at St. Andrews; and Professor Jamieson, of South America. From Aberdeen he went to Edinburgh University for the study of Medicine. After graduating, at the age of 21, he settled at Kirkwall. He was an accomplished botanist and zoologist. In 1831 Dr. Duguid married Miss M'Kenzie, of Groundwater Orphir, and by her he had nine children, five of whom survive. His wife died in 1845. He was Medical Officer of Balfour Hospital, and contributor of an article on "Ileus" to the *Edinburgh Medical Journal*, 1829.

JOHN GARDNER, F.R.C.S.,

Died at Cheltenham on the 15th instant, at the age of 82. He commenced his professional life as Assistant-Surgeon in the Grenadier Guards, and was with them at Waterloo. He was admitted a Member of the Royal College of Surgeons in May, 1812, and elected Fellow in 1844. On leaving the army he practised at Marlborough, and on his retirement resided at Cheltenham. He took great interest in the foundation of Marlborough College, of which institution he was the first medical attendant, and retired with the thanks and a handsome gift of plate from the Council. He maintained a high professional character, and was much beloved by his friends and patients.

JOHN NOBLE AGNEW, M.D.,

Died suddenly on August 15, at Toronto, aged 40. He was born in Edinburgh, and went to Canada when 2 years of age with his parents. He commenced practice in the township of Pickering, but after two years removed to Toronto, where he carried on an extensive practice. He was elected on two successive occasions to represent the county of York, including Toronto, in the Medical Council of Ontario, where he took an important part in all deliberations. He was appointed lecturer in Victoria Medical School in 1870, and was much respected by the Profession and a large circle of friends.

NEW INVENTIONS.

THE MAREZZO MARBLE COMPANY (LIMITED).

The Parian cement which has been used in so many places at great cost as a lining to hospital walls—as, for example, at Leeds, Birmingham, Belfast, Oxford, Guildford, and at the Herbert Hospital at Woolwich—appears to have found a successful rival in the material furnished by the Marezzo Marble Company. A harder surface, less liability to discoloration, and greater resistance to damp, are the advantages claimed on behalf of the newer material, while the price is said to be about the same—namely, at present 1s. 6d. to 2s. per square foot for highly polished work. But on a nearer inquiry the difference between the materials proves not to be very great, and the important point of hardness of surface is seen to depend chiefly on the enamel or varnish used by the new Company, and their treatment of the surface.

Keen's cement and Parian cement are both manufactured almost exclusively by a single London firm, although the patents for both have expired. The basis of the former is sulphate of lime, that of the latter borax. The possession of some secrets of the workshop enables the firm referred to to distance all competition in both these substances. Now, the basis of Marezzo marble is Keen's cement; and it is alleged that certain secrets as to the treatment of Keen's cement and the enamelling of it are the basis of the Marezzo Marble Company. That this material is capable of various applications is shown by the extent of the demand for it in America, where it is used for making an artificial stone, besides its ordinary purposes. The process of imitating the veins of marble by means of skeins of silk saturated with the colours required is very ingenious and successful. Flat slabs, up to the size of fifteen feet long by five feet wide, are made on large sheets of plate-glass; objects with curved surfaces are made in moulds and finished by hand. But the drawback that attaches to this as well as to Parian cement is that neither will resist water unless it is coated with an impervious enamel. With this addition, the Company are so confident of the powers of resistance developed in the material by their treatment, that they make table-tops—such as those used in restaurants—of it. It would seem that considerable care in handling such articles of furniture is required, inasmuch as a small piece chipped out of the surface, so as to admit water to the body of the slab, would have disastrous results. The Company have also made baths of Marezzo marble, of which Mr. Jennings, of Lambeth, has taken the whole supply; but at present it has not been possible to make them resist the sudden action of boiling water. The varnish or enamel, expanding at a different rate from the body of the material, is cracked, and admits water, the effect of which is fatal to the bath. No doubt in time this difficulty will be got over. For the walls of rooms, and for every use to which Parian cement has been put, the material offers considerable advantages. It can be made to imitate marble of any colour, and can be painted on in any way. Figures, floral designs, etc., can thus be introduced in a room coated with an impervious lining; and this plan has already been adopted in some cases for billiard and other saloons. Marezzo marble is even being used for fountains. It seems likely to be employed largely by those architects who do not eschew the representation of natural substances by fictitious materials.

Deaths from Snake-bites.—During the three years ending 1869 there were killed by snakes—in Madras 760, in Bombay (exclusive of Scinde) 588, in Bengal 14,787, in the North-Western Provinces 2474, in the Punjaub 1064, in Oude 3782, in the Central Provinces 1961, in Hyderabad 226, and in British Burmah 22, making a terrible total of 25,664. During the same period there were killed by wild beasts 12,554.

MEDICAL NEWS.

Royal College of Physicians of London.—The following gentlemen were duly admitted Licentiates of the College on October 18:—

Bacot, W. G., Blandford.
Brown, J. L. O., Richmond House, St. George's-road, Southwark.
Charlesworth, J., Hanley.
Clapham, W. C. S., 4, Powis-place, Great Ormond-street.
Elliot, N. B., Denmark-hill, Camberwell.
Finzi, J. M., 105, Gower-street.
Hands, A., Inkberrow, Redditch.
Lineker, E. H., Widnes, Warrington.
Lubbock, M., Guy's Hospital.
Parker, G. W., 1, Selby-villas, New Cross-road.
Pellereau, G. E., 40, Bedford-place, Russell-square.
Sheppard, T. W., 8, Oxford-gardens, Notting-hill.
Stern, M., 8, Maddox-street.
Wood, R., Bromsgrove.

The following gentleman, having passed in Medicine and Midwifery, will receive the College Licence on his obtaining a qualification in Surgery recognised by this College:—

Bedford, Robert, 201, Euston-road.

Royal College of Surgeons of England.—At a meeting of the Council of the Royal College of Surgeons of England, held on Thursday, the 17th instant, the following gentlemen were admitted to the Fellowship, having been elected at previous meetings of the Council, viz.:—

Cumming, Arthur James, of Southernhay, Exeter, diploma of Membership dated April 1, 1842.
Stacy, John Edward, of Epsom, diploma dated January 7, 1820.
Thom, William, of her Majesty's Indian Army, diploma dated November 1, 1839.
Welsh, Francis Fawcett, of Saffron Walden, diploma dated May 25, 1840.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday October 17, 1872:—

Brodribb, Francis Benjamin, Well-street, Hackney.
Fletcher, George, Bromsgrove, Worcestershire.
Humphreys, Henry, Amhurst-road, Hackney.

As an Assistant in Compounding and Dispensing Medicines:—

Davies, Peter Hughes, March, Cambridgeshire.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bridgwater, Thomas, M.R.C.S., L.S.A., M.B. Lond.—Medical Officer for the Harrow District of Hendon Union.

Goodsall, David H., F.R.C.S.E., L.R.C.P., L.M.—Surgeon to the Metropolitan Free Hospital, Devonshire-square, City, *vice* H. T. Butlin, F.R.C.S.E., L.R.C.P., resigned.

Harper, Charles, M.R.C.S.E., L.R.C.P. Edin.—Medical Officer for the Batheaston District of Bath Union.

Loftus, Thomas R. E., M.B., C.M., L.M. Edin.—Assistant Colonial Surgeon in the Medical Service of the Government of Ceylon.

Oglesby, Robt. P., M.R.C.S. Eng.—Honorary Ophthalmic and Aural Surgeon to the Leeds General Infirmary.

Patchett, Henry, L.R.C.S.E., L.R.C.P.E.—Medical Officer for the Billington District of Blackburn Union.

Walker, Thomas Osborne, M.R.C.S., L.S.A.—Medical Officer, etc., for the Crick District of Rugby Union.

Woods, Oscar T., M.B. Dub., L.R.C.S.I., late Clinical Clerk West Riding Asylum—Assistant Medical Officer to the Warwick County Asylum, *vice* J. B. Ward, appointed Superintendent of the Warneford Asylum.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—Dr. Donald MacIver, Assistant-Surgeon to the *Topaze*; Dr. William Garde, Assistant-Surgeon to the *Myrmidon*.

War Office, Medical Department.—Deputy Inspector-General of Hospitals T. Longmore, C.B., to be Inspector-General of Hospitals; Deputy Inspector-General of Hospitals R. J. O'Flaherty, C.B., to be Inspector-General of Hospitals, *vice* J. Paynter, who retires upon half-pay; Surgeon-Major E. Gilborne, from the Royal Artillery, to be Deputy Inspector-General of Hospitals, *vice* R. J. O'Flaherty, C.B., promoted; Assistant-Surgeon C. Mackinnon, from the 20th Hussars, to be Staff Surgeon, *vice* S. Alder, appointed to the 23rd Foot; Assistant-Surgeon A. O. Applin, from the Royal Artillery, to be Staff Surgeon, *vice* A. D. Gulland, M.D., appointed to the Royal Artillery; Assistant-Surgeon R. A. P. Grant, from the 43rd Foot, to be Staff Assistant-Surgeon, *vice* R. Turner, M.D., who exchanges; Assistant-Surgeon N. Wade, from the 78th Foot, to be Staff Assistant-Surgeon, *vice* W. Johnson, M.D., who exchanges; Staff Assistant-Surgeon H. E. Maunsell, M.B., resigns his commission; Staff Surgeon-Major J. K. Carr has been appointed to succeed Dr. Hogg, Royal Artillery, as Surgeon to the Garrison Female Hospital for Soldiers' Wives and Children at Woolwich.

Brevet.—Surgeon-Major E. S. Protheroe, Royal Artillery, who retires upon half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

BIRTHS.

CAMPBELL.—On October 10, at 40, Wellington-square, Hastings, the wife of W. Campbell, L.R.C.S. Edin., L.S.A., of a son.

DRAPER.—On October 14, at 25, Petergate, York, the wife of W. Draper, M.R.C.S., of a daughter.

EVANS.—On October 14, at Cheshunt, Herts, the wife of Nicholl Evans, M.D., of a son.

HOLMAN.—On October 16, at Reigate, the wife of C. Holman, M.D., of a son.

OLOUIN.—On October 15, the wife of J. Olguin, M.R.C.S.E., of 11, Hinde-street, W., and Rosario, South America, of a daughter.

WRIGHT.—On September 22, at Fort Buxar, Shahabad, Behar, Bengal, the wife of Staff Assistant-Surgeon R. Temple Wright, M.D., F.R.C.S. Eng., of a son.

MARRIAGES.

BINGHAM—ROBINSON.—On October 17, at Holy Trinity, Margate, John J. Bingham, L.R.C.P., M.R.C.S., of Alfreton, Derbyshire, to Kate Laura, only daughter of John Robinson, Esq., Ethelbert House, Margate.

CARMICHAEL—TOMLINSON.—On October 17, at St. Mark's Church, Winshill, Burton-on-Trent, William Carmichael, M.D., Surgeon Royal Navy, son of the late A. N. Carmichael, Edinburgh Academy, to Sophia Myrtilla, youngest daughter of R. S. Tomlinson, Esq., J.P., The Woodlands, Burton-on-Trent.

COCKBURN—RADCLIFFE.—On October 17, at St. Stephen's Church, Paddington, Robert Adolphus, only son of Surgeon-Major R. Cockburn, of the Bengal Medical Service, to Mabel Rose, third daughter of the late Captain Charles Wilbraham Radcliffe, of the 7th Bengal Cavalry.

ELLIOTT—HALL.—On October 16, at St. Mark's, Kennington, Alfred, younger son of T. T. Elliott, Esq., Estopher House, March, to Mary, elder daughter of the late T. Hall, F.R.C.S., of Long Sutton, and granddaughter of the late Rev. John Edsall, M.A., Woodbury, Devonshire.

NOURSE—BUDD.—On October 17, at the parish church, Clifton, Arthur Herbert Nourse, 2nd Queen's Royal Regiment, to Catherine, third daughter of William Budd, M.D., F.R.S., of the Manor House, Clifton, near Bristol.

WHELER—CASH.—On October 16, John Mordaunt Wheler, Esq., youngest son of the late Rev. Henry Trevor Wheler, of Berkley, Frome, to Caroline Martha Ann Cash, only daughter of J. Cash, L.R.C.P. Edin., M.R.C.S. Eng., of Matlock, Derbyshire.

DEATHS.

BODINGTON, WILLIAM, F.R.C.S., at Kenilworth, on October 17, aged 82.

COURTENAYE, EDWARD D'ARCY, B.A., M.R.C.S., at East Templeton, Province of Quebec, Canada, after a short illness, in the month of August last.

GARDNER, JOHN, F.R.C.S., Assistant-Surgeon in the Grenadier Guards at Waterloo, and afterwards of Marlborough, Wilts, at 13, Priory-street, Cheltenham, on October 15, aged 82.

HUNTER, MARY ANN, widow of the late George Yeates Hunter, F.R.C.S., of Margate, at George-street, Portman-square, on October 21, in her 67th year.

KING, SARAH, wife of Alfred King, M.B., M.R.C.S., after a short illness, at Balham, on October 18.

LESLIE, DAVID, M.D., of 140, Kensington Park-road, late of Kiltyhegs, county Monaghan, on October 19, aged 63.

LISTER, ELLEN JANE, wife of Edward Lister, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., of Haydock Lodge, near Newton-le-Willows, Lancashire, at Newton-le-Willows, on October 23, in her 40th year.

MCKENZIE, DR. JOHN M., formerly of the H.E.I.C.'s Service, eldest son of the late George McKenzie, Esq., of Dingwall, at Dingwall, N.B., on October 9.

WELWITSCH, FREDERICK, M.D., F.L.S., F.S. Zool. Bot. Vindobonensis, at 15, Fitzroy-street, Fitzroy-square, W., on October 20, aged 65.

WESTCOTT, ELIZA, younger daughter of the late Peter Westcott, surgeon, of Oundle, at Martock, Somerset, very suddenly, on July 25; and at the same place, on September 19, Ellis, eldest son of the same Peter Westcott, aged 37.

WILLIAMS, ANNE, relict of the late David Williams, M.D., of Cheltenham, on October 15, aged 71.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM HOSPITAL FOR WOMEN.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

COVENTRY AND WARWICKSHIRE HOSPITAL.—Dispenser. Applications, with testimonials, including age, etc., to the Secretary, Coventry, on or before October 31.

DISTRICT LUNATIC ASYLUM, DOWNPATRICK.—Assistant to the Resident Medical Superintendent. Candidates must be qualified as Physician and Surgeon, and hold a diploma in Midwifery. Applications, stating age, with copies of testimonials, to the Resident Medical Superintendent, on or before November 1.

DONCASTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Honorary Secretary.

HASTINGS UNION.—Medical Officer. Applications, with testimonials of recent date and evidence of qualification and registration under the Medical Act, 1858, are to be forwarded to the Guardians at the Board-room, before October 31.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART.—Consulting and Junior Physician. Applications to W. F. Portlock-Dodson, Honorary Secretary.

NEWCASTLE-ON-TYNE BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Applications, with testimonials, to the Clerk to the Committee of Visitors, at the Asylum, on or before October 29.

PORTSEA ISLAND UNION.—Medical Officers for the Southsea and Landport Districts. Candidates must possess qualifications approved by the Local Government Board. Candidates to attend, with testimonials, at a meeting of the Dispensary Committee to be held at the Clerk's Office at 3 p.m. on Friday, November 8.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Assistant House-Surgeon. Candidates must be Members of one of the Colleges of Surgeons of the United Kingdom, and also Licentiates of the Apothecaries' Hall of London, or graduates in Medicine of any University in England, Scotland, or Ireland. Applications, with testimonials, to Dr. J. C. Hall, Honorary Secretary, on or before November 9.

SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL, CORK.—Resident Surgeon and Apothecary. Candidates must be Licentiates of the Apothecaries' Hall, Dublin, and hold a diploma in Surgery from the Royal College of Surgeons of England or Ireland, or from an Irish University. Applications, with testimonials, to the Trustees of the South Charitable Infirmary and County Hospital, Cork, on or before November 8.

UCKFIELD UNION.—District Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to H. Jones, Clerk to the Guardians, on or before October 31.

UNIVERSITY COLLEGE HOSPITAL.—Assistant-Physician; Assistant-Surgeon; Assistant Medical Officer for the Skin Department. Applications for any of these appointments must be addressed to John Robson, B.A., Secretary to the Council, on or before October 31.

WARNEFORD, LEAMINGTON, AND SOUTH WARWICKSHIRE HOSPITAL.—Surgeon. Candidates must be M.R.C.S. of London, Edinburgh, or Dublin, Licentiates of Apothecaries' Company or the College of Physicians of London. Applications, with testimonials, to the Secretary, on or before October 29.

UNION AND PAROCHIAL MEDICAL SERVICE

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Kington Union.—Mr. J. Morgaus has resigned the Huntington District; area 14,571; population 1601; salary £35 per annum.

Walsall Union.—The Stafford-street District is vacant; area 2190; population 17,216; salary £80 per annum.

APPOINTMENTS.

Alderbury Union.—James H. Gordon, M.D. and C.M. Univ. Glasg., to the Third District.

Bridgwater Union.—Wm. Antey, M.R.C.S. Eng., L.S.A., to the Middlezoy District.

Huddersfield Union.—George W. Rhodes, M.R.C.S. Eng., L.S.A., to the new Workhouse.

Lambeth Parish.—Robert H. Lloyd, L.R.C.S.E., L.S.A., Resident Assistant at the Workhouse.

Louth Union.—Wm. McBeath, M.D., M.C. Queen's Univ. Dub., to the Withern District.

Toxteth Park Township.—Sidney H. Carter, L.R.C.S. Edin., M.B. Trin. Coll. Dub., Assistant Medical Officer at the Workhouse.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—An abstract of the unconfirmed minutes of the quarterly meeting of the Council, which was held on Thursday, the 17th inst., has been suspended in the hall of that institution, of which the following is a summary. The minutes of the ordinary Council on August 8 last were read and confirmed. Mr. John Edward Stacy, Mr. Wm. Thom, Mr. F. F. Welsh, and Mr. A. J. Cumming—elected at previous meetings—were admitted Fellows. It was reported that five candidates were admitted to examination for the diploma in dental surgery in June last, and that they all passed. Reports from the Museum, Library, General Purposes, and Audit Committees were read, approved, and confirmed. The report of the Committee on the 5th section of the Charter of 1852, relating to the election of members of twenty years' standing to the Fellowship of the College, was adopted, and is as follows:—"Your Committee, appointed on March 26 last, 'to consider and report to the Council on the conditions upon which members of twenty years' standing should be elected to the Fellowship under section 5 of the Charter of 1852,' having considered the subject, have adopted the following report thereon, viz.:—Your Committee are of opinion that, looking to the difficulties by which the subject is surrounded, which have been considered in detail by your Committee, it is inexpedient that the Council should exercise the power vested in them by section 5 of the Charter of 1852." A letter of the 9th ultimo was read, from Dr. H. A. Gordon, calling the attention of the Council, in reference to his previous communication of January 29 last, to the circular of this year of the Dalhousie College and University, Halifax, Nova Scotia, in which it is laid down that the matriculation examination of that institution shall be conducted by two examiners in Arts instead of by one such examiner as heretofore, and be passed in all cases before the commencement of medical study, and inquiring whether the change will meet the requirements of this College, and whether the tickets and certificates of that institution will be recognised by the Council. The previous correspondence, minutes, and resolutions of the Council and Court of Examiners relating to the case were read, and it was resolved—"That Dr. Gordon be informed that the Matriculation Examina-

tion of the Dalhousie College and University will be recognised by this College, provided the same shall from time to time include the several subjects of examination required by the Regulations of this College; and that attendance on the several courses of lectures at Dalhousie College and University will also be recognised, and that the degree of Doctor of Medicine of that institution will entitle its holder to admission to the professional examinations for the diploma of Member on the conditions specified in par. ix., sect. iii. of the Regulations." A letter of the 3rd inst. was read from Mr. George Busk, stating, with reference to the resolution of the Council at its last meeting, that he is desirous of being relieved of his duties as a member of the Court of Examiners; it was resolved that Mr. Busk's resignation be accepted. The President appointed Thursday, the 31st inst., for the meeting of the special Council to elect a successor to Mr. Busk on the Court of Examiners. It was moved by Sir Wm. Fergusson, Bart., seconded by Mr. South, and unanimously resolved—"That the President be requested to convey to the family of the late Mr. Frederic Carpenter Skey, C.B., the sincere condolence of the Council in the great loss they have recently sustained by his lamented death."

Registration of Medical Students.—The annual October return of medical students registering at the Royal College of Surgeons of England has just been completed and forwarded to Mr. Charles Hawkins, F.R.C.S., the Government Inspector of Metropolitan Schools of Anatomy. The following represents the number of students attending at each of the several recognised metropolitan hospitals, viz.:—

Guy's Hospital . . .		319,	including	83	fresh entries.
University College Hospital		273	,,	83	,,
St. Bartholomew's	,,	254	,,	79	,,
St. Thomas's	,,	156	,,	51	,,
King's College	,,	120	,,	35	,,
St. George's	,,	108	,,	47	,,
Loudon	,,	91	,,	31	,,
St. Mary's	,,	61	,,	21	,,
Charing-cross	,,	48	,,	20	,,
Middlesex	,,	47	,,	22	,,
Westminster	,,	19	,,	4	,,
		1496		476	

From the above we find that there is an increase of twenty-one in the total number, and of eight in the new entries over the number registered last year. It will no doubt be interesting to some of our readers to trace the fluctuation in the registrations during the last ten years; the subjoined table will enable them to do so:—

1020	students	registered in	1863
995	,,	,,	1864
1013	,,	,,	1865
1027	,,	,,	1866
1125	,,	,,	1867
1194	,,	,,	1868
1241	,,	,,	1869
1298	,,	,,	1870
1475	,,	,,	1871
1496	,,	,,	1872

As the returns from all the provincial hospitals have not as yet been received, it would be premature to speculate as to the result of the registration in the provinces.

A new mortuary and disinfecting oven are to be erected at Shoreditch.

The Town Council of Warrington has determined to erect a public mortuary in the borough.

The number of deaths that occurred in London last week was 1369, which is ninety-two below the average.

The Islington Guardians have appointed Mr. S. T. C. Gardner Medical Officer of the St. Peter's district, at a salary of £120 a year.

Ophthalmia has broken out so badly amongst the boys on board the training-ship *Goliath* as to necessitate the removal of them to hospital for medical treatment.

Miss Southwell, of Grantham, last week laid the memorial stone of the North Cambridgeshire Cottage Hospital, at Wisbeach. Miss Southwell intends to defray the entire cost of the institution, about £7000.

The Sunderland Board of Guardians have increased the salary of Dr. Foote, Medical Officer to the Workhouse, from £120 to £200 per annum, and voted a gratuity of £100 to Dr. Evans, Medical Officer for Sunderland, for extra services during the fever epidemic.

The new infirmary in West Union-street, Oldham, has been opened. The building is three storeys high, and the wards will accommodate twelve patients in each. The cost of the building will be about £7000.

At the Small-pox Hospital at Homerton, 31 patients were under treatment during the past fortnight. At Stockwell, during the same period, 18 patients suffering from small-pox had been received; 2 died, and 12 were discharged, leaving 38 at present under treatment.

Dr. R. V. Fletcher has been presented with a silver salver and other substantial tokens of esteem by the attendants at the Downpatrick District Lunatic Asylum on his leaving to take charge of the Waterford District Lunatic Asylum as Resident Medical Superintendent.

Mr. Thomas Land, late Medical Officer of the Leeds Union Workhouse and the Industrial Schools, having resigned those offices on account of failing health, after a service of twelve years, has been granted a superannuation allowance of £50 per annum.

Dr. J. St. Clair Gray, late Assistant-Professor of Medical Jurisprudence in the University of Glasgow, will during the ensuing winter deliver a course of about fifty lectures on "Forensic Medicine," especially adapted for members of the legal profession, in the Faculty Hall, St. George's Hall, Glasgow.

The foundation-stone of a new building for the Pembrokeshire Infirmary, Haverfordwest, was laid on Thursday, the 17th inst., by Mrs. Scourfield, of Williamston, in the presence of the Bishop of the Diocese, Mr. Scourfield, M.P., the President of the institution, the members of the Corporation, the clergymen and ministers of all denominations, and a great number of the gentry and inhabitants.

The preliminary meeting for the formation of the proposed Medical Microscopical Society will be held in the College Hall, St. Bartholomew's Hospital, on Friday, November 1, at 7 p.m. precisely. Mr. W. Morrant Baker, F.R.C.S., Warden of the College, has kindly consented to take the chair. All qualified medical gentlemen and registered students interested in the movement are invited to attend.

King's College Medical Society.—The annual inaugural meeting of this Society was held on Thursday, October 17, when the opening address was delivered by W. B. Whitmore, Esq., M.B., the speaker specially treating of the Relation of Science to Medicine. There was an unusually large attendance, including Dr. Barry, Principal of King's College, R. Cheere, Esq., member of the Council, and several of the professors and staff.

Glasgow Southern Medical Society.—At the twenty-ninth annual meeting of this Society, held on the 3rd inst., the following gentlemen were elected office-bearers for the session 1872-73:—*President:* R. W. Forrest, M.D. *Vice-President:* James Dunlop, M.D. *Treasurer:* Edward McMillan, Esq., Surgeon. *Secretary:* John Dougall, M.D. *Seal-keeper:* E. Duncan, M.D. *Court Medical:* John White, M.D. (*Convener*), A. L. Kelly, M.D., John Aitken, M.D., H. R. Howatt, M.D.

A Good Example.—Dr. Iliff, the Medical Officer of Health of Newington Butts, has had his salary increased from £200 to £300 a year.

Health of St. Pancras.—Dr. Stevenson, Medical Officer of Health for St. Pancras, in his report for the four weeks ending September 28, states—"The death-rate was lower than in any month during the past four years. In the metropolis, as a whole, the death-rate during the past four weeks under notice was exactly the same as in St. Pancras. This parish shared with others an unusually low rate of mortality for the autumn months."

A Poor-law Relieving Officer worth £5 more than a Poor-law Medical Officer!—At a recent meeting of the Board of Guardians of the North Dublin Union it was proposed that the Relieving Officer do receive a gratuity of £25 for his services during the recent epidemic of small-pox in the Union. We trust our professional brethren, the Medical Officers of that Union, about whose gratuity of £20 so much work was made, will appreciate the delicate compliment thus paid them.

Osteo-myelitis in relation to Purulent Infection.—M. Demarquay (*Arch. Gén.*, September), after describing his clinical experience and experimental investigations concerning this subject, states that he has proved that pus, whether in a pure or altered condition, when introduced into the medullary canal of bones induces osteo-myelitis, and determines death by pyæmia or septicæmia, according to the condition of the

fluid injected. The symptomatology and the necroscopic results are the same as when similar conditions are induced by injecting the veins themselves. Such experiments, as well as clinical observations, only establish coincidences, and it becomes necessary to demonstrate that there is an easy passage from the medullary canal into the venous system. This is shown to be the case by drilling an opening into the medullary canal between the condyles of the femur in a rabbit, through which, by means of an Anel's syringe, the whole animal may be injected. So also an injection carefully made into the canal of a human bone issues by the veins at the end of the diaphysis. In the future study of osteo-myelitis, the condition of the veins emerging at the extremities of the affected bones should be carefully examined.

APPLICATION FOR CHILBLAINS.—Oxide of zinc two, tannic acid one, glycerine ten, balsam of Peru eight, and camphor four parts—M. To be applied night and morning.—*Union Méd.*, October 15.

PALPATION IN OBSTETRICS AS PRACTISED IN GERMANY.—Under this title Dr. Chadwick has published a highly interesting paper in the *Boston Medical and Surgical Journal* for August 15 and 22. It is far too long for extract, and will not admit of abbreviation, consisting, as it does, of detailed instructions for the practice of palpation as witnessed by the author in the Vienna and Wurzburg clinics, where it has attained an importance unknown in other countries. The paper is of the more interest because no detailed account of the procedure has been published in even the German midwifery works.

STATE OF NEW YORK.—The total number of inhabitants engaged in gainful occupations is 1,491,018; the total population being 4,382,759. Of the 1,491,018 there were born in the United States 935,098, Germany 159,683, Ireland 264,858, England 55,168, France 14,704, British America 31,945, China and Japan 102. There are 5678 clergymen, 931 journalists, 6810 physicians and surgeons, 20,508 teachers, and 5913 lawyers. There are 257,039 women and girls engaged in gainful occupations.—*Medical Record*, September 16.

NEGLECT OF LIGHTNING CONDUCTORS.—M. De Fonvielle, in a note addressed to the Académie des Sciences, gave an account of the numerous public monuments (especially churches) which have of late years been struck with lightning in England, and particularly in London. From the investigation he has made, he says that the fact has almost always depended upon there being no lightning-conductor, the protective radius of this not being sufficiently extensive, or from its bad arrangement. The Escurial in Spain, lately in part destroyed by lightning, was destitute of conductors.—*L'Institut*, October 9.

THE WORK DONE BY A HUMAN HEART.—The total daily work of the human heart is equivalent to 124,208 tons lifted one foot. The daily labour of a workman, deduced from long-continued observation of various kinds of labour, is found to be equal to 3540 tons lifted that one foot during ten hours. In a boat-race it is calculated that fifteen foot-pounds of work are performed by each ounce of muscle during each minute of rowing. No muscular labour that man can undertake is more severe than this; and yet it is only three-fourths of that which is exerted day and night during life by each of our hearts. If the heart should expend its entire force in lifting its own weight vertically, it could raise that weight 19,754 feet in an hour. An active pedestrian can climb from Zermatt to the top of Mount Rosa (9000 feet) in an hour; and he can lift his own body at the rate of 1000 feet in an hour, which is only one-twentieth part the energy of the heart. The heart's energy equals one-third of the total daily force of the muscles of a strong man; it exceeds by one-third the labour of the muscles in a boat-race, estimated by equal weights of muscle; and it is twenty times the force of all the muscles used in climbing, and eight times the force of the most powerful engine of the same size yet invented by man.—*Boston Journal of Chemistry.*

JAPANESE PLANTS.—A considerable majority of the Japanese plants that have obtained a place in our gardens prove to be quite hardy. The noble *Lilium auratum*, the glossy green and richly golden forms of *Euonymus japonica*, and the splendid series of varieties of *Aucuba japonica* may be named as examples. The mean temperature of the Japanese islands is nearly coincident with the theoretical mean of their latitude, but the mean temperature of the British islands is decidedly above the theoretical mean, for the great Gulf Stream is incessantly acting on all our western coasts. Hence it is not surprising to find that the climate of Nagasaki agrees very nearly with that of the southern parts of England. In respect of winter temperature the Japanese climate is apparently far more favourable to vegetation than ours. But animal and vegetable life are in Japan exposed to cooling influences that the thermometer takes no notice of. In these islands fogs are frequent and extravagantly dense, and they are often followed by gales that threaten to sweep the islands clear of every tree and house upon them. The new-comer in Japan is apt to sneer at the cities because the houses are only one storey high; but when he has tasted a Japanese hurricane, he perceives a reason for low roofs, and can praise the rich men for being content with them. The climate of Japan is probably the most changeable and convulsive in the world, and the vegetation of the country is consequently subjected to trials of which we shall obtain no account by consulting the thermometer or the parallels of latitude. It is especially worthy of remark that wind acting on organic tissues has much the same effect as a lower temperature would have; and hence the Japanese plants are, generally speaking, considerably hardier than we might have expected to find them, had we been content to form an opinion by a consideration of latitude only. The Japanese islands are extremely narrow; a width of 100 miles is the utmost. Consequently you cannot get away from the sea and the sea-breeze a greater distance than fifty miles anywhere, and, generally speaking, the inland districts are at the utmost only twenty to thirty miles removed from the seaboard. We may therefore consider the vegetation of Japan as wholly marine, and hence peculiarly adapted for introduction to our "sea-girt isle," and of course more especially for the southern and western districts that have a mild climate and a humid atmosphere.—*The Gardener's Magazine.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

D. G., Hereford.—The "Science and Practice of Medicine," vol. i., p. 263.

P. P. S.—Yes, by all means.

C. N.—It is a case for the advice of a solicitor.

F.R.C.S., Manchester.—The return from the provincial schools is not yet completed. The primary examination will take place in the ensuing week. The desired information will be found in the *Medical Times and Gazette*, vol. xviii.

M. T. W.—Yes. Sir Thomas Browne maintained that every man at his birth was nine months old; and Coleridge has said, probably in reference to this, that the history of a man for the nine months preceding his birth would probably be far more interesting and contain events of greater moment than all the three score and ten years that follow it.

Curious.—Yes. The *Mechanics' Magazine* states that it is found that the dark and light red note-papers and envelopes now so popular owe their brightness to an aniline colour and to arsenical fuchsine. The envelopes especially are to be avoided, as the tongue absorbs the arsenical matter in damping the flap, and the consequences in several cases of late have been decided symptoms of poisoning.

Inquirer.—Servetus appears to have obscurely conjectured upon the system of the circulation of the blood, but he wanted experimental facts to support his hypothesis. Vesalius had an imperfect perception of the right motion of the blood. Cæsalpinus admitted a circulation, without comprehending its consequences. At length our Harvey, by patient meditation and penetrating sagacity, removed the errors of his predecessors and demonstrated the true system. Harvey attained his 80th year, but hardly lived to see his great discovery established. No physician adopted it; and when at length it was received, one party attempted to rob him of the honour of the discovery, while another asserted that it was so obvious that they could only express their astonishment that it had ever escaped observation!

Portrait.—The lines are—

> "One told a gentleman
> His son should be a man-killer and be hang'd for 't;
> Who after prov'd a great and rich physician,
> And with great fame in the University,
> Hang'd up in picture for a grave example."—*Broome.*

TWO CASES OF LOCAL PARALYSIS FROM PRESSURE.

By J. T. WILLIAMS, Surgeon to Rossall School.

Case 1.—J. T. W., aged 20, artist, of full habit of body, retired to bed on Saturday, August 31, at 8 p.m., not feeling very well. He fell asleep immediately, and has no recollection of anything until 6 p.m. on Sunday. In the meantime his servant found him at 10 a.m. on Sunday lying on the floor of his room. Thinking he might be intoxicated she left him, and did not return until 6 p.m. He inquired the time, and was much surprised to learn it was so late, and expressed his intention of dressing. This, however, he was unable to do, as he was quite powerless in the right arm and leg.

I first saw him on Monday morning in bed. He complained of dull headache and numbness of the right arm and leg, which were completely

paralysed. The skin of the abdomen and chest unaffected. There was a large bruise on the upper and inner aspect of the arm close to the axilla, extending right across it. The greater part of the right buttock was bruised, but principally over and about the tuber ischii. Sensation both above this and the bruise in the upper arm was unaffected. I could not discover any lesion of the nerve centres. The muscles of the arm recovered their tone in about five days; but up to the present time all the muscles of the leg remain quite powerless, and have become flabby and wasted.

I presume he must have had a fit of some kind, fallen out of bed, and become comatose. The bruise on the arm was probably caused by its lying on the front edge of the fender. I cannot so satisfactorily explain the great extent of bruising and effusion over the buttock. I have tried counter-irritation over the buttock, galvanism, and liq. hyd. bichlor. internally without any benefit, and for four days he has been taking strychnine with no result.

Case 2.—T. C., aged 26, a strong, healthy farm-servant, after a debauch went to sleep with his right arm over the back of a common deal chair, and, as he believes, remained in that position about ten hours. When he came to me there was complete paralysis of the forearm and hand, which continued for about ten weeks. He was unable to make the points of the index-finger and thumb touch for more than three months. I treated this case with iodine to the bruise in the axilla, where was a considerable effusion around the nerves. He was also galvanised, without any apparent benefit, for about ten weeks, when one morning sensation and movement suddenly returned in all the parts, except in the thumb and index-finger, which, as mentioned above, did not return for about three weeks after.

COMMUNICATIONS have been received from—

Dr. Bakewell; Dr. O. T. Wood; Dr. Dougall; Dr. Phillips; Dr. W. Dale; Mr. Oglesby; Dr. Walter Dickson; Dr. T. R. E. Loftus; Mr. Jabez Hogg; Mr. J. Chatto; Dr. Copeman; Dr. Edgar Sheppard; Dr. R. Eaton Power; Dr. T. H. Green; Mr. Spencer Wells; Mr. J. W. Groves; Dr. Bodington; Mr. Hutchings; Mr. Moore; Dr. Brakenridge; Mr. Hayes.

BOOKS RECEIVED—

The Bases of the Temperance Reform, by the Rev. Dawson Burns, M.A., F.S.S.—Modern Surgery as a Science and Art: the Oration delivered before the Medical Society of London on the Ninety-ninth Anniversary, by Frederick James Gant, F.R.C.S.E.—Normal Ovariotomy, by Robert Battey, M.D., of Rome, Georgia, U.S.A.—Report of the Philadelphia County Medical Society on Epidemics and Meteorology for the Year 1871, by Laurence Turnbull, M.D.—Sanitary Report of the Parish of Paddington, by W. Hardwicke, M.D., Medical Officer of Health—De la Résection du Genou en temps de Guerre, par le Docteur A. Cousin—Human Physiology the Basis of Sanitary and Social Science, by T. L. Nichols, M.D.—University College Calendar, Session 1872-73—The Epistles and Art of Poetry of Horace, translated into English metre, by Andrew Wood, M.D., F.R.S.E., F.R.C.S.E., etc.—Sixteenth Report of the Commissioners of her Majesty's Customs on the Customs—Programme du Cours complémentaire de Physiologie fait à la Faculté de Médecine de Strasbourg, par le Dr. H. Beaunis—The Pathology of the Teeth, by Carl Wedl, M.D., translated from the German by W. E. Boardman, M.D., with Notes by T. B. Hitchcock, M.D., D.M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Nature—Pharmaceutical Journal—Dublin Medical Journal—Western Daily Mercury—Canada Medical and Surgical Journal—London Mirror October 19—Lincolnshire Chronicle—The Porcupine.

APPOINTMENTS FOR THE WEEK.

October 26. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

28. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Mr. Spencer Watson, "Foreign Body in the Eyeball, necessitating Enucleation." Dr. Edwards-Crisp, "Two Cases of Hæmorrhagic Small-pox." The paper of the evening, by Dr. Jno. Cockle, "On the Connexion between Occlusion of the Left Carotid Artery and the Existence of Laminated Clot in the Sac of Aortic Aneurism."

29. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

30. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

31. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

November 1. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Meeting of Council.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 19, 1872.

BIRTHS.

Births of Boys, 1146; Girls, 1064; Total, 2210.
Average of 10 corresponding weeks, 1862-71, 2027·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	709	660	1369
Average of the ten years 1862-71	689·3	638·5	1327·8
Average corrected to increased population	...	...	1461
Deaths of people aged 80 and upwards	...	...	51

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	3	1	6	...	5	...	7
North ...	751668	7	1	4	1	4	1	4	2	5
Central ...	333887	...	2	2	...	4	...	3	...	3
East	638928	6	6	4	...	10	1	1	2	9
South	966132	4	5	4	10	13	1	6	...	12
Total	3251804	17	15	17	12	37	3	19	4	36

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·525 in.
Mean temperature	44·4°
Highest point of thermometer	56·7°
Lowest point of thermometer	29·1°
Mean dew-point temperature	42·3°
General direction of wind	Variable.
Whole amount of rain in the week	0·50 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 19, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Oct. 19.	Deaths Registered during the week ending Oct. 19.	Temperature of Air (Fahr.): Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.): Weekly Mean of Mean Daily Values.	Rain Fall: In Inches.	In Centimetres.
London	3311298	42·4	2210	1369	56·7	29·1	44·4	6·89	0·50	1·27
Portsmouth ...	115455	12·1	88	56	55·8	29·2	44·2	6·78	1·00	2·54
Norwich	81105	10·9	45	43	57·0	32·5	44·2	6·78	0·80	2·03
Bristol	186428	39·8	115	67	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	62	28	52·4	27·1	41·5	5·28	0·94	2·39
Birmingham ...	350164	44·7	250	181	54·4	30·0	42·5	5·84	0·95	2·41
Leicester	99143	31·0	83	49	55·2	27·5	42·5	5·84	0·53	1·35
Nottingham ...	88225	44·2	54	44	55·7	27·3	42·6	5·89	0·55	1·40
Liverpool	499897	97·9	365	260	54·3	32·1	44·5	6·95	0·91	2·31
Manchester ...	352759	78·6	258	204	...	...	...	...	...	...
Salford	127923	24·7	108	59	56·5	26·5	42·9	6·06	0·27	0·69
Oldham	84004	20·2	83	65	...	...	...	...	...	...
Bradford	151720	23·0	129	63	55·3	35·0	44·4	6·89	0·64	1·63
Leeds	266564	12·4	187	144	56·0	33·0	43·3	6·28	0·95	2·41
Sheffield	247847	10·9	159	123	54·0	30·0	42·7	5·95	0·80	2·03
Hull	124976	35·1	86	54	56·0	27·0	43·3	6·28	0·67	1·70
Sunderland ...	100665	30·4	74	48	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	120	73	...	...	...	...	...	...
Edinburgh	205146	46·3	119	70	49·0	35·7	43·9	6·61	0·45	1·14
Glasgow	489136	94·8	404	252	54·7	30·9	44·7	7·06	0·16	0·41
Dublin	310565	31·9	150	118	58·2	28·0	44·6	7·00	1·58	4·01
Total of 21 Towns in United Kingd'm	7393052	34·0	5149	3370	58·2	26·5	43·5	6·39	0·73	1·85

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·53 in. The highest was 29·85 in. on Monday morning, and the lowest 29·12 in. on Wednesday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D,
Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

Lecture III.

Gentlemen,—The varieties of melancholia or depression are not so great as those of mania or exaltation; the latter, therefore, is more difficult of description. Just as it is impossible to give a satisfactory definition of insanity, it is impossible to give a descriptive account of mania which shall meet all the requirements of truthfulness and exactitude. In one case the intellect—the ideational centres—may be chiefly involved; in another the emotional or affective life; in another the motor functions. There is scarcely a case of mania, whether chronic or acute, which (though nearly all cases have much in common) has not about it some essentially distinctive feature.

We will first direct our attention to a form of transitional derangement which best meets the true definition of the generic word "mania" (*μαίνομαι*, to rage), and to which writers have given the term *acute delirious mania*. It comes on suddenly, with scarcely any premonitory symptoms as compared with those of ordinary mania, and sometimes, after running a brief course, it will disappear with equal suddenness. It is a not uncommon sequel to fevers and the acute exanthemata, exposure to fatigue or to the sun, child-bearing, or a debauch. The following case will illustrate forcibly this form of disease:—

I was sent for one morning to see a young lady who was described to me as excessively violent and unmanageable, and I was requested to visit her immediately. She was a handsome, well-made brunette, 19 years of age, and had always enjoyed good health until attacked by scarlet fever, from which she had recently recovered. She was happy in her family relations, and was engaged to be married to a gentleman who was in the house at the time of my visit. There was no insanity in the family. Two days previously this damsel had suddenly, and without any obvious cause, displayed a petulance and irritability towards her father and mother, and absolute rudeness and indifference to her *fiancé*. She was heard to talk in her bedroom that night, long after the family had retired to rest, and in the morning it was pretty obvious, from her appearance, that she had had no sleep. Her countenance was flushed; she was in a state of considerable excitement, and she refused to leave her room. Medical assistance was sent for, and two local practitioners were charged with the responsibility of her treatment. But she would not be treated; she refused to take their medicines or their advice, and she spat in their faces when they went near her. As night approached she became more excited, and she would allow no one to approach her. They had a terrible night with her: she tore up and down the room in her night-dress, smashed everything she could lay her hands on, spat at everybody, made use of the most disgusting language, exposed her person, and threw out her arms as though to clutch imaginary objects. She took a singular dislike to one of the medical gentlemen, and he really became quite frightened at her, and left the house. It was on the morning of the next day that I saw her. I shall never forget the look of utter dismay and bewilderment upon the countenances of everybody as I entered the house. They were baffled in all their attempts to meet the emergencies of the case, and even the medical man was on his beam ends. As I ascended the staircase I heard vehement declamations and shouts, associated with as obscene language as the nastiest mind could desire. The bedroom was strewn with different articles; one of the windows had several panes broken; a glass which was fastened to the wall over the mantelpiece was also broken; the whole place was a Babel of confusion. Wild and flushed, the central figure, this young, mad, and imperious lady, with dishevelled hair, torn night-dress, and exposed bosom, sat up in the middle of the bed. "Who are you?" she screamed, drawing herself up with a menacing aspect. "Leave my room instantly; how dare you come into my bedroom?" I approached her and endeavoured to take her hand; but, spitting at me, she sprang out of bed on the opposite side to that on which I stood, and threatened to burn down the house if I did not leave. Fierce as a lioness at bay she stood there, with dilated nostrils and heaving breast, the incarnation of ungovernable passion. The friends around were watching me anxiously to know what I was about to do, and how I was going to free them from their terrible bondage. "That will do," I said; "let us go down stairs again";—and the patient, without speaking another word, kept her piercing eyes upon me until I had retreated. When we reached the dining-room all looked very much astonished, and were evidently thinking I was as much baffled as themselves. But I had seen all I wanted to see upstairs; a glance, and the history narrated to me on my way to the house, had told me what the case was, and what was needed. My continued presence in the bedroom could only be a source of increased irritation to the patient; the sooner I left her, therefore, the better, in order to organise my plans and arrangements. Now, how was I to set about assaulting the strong citadel of this acute disease? First, I selected another bedroom, and completely dismantled it of all furniture except the bedstead itself, which had no canopy or hangings. A bath-room was close by, and I turned on the cold water, threw a sheet into it, and sent for all the blankets that could be found. I laid a mackintosh—which was hanging up in the hall—upon the mattress, and over that, after wringing it out, I spread the sheet which had been immersed in the bath. My proposal was to *pack* this young lady. Returning to her bedroom with my medical colleague, one of her brothers, a nurse, and three female servants, we seized her, and carried her forcibly and with great difficulty on to the bed where the wet sheet was spread out for us. After much labour we managed to straighten her limbs and get the sheet thoroughly round her, followed by about ten or twelve blankets; we then placed a pillow under her head, and a wet towel on her forehead. For half an hour I never worked harder in my life. But there she lay at last, powerless and baffled. It was a great triumph, and she knew it; and the sense of defeat helped to tame her and tone her down into comparative calm. Now, in a case of this kind the wet sheet serves a double purpose. It is a powerful depressor and sudorific, and it is at the same time a very legitimate means of restraint. It lowers the abnormal elevation of temperature, it converts a dry and harsh skin into a moist one, and it places your patient in a position to submit to ulterior steps and processes. It relieves everyone—both patient and attendants. It gives you breathing-time, and enables you to look about and organise your future plans.

It should be mentioned that the room of these operations had one window, with shutters, which we nearly closed; for darkness is a material aid in allaying maniacal fury. In about five minutes after our patient had been packed she asked for water, and it was given to her iced; she gulped it down eagerly, but she refused to take anything with it. I was now told that she had touched no food since the commencement of the excitement—that is, for two days. Having great confidence in the power of the wet sheet, I did not think it desirable to press medicine, though I had some tincture of digitalis in my pocket, and one drachm of it, or even two, would have been a suitable administration. In ten minutes our young lioness was asleep, and breathing calmly. The sunshine which came upon that distressed family—the calm which succeeded the storm and tempest—were alike evidenced in the patient and her friends, and filled me with a satisfaction which you can well understand and appreciate.

As a rule, it is not desirable to keep a person in a wet sheet more than an hour or an hour and a half; but in this case I felt justified in doing so. At the end of two hours I awoke and unpacked our patient. She steamed again as we unwrapped the ponderous coverings, and I then instructed the females about her to carry her into the adjoining bath-room, and there place her in an open bath which I had had prepared at a temperature of 75°. She was quite passive under it, and after being rubbed dry with rough towels she was carried back to the room last used, where, in a clean night-dress and clean sheets, she lay down quietly, in charge of the nurse and one female servant. It was now about 3 p.m. She refused nourishment, and immediately fell asleep again, not waking until eight o'clock. She then took a glass of pale ale, some milk and beef-tea, with two eggs beaten into it, and seemed as calm as she had ever been in her life. So I now felt safe in leaving the house. When I called to see her the next day her father and mother, overwhelmed with gratitude, told me that everything had gone on satisfactorily; her bowels had acted very copiously and very offensively, without medicine; she had repeated the nourishment according to instructions at regular intervals. She was perfectly calm, but there was one thing on her mind which distressed her greatly. She knew all that had taken place during her delirium,—the obscene language she had used,

and the indecent exposure of her person. She was impelled to it, she said, by an irresistible impulse; but the shame of seeing me again, a stranger until last night, completely overwhelmed her. Would I accept her gratitude and not subject her to an ordeal at which her modesty revolted? Of course I would, and did. She had no bad symptoms afterwards. In three months she was married. She has borne children, and the puerperal state has been free from all complications; but I have never seen that lady from that day to this.

Now, this case is highly instructive in many ways. In the first place, it furnishes you with a splendid illustration of that transitory maniacal delirium—the *délire aigu* of French writers. In the second place, it shows you the importance of active and vigorous treatment, and that the mere exhibition of drugs is no necessary part of that treatment. In the third place, it shows you the importance of not measuring the need of asylum care and management by the violence of the first symptoms. It would naturally have suggested itself to you that if ever there was a case for immediate removal to an asylum, here it was. But such a step would have been a great injustice to the family, and would have reflected but little credit on the family's medical advisers. The suddenness of the attack, with promonitory symptoms of only two days' duration, the antecedent scarlet fever, the violent frenzy of the seizure—these were my guides to a diagnosis the correctness of which was fully justified by the result. You will not, of course, expect that all your cases of acute delirious mania will turn out like this one. This occurred about eight years ago, and I have not seen more than three or four since of equally rapid and successful issue. In most you will meet with more marked and extended premonitory symptoms, among which will be, notably, illusions and hallucinations of sight and hearing. These hallucinations underlie and generate suicidal and homicidal impulses. There will be alternating intervals of violent delirium and sullen calmness; at times obstinate refusal of food, a foul tongue and breath, constipated bowels, a dry rough skin, and an indifference to personal cleanliness. If this state of things continues for seven or eight days, and your patient is very unmanageable, you will be justified in taking the proper steps for certifying him and removing him to an asylum. There he will meet with an organised and systematic care which it is quite impossible to provide under home treatment.

At times these patients are excessively incoherent and noisy, shouting night and day at the very top of their voices for hours together. This circumstance constitutes one of the chief reasons for transfer to an asylum, if the case occurs in an undetached house, or in one which is close to a public road; for you have no right to annoy your neighbours, and nothing is more annoying than continual shouting. Moreover, it attracts the notice of passers-by, who stand and listen, fancy all manner of cruelties are going on inside, and circulate all manner of sinister reports outside. This condition, in which there is great exaltation and derangement of the ideational centres, may be succeeded by a corresponding depression, evidencing great terror and emotional disturbance. And this latter phase indicates an unfavourable prognosis; for the arrest of supply by refusal of food, and the absolute waste of tissue resulting from great excitement, have a tendency to produce rapid exhaustion. Obviously, therefore, you must do all you can to get nourishment down your patient's throat, and you must invite sleep by every possible means. Both these matters are obviously attended with difficulty if there is refusal to swallow, and the teeth are firmly and defiantly clenched. I have already spoken to you of the stomach-pump. Here is the occasion for its use. I have an inclined feeding-chair, to which I can fasten the legs and arms of violent patients; a broad sheet round the body and a good staff of attendants complete the necessary arrangements. In throwing in food you can also throw in your hypnotic—the hydrate of chloral is the best. Sometimes you may resort to the subcutaneous injection of one of the salts of morphia, of which the hydrochlorate is the more soluble. In the early stage of the disease, before there is any tendency to depression, the hypodermic use of the alkaloid of digitalis is serviceable; but it requires great care, for its action is quick and powerful. From the one-sixth to the one-third of a grain is about the quantity for each injection, but I have seen a patient who bore one grain.

The tendency of this acute delirious mania (as I have before stated), when alternating with melancholic symptoms, is towards death by exhaustion or towards consecutive dementia. You may expect one of these terminations if there is no recovery within ten or twelve months. Under a prolongation beyond this period all the pith and energy of life seem to be eliminated from that unfortunate who has been driven through the fiery crucible of this fierce disease. With such an issue on the cards, you will have every inducement to prompt and vigorous treatment.

With regard to the diagnosis of this disease: When you are summoned to its first outbreak, you are—and I doubt not always will be—much too wideawake to confound it with alcoholism; but this mistake has been made, and drunken people have been sent to an asylum as mad. But you must be careful not to confound it with delirium tremens. The terrified aspect of your patient in the latter state, the cold clamminess of the skin, the white and creamy tongue, the tremor which has given to the disease its name, the character of the hallucinations—black cats under the bed, persons getting into the house, etc.—these will be sufficiently distinguishing characteristics. One caution also may be necessary as regards the delirium of fever and meningitis. Here, apart from the antecedents, you have less action and less disturbance of the motor functions, low muttering, incoherent talk, great intolerance of light, with pain and heat of scalp, and contracted pupils. Rigors, too, have preceded, indeed have been among the various premonitions. The end is here sometimes very rapid, with convulsions, squinting, and complete coma.

(*To be continued.*)

CLINICAL LECTURE
ON A CASE OF INTERNAL INTESTINAL OBSTRUCTION.

DELIVERED AT THE MIDDLESEX HOSPITAL, MAY, 1872.

By J. W. HULKE, F.R.S.

Gentlemen,—I ask your attention to-day to a retrospect of a case of internal intestinal obstruction, which has unfortunately—as so many do—ended fatally, notwithstanding a surgical attempt to relieve it.

The patient, a man, aged 32, in good health, after a hearty meal of fish, was seized with pain in the belly—he thought it colic—shortly followed by vomiting. The pain soon left him, but the sickness continued; food and drink were rejected almost instantly after being taken. The bowels were obstinately bound. On the eighth day, domestic remedies having failed to relieve his alarming condition, he was brought to the Hospital. His danger was evident, and he was at once admitted into Dr. Thompson's ward. Two days later, being the tenth day of his illness, internal measures having been meanwhile tried and failed, Dr. Thompson called a consultation to consider the propriety of surgical interference. The patient's condition at that time was as follows:—His belly was uniformly swollen and hard, so hard that no reasonable pressure dimpled it. He often vomited a pea-soup-like fluid having a fæcal smell, which gushed copiously from his mouth with but little heaving. The only pain and tenderness in the belly—and this was very slight—he referred to a spot rather above and to the right of his navel. The pulse was small, quick, and weak. He had not passed any stool since the beginning of the attack. It was plain that he must soon die unless relief could be obtained.

The propriety of surgical interference in a case of this kind, where internal measures have failed, depends greatly on the answers that can be given to the questions—what is the nature, and where is the seat, of the obstacle?

In such a case the first thing to do is to exclude the possibility of overlooking an external obstruction—*e. g.*, a rupture. The unusual seats of rupture—*e. g.*, the obturator and sciatic openings—as well as the ordinary ones, were carefully examined; the result was negative, and proved the obstruction to be beyond doubt inside the belly. Was it situated in the large or in the small intestine? Inspection and palpation of the belly afforded no clue; it was uniformly swollen and tight. The rectum, explored with the finger, was found empty, and two pints or rather more of water could be injected (it provoked vomiting), which was more than the normal capacity of the sigmoid flexure with the descending colon, showing so much of the canal to be pervious, although a flexible tube could be passed only a few inches beyond the anus, the reason of which became apparent at the post-mortem examination. Further, we had evidence that the entire large intestine was pervious, for, while water was being injected through the anus, with each stroke of the piston a distinct gurgle was audible in the cæcum. We now knew that the obstruction was in the small intestine. In what part of it? The situation of the tenderness just above

and to the right of the navel, and the quick accession of vomiting, favoured the supposition of the obstruction being near to the upper end of the canal. (The sequel showed it to be quite at the lower end of the ileum.) Next, what its nature? Was the impediment an invagination or intussusception? or was the bowel constricted by an adventitious band? or had a piece of bowel slipped through a laceration in the omentum or mesentery, and become strangulated? or had a portion become twisted? was there volvulus? was the obstruction a stricture, or a plug (*e.g.*, a mass of hardened fæces), or a large gall-stone, or a tumour growing from the inner surface of the gut and so choking it? or, lastly, was the gut compressed by a tumour outside it?

Of these possible causes of obstruction some were eliminated with a certain degree of assurance. To begin with the first, intussusception, which was shown by the late Mr. Benj. Phillips to be the commonest cause (it was present in sixty-three of a total of 169 cases collected by him in 1848), has been most frequently observed in children, and tenesmus with discharge of bloody mucus per anum has seldom been absent. Our patient was an adult, had absolutely no tenesmus, and no discharge of any kind from the rectum. Here, then, intussusception was extremely improbable. Was there a stricture? This, whether cancerous or syphilitic, has its seat most often in the large intestine, most commonly in the rectum, and next in the sigmoid flexure of the colon. But the rectum, so far as the finger could reach, was free from any obstructive disease, and the entire length of the large intestine allowed the passage of a stream of water. Besides, obstruction by stricture is a gradual process, and although the final complete closure may occur suddenly, there are precursory stages marked by symptoms the former existence of which may usually be learned. Our patient, in reply to repeated questions, affirmed that he had not had any chronic trouble in the belly before his present sudden illness. A gradual development of symptoms also characterises compression of the bowel by an external tumour, the gradual enlargement of which produces minor degrees of obstruction before the closure is complete. Choking by hardened accumulations of fæces, and by intra-intestinal tumours, is also a gradual process marked by chronic irregular action of the bowels. Besides, fæcal impaction is much less common in the small than in the large intestine, and this latter we knew to be pervious. Again, the impaction of a large gall-stone in the small intestine would have been preceded by severe symptoms marking its passage through the common bile-duct. Thus, by excluding very improbable causes, it became likely that the obstacle was either a twist, or the entanglement of a piece of small intestine in a hole in the mesentery or omentum, or an adventitious constricting band. A negative reply to repeated questions whether he had had any previous abdominal ailment weighed rather against the supposition of a band, and favoured volvulus or entanglement with strangulation, because an adventitious band necessitated a previous peritonitis, and of this there was no history; but then a very limited and subacute peritonitis might have passed unnoticed—it might have been, so to say, latent, just as the post-mortem theatre teaches us daily with regard to pleurisy and periorchitis, revealing adhesions of the costal and pulmonary pleuræ, and of the testis and parietal tunica vaginalis in the bodies of persons in whom during life these maladies had not been suspected. Analysis of the symptoms and of the possible causes of the obstruction led us, then, to presume that one of the last-mentioned three was present, but which one could not be ascertained in the absence of differential clinical symptoms.

The practicability of relieving such obstacles by direct surgical interference is established by a sufficient number of cases. The success, small as it is, which has attended such endeavours more than justifies the exploration of the belly through an incision when other measures have failed; and Dr. Thompson, concurring in the opinion formed by Mr. Morris and myself that it would be wrong to deny the patient the slender chance which an operation alone afforded him, he was put under the influence of chloroform, and the belly opened by a cut in the middle line midway between the navel and pubes, through which I passed in my hand, and felt for an empty piece of small intestine, by tracing which I hoped to be led to the obstruction. The distension of the small intestines was extreme—they were so inflated, so tightly packed, that the fingers insinuated between them and the abdominal walls could not be flexed. The hand was flattened and grasped tightly, as it is in the uterus during a pain, so that an exact search in this way was not practicable. All that could be so learned was that the cæcum and sigmoid colon in the iliac fossæ were empty. A large exposure of small intestine, which I had hoped might not have been necessary, now became unavoidable, and many feet were drawn out and returned again, with the precaution of not exposing outside the wound more than a foot or so at once. The obstacle remained undiscovered. Much embarrassment was caused by the extreme inflation of the gut, and it seemed that if this could only be lessened the probability of finding the impediment would be greatly increased. As no ill-results had attended removing gas with a very fine trocar from over-distended intestine in several cases recently in other metropolitan hospitals, I felt justified in tapping the blown-up bowel with a very fine trocar, of about the size of an exploring needle. Much stinking gas hissed out, but only a few inches of bowel collapsed, and on pulling out the canula thin pea-soup-like fæces oozed through the prick. The tissues of the bowel, purplish and succulent, were so soft, and the peritoneal coat was so friable, that an attempt to tie up the minute hole only made it larger, and for the same reason a very fine continuous suture did not hold. Plainly the punctured piece of bowel could not be replaced inside the belly; and in view of this a further prolongation of the search, which had already occupied some time, seemed unwise. The abdominal incision was therefore closed with twisted sutures, and the punctured gut was slit up and stitched securely to the skin. A large panful of fluid fæces immediately ran out. The relief was prompt and remarkable. He vomited once directly on recovering consciousness, and again at seven o'clock in the evening; but from this time all sickness ceased. The belly sank and became soft. He said that he had no longer any discomfort, and each time I saw him he told me that he thought himself better. Fluid fæces and gas passed away, freely through the artificial anus (after drinking milk, curds were found when the dressings were next changed—in less than two hours). Those of you who watched the case with me will remember how I told you that this calm did not lead me to expect his recovery; the absence of pain and of a high temperature was no evidence of the absence of peritonitis, for the painlessness and the absence of tenderness of the belly might be effects of the opium, which he had taken freely since the operation, and we had seen fatal cases of traumatic peritonitis marked, not by a high, but by a low temperature. Our patient's temperature was below a normal average, which could not, in the light of previous cases, be regarded as other than a very unfavourable indication; and the growing weakness with acceleration of his pulse bore no less certain witness to the illusory nature of the calm. Fifty-three hours after the operation he died exhausted.

At the post-mortem, when the belly was opened, the stomach (much dilated) and the very distended small intestine seemed to fill the whole cavity, completely hiding the colon. The small intestine was in its whole length acutely inflamed, and in the neighbourhood of the incision, as also in the pelvis, which it filled, its coils were glued together by recent exudation. On lifting out of the pelvis a matted coil of ileum, the site and cause of the obstruction became first apparent. The sigmoid flexure of the colon had a very long and lax mesocolon, which allowed it to stretch in an angular loop across the pelvis, from left to right. This abrupt deviation was the cause why the long flexible tube could only be passed a short distance beyond the anus. At the apex of the loop a long epiploic appendage, issuing from the free border of the gut, gave attachment to one end of a thin, glistening, tendinous band, the other end of which crossed and tightly tied down the ileum about three inches distant from the cæcum, and lost itself on the peritoneal lining of the pelvis near the right sciatic notch. Between this strangling band and the cæcum the ileum was empty, contracted, and pale. At the constriction the outer surface of the gut was ulcerated. The band might have been easily reached and safely cut had its seat been discovered during the exploration. What are some of the lessons we may learn from this case?

First, notwithstanding its fatal issue, the ascertained practicability of cutting the constricting band is an encouragement to operate again under similar circumstances. Next, the acute and general enteritis and the ulceration at the constriction, already present when the operation was done, show how much danger grows with delay. Again, we learn that the plan of puncturing inflated intestines for the purpose of letting off gas is safe only when the gut does not also contain fluid fæces, and when, unspoiled by inflammation, its muscular coats can shrink and close the puncture, assisted by a slight sliding of the mucosa; but where the gut is damaged by inflammation, and contains also fluid fæces as well as gas, the hindrance to the search caused by tight packing of the inflated intestine will be more safely dealt with by a freer

section of the abdominal walls than by puncture. We are taught also that fixed tenderness and pain are very uncertain guides to the seat of an obstruction, for here that situation pointed to the upper end of the small intestine, while the obstruction was close to the cæcum. Lastly, in traumatic peritonitis we may expect a low temperature, and are not to be thrown off our guard by the absence of a high one.

ORIGINAL COMMUNICATIONS.

ON THE CONNEXION BETWEEN

OCCLUSION OF THE LEFT COMMON CAROTID ARTERY AND THE EXISTENCE OF LAMINATED CLOT IN THE SAC OF AORTIC ANEURISM.

By JOHN COCKLE, A.M., M.D., F.R.C.P.,
Physician to the Royal Free Hospital.

To the Society (a) I have the honour of addressing, I feel that a communication on the worn subject of aortic aneurism would probably awaken a scarcely more than passing interest, were it not redeemed by an embodiment of the results of the impulse given of late in Italy (particularly), in Russia, and to some extent in this country, in matters of moment as regards its treatment. Indeed, with a pathology well-nigh exhausted, it is in the direction of treatment alone that the future road of promise lies.

It is an admitted truth, however rare and exceptional a one, that aortic aneurism does undergo spontaneous cure, and equally a truth that the process through which such cure results is known—and known as one not of restitution, but of substitution. The inquiry, therefore, whether any means other than those in common use to induce such process can, under given circumstances, be employed, is a perfectly legitimate one; and provided that a reasonable probability of success can be thereby obtained, our bounden duty is, I conceive, to try them. To support this proposition, no testimony more authoritative or encouraging could be adduced than that of the late Professor Porter, of Dublin. In his work on aneurism,(b) he remarks—"Still, the disease is of such a dreadful nature, and its results so fatal, that no chance should be rejected of discovering some means of arresting its progress; and perhaps by unwearied diligence and repeated trials we may arrive at some means of mitigating so serious an evil."

In a paper read before this Society on March 1, and published in the *Lancet* April 16, 1869, I believe that I was the first formally to propose the ligation of the left carotid artery as an extreme measure, with the direct intent of arresting the progress of pure aortic aneurism. I may further state that, conjointly with Mr. Heath, I was the first also to bring the proposal to the test. I say as an extreme measure, for if after failure of all the means supposed by art remedial—and this how often!—the sac should still increase and threaten to give way, must then our active duties merge into a mere passive watching the result, or dare no other means be tried? To desperate conditions desperate measures must apply; and if ever the *anceps remedium* found a justification, it is here. And this is why, from time to time, some daring efforts have been made to rescue these cases from the charge of utter hopelessness under which they labour. Such measures as the introduction of iron wire into the sac, or the injection of perchloride of iron, are scarcely likely from their results to attract many imitators. The distal ligature of the left carotid artery is now on its trial—it may be to share a similar fate; but the verdict must rest in the hands of the future, for the actual results cannot be ignored.

The results obtained from the use of galvano-puncture by Ciniselli,(c) the distinguished physician of Modena, must not be passed by. His paper is far too long for me to attempt to analyse, but it deserves the most careful study. His recent experience is much more favourable than the earlier essays. Of these no permanent cure resulted. In the former, of fifteen cases five are stated to have been cured. He admits frankly that what he terms "unfavourable conditions" for the use of the agent are most frequently met with in practice. I fear that his "favourable conditions" are rare; but at the same time can well believe that a flagon-shaped false sacculate aneurism, in which a sluggish current circulates, may be consolidated by the process.

To my mind the principal drawbacks to galvano-puncture are these—The sac may rupture at its posterior face; it can be of no avail in secondary sacculations not advancing to the surface; the galvano-albuminous clot may redissolve, and give rise to embolism, with its train of ills; and, lastly, the sac may yield in the interval recommended—at times some weeks—between each application of the current (page 392). In stating these objections, however, I must not be understood as wishing in any way to underrate the general value of the thoroughly good and able work of the Italian physician; with more perfect instruments of precision, more satisfactory results may be yet obtained and other measures superseded. To return to my more immediate subject matter, if the plan I advocate is really to constitute an addition to our knowledge, it takes its root in the experience of the past, and it is from this experience that the material is to be selected to furnish the proof sought. The question is one of pure observation, and quite independent of any *à priori* reasoning. The great point to determine (considering the gravity of the issue involved) is whether the successive links in the chain of evidence are sufficiently strong to warrant the conclusion—in other terms, whether the facts are adequate. Such as they are, are now to be submitted. They are, however, weighted with the consciousness of the imperfect manner in which I have executed this portion of my task. This defect has arisen in part from the restriction of time, but mostly from the neglected mention of the condition of the artery in many of those recorded cases in which either a cure took place or the aortic sac was found unruptured and filled with laminated clot.

The cases may be divided into those in which the occlusion of the artery, coinciding with the formation of laminated clot, has been effected by a natural process, and into those in which such conjunction has been the result of an artificial process. A further subdivision may be made of the first class into cases where the aneurism has been permanently cured, the subject dying of other disease, and into those in which death has resulted from tracheal or other pressure. The second class would embrace those cases in which clot has been formed in the aortic sac from the ligation of the carotid artery, though tied with indirect intention, and into those in which the artery has been tied with the direct intent of inviting its formation.

The first case of the first series I can adduce is the remarkable one recorded by Haller, (d) with a plate attached showing the morbid appearances. The body of a woman, about 50 years of age, was brought into the anatomical theatre for dissection. Upon opening the thorax an old and cured aneurism was found. The ascending aorta was dilated, and the entire arch converted into a large sac. Beyond, the vessel was normal. The centre of the vessel contained much coagulated blood, but the sac itself was densely filled with firm, white, laminated tissue, resembling membrane. The innermost layer, six lines in thickness, adhered so firmly to the lining membrane that it might have been mistaken for part of the arterial coat. But Haller writes—"We were much more surprised to find that this membrane was prolonged into the left carotid artery alone, and not into any other of the arterial trunks." It was white, soft, but tough, completely obliterating the canal of the vessel, and so firmly adherent to its walls as to be with difficulty detached by dissection. . . .

A second case of old-cured aneurism is referred to by Dubreuil. (e) Treating of these cases he states—"But if the aneurismal sac is limited to a portion of the vessel without involving its totality, we cannot refuse to admit the possibility of spontaneous cure—that is to say, that the accumulation of fibrinous coagula in the sac may form a kind of artificial wall or barrier against the blood, and permit the main stream to course onwards in the aorta." We may be permitted to recall here the description of a preparation of which the history is recorded in the *Journal of Medical and Surgical Sciences* of Philadelphia for November, 1826. The preparation shows the remains of an aneurism of the upper wall of the aortic arch, the inferior wall remaining sound. . . . The sac of the aneurism itself is filled with extremely dense laminated coagulum, consisting of numerous layers. The innominate artery emerges from the exuded fibrine lining the surface of the aneurism. This vessel is contracted to the point

(a) Read before the Medical Society of London, on October 28, 1872.
(b) "Observations on the Surgery, Pathology, and Treatment of Aneurism," part i., page 85.
(c) Annal. Univer. de Medicina. Griffini. December, 1870.
(d) "Opuscula Pathologica, Lausannæ." 1755. Obs. xix., p. 38.
(e) "Observationes et Reflectiones sur les Aneurysmes de la Portion Ascendante et de la Crosse de l'Aorte." 1841. P. 176.

of obliteration of its canal. The left carotid artery, filled by a coagulum, gradually decreases in size to its division. The right and left inferior thyroid arteries, enlarged in volume, establish by their anastomoses communication with the right subclavian, thus compensating, during life, the defect of circulation in the innominate artery.

Sir Astley Cooper(f) mentions (briefly enough, it is true) a case of aneurism of the arch of the aorta in which death occurred with the sac unruptured. "The left carotid artery was found obliterated as far as its terminal division."

The following case, also in the second series, is narrated by Pelletan,(g) who, it is well known, carried out with great severity the plan of Valsalva:—A female, aged 32, was attacked in January, 1801, with severe catarrh followed by pain in the left shoulder-joint, extending first to the clavicle and back of the ear; subsequently to the entire left side of the chest, much embarrassing the respiration. In the following October, after great mental excitement, the symptoms increased, and shortly after she discovered a small pulsating tumour below the right clavicle. The treatment of Valsalva was now adopted, and apparently with signal benefit. After many changes in the character of the malady, and the appearance of a swelling below the left clavicle attended with slight impulse, and later by another, death occurred in August, 1804 (three years and eight months after the advent of the symptoms), the apparent result of intractable diarrhœa, cough with excessive purulent expectoration, and emaciation progressing to the extremest degree.

Post-mortem examination revealed false sacculate aneurism of the arch of the aorta, which had occasioned some absorption of the superior portion of the sternum. It almost completely filled the left cavity of the thorax, crowding back the lung, which was condensed and tuberculous. In the substance of this latter organ a cavity existed, containing blood which apparently had simply oozed through the coagula of the largest sac. The coagulum in the sac was white and laminated, about an inch and a half in thickness at the anterior part of the sac, and weighed about a pound and a half. The left carotid artery was flattened and occluded. Above the occlusion the canal was filled by a coagulum extending to its terminal division.

The next case is from Cruveilhier.(h) It is too long to detail, but its more salient points are as follows:—A cooper by trade, aged 68, of vigorous constitution, but addicted to great excesses, felt a tumour at the upper part of the chest about two years before he came for advice. Prior to its appearance the health was good, without any symptoms either of oppression or palpitation. Duméril diagnosed aneurism of the arch of the aorta. In the two years which elapsed between the appearance of the tumour and his death he was examined many times while still continuing his irregular habits. He died eventually with symptoms resembling those of pernicious algide fever. The aorta was dilated from its origin; a very large false sacculate aneurism of the arch existed, commencing at the left of the innominate artery; another sac, much smaller, was found beyond the origin of the left subclavian artery. The aneurism of the arch was filled with fibrine, arranged in numerous concentric layers, and evidently formed at different periods, the most ancient so dense that they might have been confounded with the wall of the sac itself. The left common carotid artery sprung from the sac; it was completely obliterated by a very dense semi-transparent plug intimately adherent to the arterial walls. A second case is recorded by Cruveilhier,(i) occurring in a dissecting-room subject, concerning whose antecedents no particulars were known. Death had evidently occurred from tracheal pressure. The aorta, after leaving the pericardium, was dilated into a spheroidal pouch, extending upwards, still enlarging and acquiring enormous dimensions in every direction. This vast tumour presented above two prolongations—one bearing to the right, formed by aneurismal dilatation of the entire innominate and origin of the right subclavian arteries; the other, a false sacculate pouch crossing the trachea to the left, the limit of the sac being the inner wall of the left subclavian artery, which, together with the carotid, was free from dilatation. The portion of the ascending aorta forming the spheroidal pouch was simply dilated; the coats of the vessel were intact, though thickened by numerous cretaceous and cartilaginous patches. This portion was free from coagulum, but the walls of that portion of the aneurism of secondary formation crossing to the left were thin and mottled in colour, as if about to yield. All this portion of the aneurism was filled with adherent and laminated coagulum. The right carotid artery was perfectly patent; the canal of the right subclavian was patent to its dilated mouth, which was completely closed. The left subclavian artery was perfectly normal; but the canal of the left carotid artery, which alone arose from the left portion of the sac containing laminated coagulum, was completely obliterated and its origin contracted.

Dr. Holland, in his essay upon "Aneurism of the Innominate Artery,"(k) quotes the following case as occurring in the practice of the late Dr. Hughes:—"A man, aged 40, had suffered from cough for five years. Six months ago a pulsating tumour was detected above the right sterno-clavicular articulation. When seen by Dr. Hughes he presented all the signs of innominate aneurism, with consolidation of the upper lobe of the right lung. The tumour disappeared, and never again could be discovered. The patient lived four months after, and died from dysphagia and tracheal pressure. In the centre of the right lung an irregular cavity was found. One aneurism arose from the right side of the innominate artery; a second aneurism, about the size of a hen's egg, sprung partly from the left side of this vessel, and partly from the aorta pressing on the trachea; a third aneurism, about the size of a walnut, arose to the left of the subclavian artery. The ascending aorta was enlarged and diseased. The right subclavian artery was enlarged; the right carotid normal. The left carotid was very small, and its mouth completely closed. The origin of the left subclavian was recently but entirely closed by pressure of the third aneurism."

In the *Transactions of the Pathological Society*, 1870, a case is recorded by Mr. Sidney Jones, which, for present purposes, may be thus summarised:—A seafaring man, aged 32, had suffered from chest symptoms for two years. During the last year a swelling of the left clavicle appeared, and then shifted its position. No pulsation in the left axillary, brachial, or radial arteries could be felt. The left carotid artery seemed to have a diminished current passing through it. Considerable impulse existed behind the left sterno-clavicular articulation. Post-mortem examination revealed an immense aneurism of the arch of the aorta, measuring five inches horizontally and vertically. It had partially absorbed both sternum and clavicle in front, and posteriorly extended to the vertebral column. The sac was completely filled with laminated coagulum. The innominate artery was patent, but the left carotid and subclavian arteries were compressed and filled with adherent clot. Treating of the aneurismal swelling, Mr. Jones observes—"The latter also became less evident, from less distension of the sac and from the vessels taking origin from it being obstructed."

(*To be continued.*)

(f) Medical and Chirurgical *Transactions*, vol. i.
(g) *Clinique Chirurgicale*, Paris, 1810, p. 60.
(h) "Atlas de l'Anatomie Pathol.," liv. iii., planche iv.
(i) "Traité de l'Anat. Path.," t. ii., p. 763.

(k) *Dublin Quarterly Journal of Medical Science*, 1852.

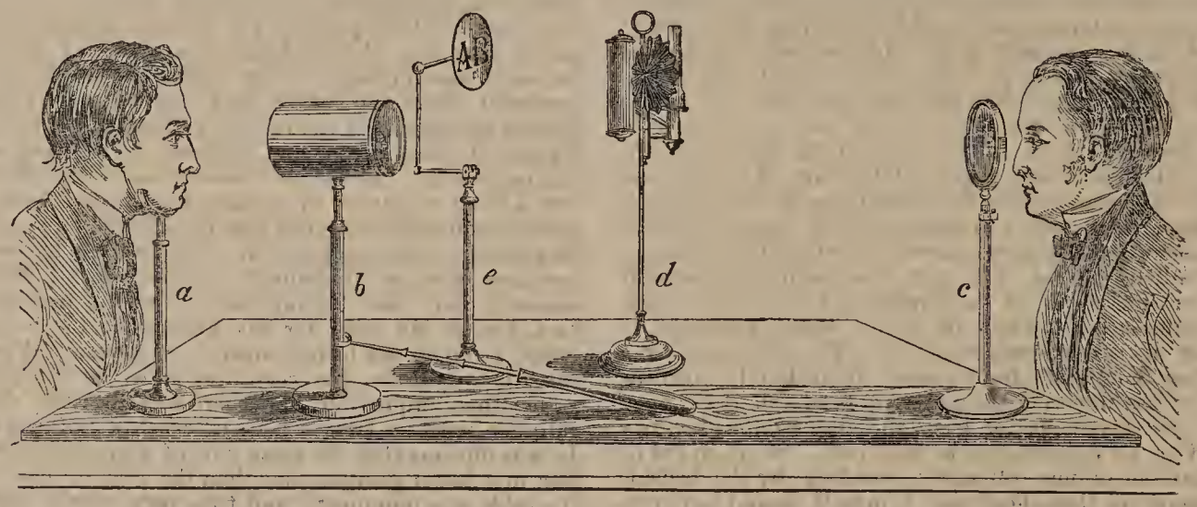
A CLASS OR DEMONSTRATING OPHTHALMOSCOPE.

By JABEZ HOGG,
Surgeon to the Royal Westminster Ophthalmic Hospital, etc.

At the Royal Westminster Ophthalmic Hospital various forms of demonstrating ophthalmoscopes have been tried and found wanting, consequently all were quite thrown aside long before I chanced to see Dr. Burke's reflecting mirrors in use. The demonstration I witnessed with this instrument was to a certain extent gratifying, although not perfectly satisfactory. Certain difficulties in its management produced doubts in my mind, and I ultimately came to the conclusion that it would not prove to be the practically useful ophthalmoscope I had in vain long looked for. Certainly for brilliancy and magnification of the image it was decidedly superior to any other in use. I soon became aware of defects due to the form and arrangement of the mirrors, and these I set to work to correct; but before my alterations were finished, I happened to be present at one of the evening meetings of the Medical Society of London, when Mr. Carter exhibited his modification of Burke's instrument, and which elicited a well-deserved meed of praise from the members present. This ophthalmoscope consists of the following parts—a bi-convex lens of eight inches focus, a perforated mirror of thirteen inches focus, a chin-rest and lamp, each supported on an upright adjustable tube. An instrument simple in construction, easy of management, and affording excellent results, it seemed to be all we could wish for; on a closer acquaintance,

however, some slight defects began to show themselves. It was found that the flood of light thrown off by the large mirror was productive of annoyance to those patients suffering from any inflammatory form of disease; that in some other cases a blurred and exaggerated appearance of the disc and vessels was observed; and only within a limited area was the image rendered perfect or equal to that obtained by the small hand-ophthalmoscope. It is, indeed, almost hypercritical to point to distortion, want of sharpness, and so forth, in an image produced by a bi-convex lens of long focus and four inches in diameter, the imperfectly finished surfaces of which give an increased amount of spherical and chromatic aberration, and a series of annuli with their confusing effects, rendered still more confusing and palpable when thrown upon the convex and concave surfaces of the eye. To lessen the evils spoken of I resolved to employ two plano-convex lenses with their convex sides turned towards parallel rays, which at once reduced the aberration to about one-fourth of that of a single lens in its best form. This gave far better results. By mounting each lens in a separate piece of tubing—one tube being slightly smaller than, and sliding within, the other, for the purpose of accurately adjusting the two—I obtained a sharp, well-defined image of the fundus oculi, far superior to, although not so much magnified as, that obtained by employing a bi-convex lens. A reflected image of the mirror annoyed me for a time, but this I got rid of by making the lens nearest the observer turn on its vertical axis, thus giving it a moderate degree of obliquity. An erect magnified image of the fundus is seen when the mirror alone is employed.

To set up the instrument for use, it is only necessary to bring the centre of the lens and mirror into the horizontal plane with the eye of the patient, then let a patch of light about the size of the eye fall upon the cornea. The focus is very nearly correct when a small image of the central opening in the mirror is seen brightly depicted in the spot of light on the eye. The long handle which is attached to the tube carrying the lenses is used to bring the fundus to the most perfect focal adjustment. The arrangement of the several parts of the instrument is shown in the accompanying woodcut, with the relative distances tolerably well preserved. The mirror, which has the usual central perforation, is hung in a gimbal by screws, and can be turned in any direction. It should be placed about forty inches from the eye under examination. The patient is represented seated at *a*, with his



a, Concave chin-rest, supported on a vertical tube, and made to slide up and down in an outer tube, and fixed by a biting screw at any given height. *b*, Pair of plano-convex lenses, with long horizontal handle fixed to lower part of tube, and stretching out towards the observer for assisting in adjusting the focus. *c*, Mirror hung in a gimbal by screws. The eye of the observer, when placed close to the central opening, is supposed to be forty inches from that of the patient. *d*, An Oxford reading-lamp, with screen for protecting the eye. *e*, Movable disc, with bold letters printed on its face, for fixing and directing the attention of the patient, and keeping the disc in the centre of the field of view. (By an error this is represented in a reversed position.)

chin firmly supported in a convenient concave rest, the foot of which is secured to the table. The lenses, mirror, and chin-rest are each fitted in upright adjustable draw-tubes, with screw clamps, for fixing at any required height. The eye of the patient should be turned slightly away from the bright spot of light, and kept directed towards some fixed object. A movable disc with a bold letter or two printed upon it (represented at *e*) will be found most convenient for the purpose. This assists, also, in keeping the optic disc in the centre of the field during the examination. The best illumination is obtained by employing an ordinary Oxford reading-lamp, and this should be placed at some convenient angular distance—about fourteen inches to the right or left of the observer. A small cardboard screen protects the eye from the diffused light emitted by the lamp, as represented in the woodcut.

The image obtained by the aid of this instrument is the counterpart of that seen when the hand-ophthalmoscope is used; and the ease with which it can be adjusted and the fundus kept in view is, I consider, an advantage and a great saving of time. A few seconds serve to put the instrument in position, and the merest tyro, equally with the experienced observer, will have no difficulty in using it. No specially darkened room is needed; the ordinary consulting-room, with the blind drawn down, is quite dark enough for a demonstration. The instrument may be seen constantly in use at the Hospital.

1, Bedford-square.

The St. Saviour's District Board of Works, Southwark, has appointed Dr. Bianchi, the Medical Officer of Health, the public analyst for the district. Dr. Bianchi had offered to perform the duties of the office pursuant to the provisions of the Act without extra remuneration.

ON SOME CASES OF

DIRECT INJECTION OF AMMONIA INTO THE CIRCULATION.

By R. W. TIBBITS, M.B., M.R.C.S.,
Surgeon to the Bristol Royal Infirmary, and Lecturer on Surgery at the Bristol Medical School.

A. W., aged 38, a labourer by occupation, was admitted into the Bristol Royal Infirmary with extensive indolent ulcer of left leg. This during the preceding five years had been twice completely healed, but on each occasion had broken out again in less than a week after resuming his work. About a year previously to his admission several varicose veins of the leg had been pinned, and at the time of his admission the veins at lower part of thigh were extensively varicose. In this state he was completely incapacitated from following any employment, and as advancing age would only make his condition worse, I determined to amputate. This I accordingly did through the upper third of leg, at the same time pinning two varicose veins of the thigh.

1st day after operation.—Pulse 110; temperature 101·2°; tongue dry. Complained of some pain in stump. Bandages ordered to be kept wet with carbolic acid lotion.

2nd day.—I was unable to visit the Infirmary, but Dr. Smith, the House-Surgeon, removed the bandages, squeezed out a considerable amount of odourless blood from between the flaps, and then dressed the stump with carbolic acid lotion.

3rd day.—1.30 p.m.: Patient insensible; countenance dusky; limbs cold and mottled purple; pulse imperceptible at wrist; body bathed in perspiration; still retained the power of swallowing. 2.30 p.m.: Had lost the power of swallowing. I now injected into the right cephalic vein mxl. of strong liquor

ammoniæ, diluted with ʒij. of water at a temperature of 98°. The effect was startling; just as the injection was completed the patient gave a sharp cry, every muscle became rigid, the head was thrown back and the teeth clenched—in fact, he presented much the appearance of a person seized with a sharp epileptic convulsion. In a few seconds, probably about ten, the pulse returned at the wrist, then came a gasp or two, and the respiration gradually settled down to thirty-four per minute. The surface of the body lost some of its purple hue, and the pulse continued fairly perceptible at the wrist. He regained also the power of swallowing. Ordered to have teaspoonful doses of brandy by the mouth every quarter of an hour, and an injection per rectum every hour of brandy ʒss., beef-tea ʒij. I intended to see this patient again in three hours, but he gradually sank, and died two hours and three-quarters after the injection of the ammonia. The post-mortem examination revealed nothing except a very fluid condition of blood, a total absence of clot in either side of the heart or in the pulmonary artery, and considerable congestion of lungs, spleen, and liver.

A. C., a farmer, whilst attending to a threshing-machine, was caught in one of the leather bands of it and terribly injured. This happened ten miles away, in the country. From thence he was driven in an open cart to the Infirmary, losing, from all accounts, a large quantity of blood during the journey. I was called to see him at 9 p.m. He was then in a state of intense collapse—perfectly pulseless, quite sensible, but very restless. His right leg, below the knee, was crushed into a shapeless mass. There was also an extensively comminuted compound fracture of the upper third of the femur on the same side. He had taken ɱxxx. of tincture of opium and many ounces of brandy since the occurrence of the accident. Ordered warm-water bottles to trunk and left leg, and to have half an ounce of brandy in warm water every fifteen minutes. He never rallied, and at 10.30 p.m. was perfectly insensible and had lost the power of swallowing. I now injected into the right cephalic vein ɱxxx. of strong liquor ammoniæ in ʒij. of water at a temperature of 98°. The effect was even more startling than in the former case. Immediately upon the completion of the injection the patient's head fell back upon the pillow. He gave a sort of gasp, the eyes remained widely opened, and to all appearances he was dead. So much did he seem so that one of my colleagues standing by the bedside made a remark to that effect, and I myself should have certainly thought so, but having my finger upon his wrist the pulse for the first time since his admission into the Infirmary became perceptible. Under such circumstances it is perhaps difficult to compute time correctly, but I should think that it was for fully a minute that he lay in this state without breathing; then at last he gave a gasp, and respiration quickly became again established. The pulse improved at the wrist, and he regained the power of swallowing. Ordered to have constant small doses of brandy by the mouth. For the next hour and a half I was engaged in the operation-room with another patient, but at the expiration of that time his pulse was fairly perceptible and he continued capable of swallowing. Still I did not feel justified in repeating the injection, considering that there was no possible chance of his rallying sufficiently to bear amputation at the hip-joint, which would have been necessary. He gradually sank, and died two hours later.

E. H., aged 28, a porter on the Midland Railway, on Jan. 26, 1872, at 7 p.m., was occupied in shifting the points about a quarter of a mile from Mangotsfield Station, when he was knocked down and run over by a passing train. He lay for some time insensible, then managed to reach a signal-post (how, I know not), and, turning on the danger signal, stopped the 1 a.m. train as it was leaving Bristol—six hours after the occurrence of his accident. He was then brought a distance of five miles to the Bristol Royal Infirmary, and I was called to see him at 4 a.m. His left leg was torn off about its middle third, and his right one was frightfully crushed. He was much bruised about his hip. Two of his ribs on the left side were broken, and a considerable amount of emphysema existed in the neck, trunk, and upper left extremity. He was perfectly sensible; the surface of body moderately warm, and the pulse at the wrist just perceptible. Ordered small quantities of brandy and water every ten minutes. At 5 a.m., or an hour later, in nearly the same condition—if anything, rather falling back than improving. Considering that the large amount of crushed muscle tended to keep up the condition of collapse, it was determined to give him the chance of amputation. I accordingly removed as rapidly as possible both his legs immediately below the knee, my colleague, Mr. Steele, very kindly taking up the arteries of the one whilst I was amputating the other. At the completion of the operation his pulse, which at first had slightly improved under the chloroform, became imperceptible; he was incapable of swallowing, and there seemed every probability of his immediately dying. As rapidly as possible I injected into the left cephalic vein ɱx. of strong liquor ammoniæ in ʒij. of warm water. Instantly the respirations became hurried. The pulse returned at the wrist, and gradually increased in strength. Perspiration broke out over the surface of the body, and at the expiration of about two minutes he vomited up a large quantity of fluid smelling strongly of brandy. After a short time I ventured to have him lifted from the operation-room table into his bed, applied warm-water bottles to his body, and administered an enema of brandy and beef-tea. Slowly but steadily he improved, fortunately suffering but little from his broken ribs, injured lung, and emphysema, and has since been discharged from the Infirmary with two excellent stumps.

Remarks.—*Case* No. 1: This was a case of intense septicæmia, and at the time of the injection the patient was far beyond the reach of any ordinary treatment. The effect produced showed that the dose of ammonia was too large, and also that, whatever its action may be in cases of snake-bite, in this instance it acted simply as an intense and immediate stimulant, prolonging for a short time the patient's life. *Case* No. 2: This patient was rapidly sinking from intense shock, caused by the frightful injury he had received and by excessive hæmorrhage. Here again the ammonia acted as a powerful stimulant, bring back the pulse and causing the patient to regain the power of swallowing; but it could not replace the lost blood, and without this it was useless continuing its use. In the next similar case that comes under my care I shall endeavour to combine transfusion with the injection of ammonia, believing that considerable advantage would be gained by this combination. *Case* No. 3: The result in this instance was an undoubted success; for I have not the slightest doubt that the injection saved the patient's life. In fact, had it not been for my experience in the two former cases, I should not have ventured to operate. When I amputated his condition was very desperate; he was falling back rather than improving, and there seemed little chance of his rallying with so large a mass of crushed and exposed muscle. It was obvious that the clean cuts of amputation would place him in a better position, but then the risk of his dying upon the table was imminent; and this very nearly happened, for when I opened his vein he was lying perfectly pulseless, hardly breathing, and incapable of swallowing. The change effected by the ammonia was immense; his pulse immediately became fairly established, and his breathing greatly improved. Soon he vomited up a large amount of fluid, showing how little had been absorbed from his mucous membrane during the condition of intense collapse, and also how useless it would have been, even had he been able to swallow, to continue pouring brandy into his stomach. The good effects of the ammonia lasted for some time, and then other stimulants could be administered with advantage. It seems to me that in the direct injection of ammonia into the veins we possess a stimulant *immediate* in its action, far more powerful than any other I am acquainted with, and capable of being administered in many cases where the patient is beyond the reach of ordinary stimulants.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

OPERATIONS.

Amputation of the Thigh for long-standing Suppurative Disease of the Knee-joint.

(Under the care of Mr. BIRKETT.)

JOHN B., aged 42, a mason, injured his left knee when 8 years of age; inflammation and suppuration followed, which resulted in a stiff joint. Up to eighteen months ago he was able to work, but he was seized with typhus fever in July, 1871, and suppuration again occurred in the joint. He has since been gradually losing ground, so that it became imperative to take some active course. Mr. Birkett preferred amputation to excision, because the reparative action necessary for recovery from the latter operation calls so much upon the constitution that excision cannot be wisely resorted to when the general

strength has been very much reduced by long-continued and exhausting suppuration. Amputation, Mr. Birkett remarked, was undertaken on the general principle that the patient's condition is improved, and his chances of recovery increased by removing the source of irritation and weakening discharge.

The limb was removed about the junction of the middle and lower thirds by the lateral flaps method. The vessels were secured by torsion, about eight slow half-turns being given to the femoral, and the edges of the wound were brought together by the continuous suture.

On examining the joint, it was seen that the synovial membrane and cartilages had disappeared, the ends of the bones were united by fibrous tissue, and the articular surfaces were very uneven from irregular absorption. A vertical section through the bones showed them to be healthy. There were abscesses burrowing the soft tissues around.

Stone in the Bladder—Lithotomy.

(Under the care of Mr. DURHAM.)

In this case the symptoms of vesical calculus had existed for eleven years. The patient was a gardener, aged 68, who had enjoyed fairly good health. He had long suffered pain about the bladder and on micturating, and his urine became thick from mucus, and occasionally blood-stained. During the last three or four years all these symptoms had been aggravated. Mr. Durham performed the usual lateral operation, using the straight staff, which is generally preferred at Guy's Hospital. The operation was completed with great celerity, and a small rough and hard stone removed. On passing the finger into the bladder a tumour or tumescence was felt projecting into the cavity of the viscus; this was an enlargement of the middle lobe of the prostate, which had no doubt caused some difficulty to the flow of urine, and would have offered a still greater impediment to the passage of fragments of stone had lithotrity and not lithotomy been resorted to. There were, too, other reasons which had influenced Mr. Durham to prefer the cutting to the crushing operation, and these were—first, the irritable disposition of the patient, which was decidedly opposed to a method which in any case is a severe test of the mental quietude of the sufferer; secondly, there was the enlargement of the prostate, though this in itself is not always a reason for lithotomising instead of lithotrising; and thirdly, the urethra was very small and irritable, and false passages existed.

Perineal Fistula, after injury, in a Boy—Plastic Operation on Urethra.

(Under the care of Mr. DURHAM.)

The patient, a little boy, had, one year and a half ago, fallen upon an iron spike, which penetrated the fore part of the perineum and produced a jagged wound of the scrotum. Much blood was lost at the time, and for two days blood flowed from the penis. Soon, however, the wound healed, with the exception of a small hole in the middle line immediately behind the scrotum, through which the urine has ever since flowed, none having been passed by the penis. A catheter could be passed along the penile urethra to the position of the fistula, but not beyond, so that Mr. Durham had formed the opinion that a severance of the urethra had taken place at the time of the accident, and a *cul de sac* had resulted at the distal end of the anterior portion of the lacerated urethra. Having passed a small catheter along the penis as far as it would go, Mr. Durham carefully dissected out the urethra, and found the point of the instrument projecting into a little *cul de sac*. In this he made a small opening, and after dissecting out the anterior extremity of the posterior portion of the urethra, he passed the catheter on through this into the bladder, and stitched together the margins of the two portions of the urethra. The catheter was left in the bladder. This case was a beautiful example of complete rupture of the urethra, and of the consequent establishment of a permanent fistula in perineo. Mr. Durham hoped, by bringing the margins of the tube together, that union might result, and a continuous epithelial lining be produced. This, however, was a difficult and unusual thing to effect after there had been a thorough destruction of the continuity of the mucous membrane.

THE GENERAL INFIRMARY AT LEEDS.

RARE DISLOCATIONS.

The two following rare dislocations have lately been in the Infirmary under the care of Mr. Samuel Hey:—

1. A man, aged 36, was admitted, suffering from a dislocation of the right knee. The accident was caused by his being caught in some machinery and twisted round; he did not know the precise way in which the limb was struck. On examination it was found that the inner tuberosity of the tibia rested on the anterior part of the external condyle of the femur; the head of the fibula could be felt distinctly under the skin, the leg being slightly flexed. The dislocation was easily reduced by flexing the leg, gently rotating, and then pushing the bone with the fingers into its proper position. The patient was kept in bed for a month, he was then provided with a leather knee-cap, and was discharged, walking about with but slight inconvenience.

2. A boy, aged 15, was admitted with a dislocation of the sternal end of the right clavicle backwards, caused by a crush from behind forwards between a cart and a wall. The deformity was very apparent, the end of the clavicle being situated behind the sternum. Neither respiration nor deglutition were in any way disturbed. It was difficult to decide with certainty whether the epiphysis was left attached to the sternum or whether the case was a true one of dislocation. The bone was easily replaced in position by placing the knee on the upper part of the dorsal spine and forcibly drawing the shoulders back. The patient was kept in a recumbent position without pillows for three weeks, when he was discharged cured.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.

Clinical instruction for the session 1872-73 was commenced on October 1, when many additional beds were provided for the medical and surgical departments. Operations have been numerous, and include excision of the elbow by Mr. Tyrrell, two amputations at the ankle, removal of the breast, extraction of cataract, and an iridectomy by Mr. Hayes. Mr. Coppinger, the Assistant-Surgeon, has obtained some beds, and lately he amputated a thumb for gunshot injury, and removed a large epithelioma from the lower lip. Excepting in the case of iridectomy the results promise to be highly satisfactory. The elbow was excised for strumous disease of long standing, which implicated the articular surfaces of the bones, and was attended with profuse discharge of pus. The amputations were performed in consequence of caries of the tarsal bones, and the breast was removed on account of a scirrhous tumour. Irideetomy was employed in the very faint hope of restoring some visual power to an eye which had been useless for twenty-three years, loss of sight resulting from injury inflicted by the spur of a cock, and the operation was performed because by recent accident the previously useful eye had been completely destroyed. At present the patient can but distinguish surfaces which reflect light or are of a whitish hue. The case of cataract is progressing most favourably, and it is Mr. Hayes's intention to remove the second lens, which is also cataractous, after the lapse of a few weeks.

HUTTEE SINGH'S HOSPITAL, AHMEDABAD.

POPLITEAL ANEURISM—DIGITAL PRESSURE—LIGATURE OF FEMORAL ARTERY.

(Under the care of Mr. A. S. G. JAYAKAR.)

J. A., labourer, aged about 40 years, was admitted on January 9, 1870, into Huttee Singh's Hospital with a large pulsating tumour situated in the right popliteal space, diagnosed to be an aneurism. The leg was strongly flexed on the thigh; there was a distinct thrill on the application of the hand to the tumour, and a loud blowing murmur on examining it with the stethoscope.

History.—About four months before his admission he accidentally fell down into a small ditch while he was carrying a heavy load on his head; the left leg went into the ditch, whilst the right one came forcibly and suddenly down on the ground. He seemed to have suffered no pain or inconvenience from the fall for eight or ten days, after which period he observed a small tumour gradually appearing in the popliteal space. The tumour went on increasing, and on his admission the measurement round his right knee was nineteen inches, whilst that round his left was only fourteen inches. The leg was swollen and œdematous, and on pressing upon the superficial femoral the aneurismal thrill and bruit entirely disappeared. Temperature of right popliteal space 91·5°; of the healthy popliteal space 92°. There was a distinct history of syphilis and rheumatism in the patient's case, though he seemed to be in fair health. He was ordered to take internally quinine and iron, and a flannel bandage was

applied round the leg. On examining the heart the second sound was found replaced by a short blowing murmur, best heard at the base. The œdema and swelling about the knee and leg having slightly gone down, digital pressure over the superficial femoral artery was applied on January 19 for ten hours continually, but it failed to make any impression on the tumour, and consequently on January 21, at 3 p.m., a ligature was placed round the artery at the apex of Scarpa's triangle. Before operation, measurement 18½ inches, temperature 96°; immediately after operation, temperature 95°, no pulsation felt or bruit heard, leg and knee well bandaged in cotton with a flannel roller; 6 p.m., temperature 96°.

January 22.—Tumour less by half an inch; patient quite comfortable; temperature of right leg, 96°. Evening: Had an attack of fever. Temperature in popliteal space, 97°; temperature of right foot 87°, left foot 87°.

23rd.—Wound nearly healed; no bleeding or any inflammatory signs about it. Measurement round the right knee, 17½ inches; temperature, 97°; left foot, 85°; right foot, 85°; hypodermic injection of quinine, and opium gr. iij. during the day.

On the evening of the 24th the temperature of the right foot fell considerably, being only 78°, whilst that of the healthy foot was 87°; measurement round the knee, sixteen inches.

25th.—A few blackish vesicles appeared over the skin covering the tumour, the temperature of right foot being only 70°, whilst that of the left was 77°; quinine again injected.

26th.—Temperature of healthy foot, 72°; of left foot, 75°; in the popliteal space, 99°. Evening: Temperature of right popliteal space, 99°; right foot, 80°; left foot, 87°.

27th.—Temperature of right popliteal space, 99°; right foot, 74°; left foot, 76°; had symptoms of constitutional irritation. Evening: Right popliteal space, 102°; right foot, 86°; left foot, 90°.

28th.—Right foot, 77°; left foot, 82°.

From this time the case again took a favourable aspect. At first, as may be observed from the temperature of the foot, there seemed to be no tendency to gangrene, collateral circulation being fairly established; but on the evening of the 24th the sudden fall of temperature in the right foot and the great difference between the temperature of of the right and left feet, together with the presence of black bullæ, left little doubt as to the ultimate issue of the case. About the beginning of February the temperature of the right foot again began to fall, and some more bullæ appeared on the dorsum of the foot and on the leg; but on February 8, when I had to leave Ahmedabad for a short time, the foot did not seem to be entirely without hope. On my return, on the 17th of the same month, I found the foot and the lower third of the leg in a state of gangrene. During my absence the aneurismal sac had sloughed and opened externally, giving exit to numerous clots of blood. He was ordered stimulants freely.

February 18.—The patient was brought under influethence of chloroform, and the aneurismal sac laid open freely in all directions, a large quantity of sloughs removed, and the whole cavity sponged with carbolic oil. Amputation of the leg was next performed at its lower third, just a little above the line of separation. The stump seemed to progress well at first, but on the 22nd osteo-myelitis set in, and although the aneurismal sac was looking healthy, amputation of the thigh had to be performed just above the condyles, on the 25th, with two lateral flaps. The constitutional and dysenteric symptoms which had set in from the commencement of gangrene in the foot gradually disappeared. The stump was perfectly healthy during the healing process, and had entirely healed by April 2. The patient was discharged from the Hospital on April 19, 1870.

Remarks.—There are many points of interest in the above case. Although digital pressure was applied continually for ten hours, it did not seem to affect the tumour in any way at all. The ligature at first seemed to be successful; in fact, so far as the immediate result was concerned, it may be said to have been so. The artery was easily tied; there was no injury done to the femoral vein; the pulsation and bruit disappeared from the tumour, and a diminution in its size took place; and lastly, there was a proper establishment of the collateral circulation within a few hours from the application of the ligature. Inflammation of the sac, evidently set in subsequently, attended with suppuration, and this, pressing upon the popliteal and tibial vessels, must have in my opinion given rise to gangrene of the foot. Perhaps a timely incision in the inflamed sac would have saved the foot and lower part of the leg from the impending danger. There is another point full of interest, when osteo-myelitis sets in it may almost always be laid down as a rule that, unless the limb be amputated above the next joint, the disease is almost sure to return. In the present instance an inch and a half of both the bones was removed from the stump after osteo-myelitis had set in; and the consequence was that although at first the bones appeared perfectly healthy, they were soon affected with osteo-myelitis, and hence the amputation of the thigh just above the knee.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 2, 1872.

THE QUALIFICATIONS AND DUTIES OF HEALTH OFFICERS.—No. I.

By the putting in action of the Public Health Act of the last session of Parliament, a large number of medical men will shortly be called upon to exercise the functions of Medical Officers of Health, both in urban and rural districts. Already, in anticipation of their election to the office of Health Officer, a number of medical practitioners have addressed queries to us, asking for information as to the nature of the duties that will be required of them; and we understand that the acting officers of the Association of Medical Officers have been deluged with like inquiries. We have, therefore, thought that a series of papers setting forth the qualifications and duties of Health Officers would be acceptable to our readers, since there is no English manual treating of the subject, with the exception of the admirable one of Dr. Parkes, which is devoted, however, almost exclusively to military hygiene. A manual for Health Officers, treating of the duties of such officers in general, and with some, though not too great, detail, is, we know, a desideratum in English medical literature. Seeing that, beyond the limits of the metropolis (which has some forty-six Medical Officers of Health), very few even of our large cities and towns, to say nothing of rural districts, have hitherto had the advantage of Health Officers, such a book could have appealed to but a very limited circle of readers. Soon, however, this will be changed, and a well-written handbook on hygienic administration will, we imagine, command a wide circle of readers; and a manual of this nature will form as necessary a part of the Poor-law surgeon's library as a manual on Poor-law administration. The Local Government Board, it is true, will doubtless set forth in a series of minutes what they conceive to be the duties and functions of a Medical Officer of

Health; but if we are to judge from the recent sketchy but perhaps inspired article on the subject which appeared in the *Times* of October 14 as to the character of the forthcoming first minute, as it is believed now in the course of preparation, such minutes will be of little real service to prospective Health Officers.

Notwithstanding that Liverpool, Bristol, Leeds, Leicester, Glasgow, Dublin, and some other large cities have for years had able and experienced Medical Officers of Health, it is indubitable that London is the great source from which we must seek to derive our stores of experience; for it alone has had the advantage of having been the field during the last sixteen years of a vast experiment in the administration of sanitary law under a variety of medical officers. These are, one and all, required by law to publish an annual report on the results of each year's administration. These annual reports on the health of the various metropolitan parishes and amalgamated districts form an embodied record of sanitary experience of extreme value, and, were they collected, would form an invaluable volume. But we fear that no complete collection of them could be made, though, thanks to the energy and zeal of its librarian, the library of the Royal College of Surgeons possesses the most valuable of them.

As regards the qualifications of special knowledge and of personal character which it is desirable that a Medical Officer of Health should possess, there is little to be said, for, as a rule, we believe that these will have little to do in securing the Health Officer for the majority of districts: political, social, and personal interests will govern the elections in all places where the electing body is not exceptionally disinterested; and it will be a rule, from which there will be few exceptions, that average medical men, rather than those specially qualified for the office, will be called upon to administer the sanitary laws. We are not sure that this will not in the end prove to be attended with some advantages, though also with many obvious disadvantages. It will tend to a wider diffusion of sanitary knowledge among the members of the medical profession, and it will invest the general practitioner with a greater sense of the importance and responsibility of his office, not only in relation to the individual welfare of his patients, but also of that of the public at large. Moreover, hygiene will henceforth form a necessary and indispensable part of the study of every medical practitioner and student. The teaching of hygiene can now no longer be shirked by our medical schools.

A Medical Officer of Health may reasonably be required to have an intelligent knowledge of the following subjects in their bearings on the public health:—Soil, situation, climate, air, water-supply, habitation, overcrowding, ventilation and warming, clothing, food, the physical peculiarities of his district, the removal of excreta and refuse, drainage, the habits and occupations of the inhabitants of his district, local manufactures, the ordinary prevailing sickness of his district, the laws of contagion, the prevention of contagious and infectious diseases, the best methods of dealing with outbreaks of epidemics, and statistics. To these he must add a fair acquaintance with sanitary law so far as it affects his functions, and, above all, he must acquire a capacity for administration, seeing that he will have to direct, and even educate, not only his subordinate officials, especially the sanitary inspector, but also the sanitary committee or other body under whom he acts.

Here certainly is a wide field and ample scope, but the newly appointed Medical Officer of Health need not be dismayed or despair at the extensive field of his duties, to be performed, we fear, at a very unremunerative rate. Speaking from long and close observation, we aver that the necessary knowledge and aptitude can be readily acquired by any well-educated medical man who will only bring sound common sense and a little acumen to bear upon his work. In succeeding articles we shall treat of the subjects enumerated, in the order in which, we conceive, they will present themselves to a Health Officer who commences to work a district *de novo*.

THE ESSEX POISONING CASE.

The second trial of Ellen Day Kittel, for the supposed murder of Elizabeth Kittel, came on at the Chelmsford Assizes on September 24, and resulted in the acquittal of the prisoner. The circumstances of the case are so remarkable, and the medico-legal points raised so important, that a brief account of them may not be unacceptable to our readers.

In October, 1871, there was living at Great Bromley, in Essex, a farm labourer named Kittel, in the employ of a substantial farmer, named Wenden. Kittel was a married man with several children, and he and his wife are stated to have led an unhappy life. Mr. Wenden had several daughters, and one of them, Ellen, the accused, lived with him. She, though only 20 years of age, appears to have conceived a violent passion for Kittel, and dropped expressions indicating that he was to be her future husband; and various indecent familiarities between the accused and Kittel during his wife's lifetime were deposed to at the trial. On a certain Friday in October, 1871, Mrs. Kittel was gathering sloes with her children in a field near Mr. Wenden's house, and about midday Ellen brought her a couple of bottles of beer. It appears that nearly the whole of the party, including Ellen, partook of the beer, and that several of them were shortly after seized with pain, vomiting, and purging. After this there was no evidence of any communication between Ellen Wenden and Mrs. Kittel till the succeeding Monday. Mrs. Kittel continued to suffer, and on Sunday afternoon she was seen by Dr. Cook, of Manningtree. He considered the case to be one of diarrhœa, supervening on liver disease, and prescribed for her accordingly. He did not see her again, and early on the morning of Tuesday the woman died, having suffered during the last twenty hours of her life from incessant vomiting and diarrhœa. All the Monday Ellen Wenden appears to have been unremitting in her attentions to the deceased, and, it was suggested, conveyed to her openly several delicacies; but at the same time she was indulging in language which implied a desire to get rid of her rival. After the death Ellen took charge of Kittel's house and children; and nine calendar months and six days after Elizabeth Kittel's death she was brought to bed, during the course of the first trial, of a fully developed male child. In December, 1871, Ellen Wenden married the man Kittel. Dr. Cook certified that the deceased died from liver disease and exhaustion; but, immediately afterwards, hearing that she had been found dead under suspicious circumstances, he induced the coroner to hold an inquest. It then appeared that the deceased had been found dead beside the bed in which her husband was sleeping; that she had sustained an accident by falling upon and breaking the chamber utensil, which had penetrated the vulva; and that she had sustained the loss of about a pint of blood. No post-mortem examination was made, and the wound was not even probed, but merely inspected. The medical attendant gave it as his opinion that the woman had died from syncope from loss of blood whilst suffering from liver disease, and a verdict was returned in accordance with the evidence. Subsequently, suspicion of the administration of poison was excited by the conduct of Ellen Wenden, now married to Kittel, and in April last the body was exhumed under an order of the Home Secretary. It is strange that even then only a partial examination of the body was made; the heart was not examined (a circumstance which was made much of in the speech of the defending counsel), but the stomach, certain portions of the intestines, the liver, the spleen, and the kidneys, were removed for analysis. These viscera were found to be saturated with white arsenic, which, indeed, could be picked off the stomach in the form of coarse granular fragments. The usual inflam-

matory and preservative effects of arsenic had been produced, and the mesenteric vessels were filled, even five months after death, with florid blood. Dr. Stevenson, who made the analyses, gave it as his opinion that death had resulted from the administration of arsenic, and not from hæmorrhage; but Dr. Cook, at the trial, still adhered to his opinion that hæmorrhage was the cause of death; and this opinion, formed shortly after the death of the woman, though apparently unsupported by any observed signs of death from hæmorrhage except the loss of a pint of blood, was held by the presiding judge to be more probable than an opinion arrived at by an expert six months after death. The non-examination of the heart at the exhumation was held to be an important omission, and it seemed to be thought by the bench and the bar that this viscus would, if it had been examined, have afforded indubitable evidence as to death having resulted from syncope or not. Seeing that it is only those organs of the body which directly imbibe arsenic that are preserved by the poison from decay, we much doubt whether an examination of the heart would have furnished any serviceable evidence for the elucidation of the case; but the necessity of examining every organ and part of the body, in forensic cases, is forced upon medical men by the results of this trial. It is never safe to omit anything.

Elizabeth Kittel's death may have been the result of three causes, and probably each of those causes contributed more or less to her death; yet we conceive that only one of them—the administration of arsenic—can be reasonably supposed to have been the real cause of her death. She herself believed that she suffered from liver disease; she was treated accordingly, and at the exhumation the liver was found to be remarkably small (it weighed 16½ ounces), but no signs of disease were detected in it beyond the smallness in size. The organ was, however, much decomposed; and it is a curious question how far the viscus might have become smaller and lighter after burial, by putrefactive and other changes. It is quite probable that such was the case. We cannot think, however, that liver disease, even if it existed, acted in any way towards procuring the death of the woman except by predisposing the system to the effects of the arsenic. The effects of this poison were too palpable and plain to our mind to permit us to doubt that arsenic was the real cause of death. We must admit, nevertheless, that the loss of a pint of blood in a person dying from poison—as, according to the evidence, Mrs. Kittel was at the time of the accident—may have somewhat hastened the fatal event; and thus a curious question arises: Did the woman in that event die from the poison? On this point Baron Martin, who tried the case, is reported to have said—"If the evidence should satisfy you (the jury) that the poison was administered with the intention of causing death, and that it so affected the system as to cause weakness, in consequence of which an accident happens, such as occurred in this case, causing loss of blood, the immediate cause of death, I am not prepared to say that the administration of the poison would not be a murder." There is little doubt that had a conviction ensued in this case an appeal would have been raised on this point.

Two other curious points were raised, and on one of them some valuable new light was thrown. The first was as to the smallest fatal dose of white arsenic for an adult. This is usually stated to be two grains, and this was maintained in this inquiry; but the medical expert deposed that he had seen a case in which doses of a grain and a half of that poison had been repeatedly given without a fatal result, though life was jeopardised. Such a remarkable case ought certainly to be made public. The other point was as to the identity of the poison administered. It will be remembered that the poison found in the body of the deceased was partly in the form of coarse grains; indeed, it presented every gradation in size between these and the finest powder. An attempt was made to connect this poison with a certain specimen of arsenic to which the accused was supposed to have had access—a specimen mixed with verdigris. The arsenic in this mixed specimen differed, it is true, in some respects from that found in the stomach; none of the grains of arsenic were quite so large in the arsenical verdigris as those in the stomach, and the former was more friable. But it is well known that porcellanous arsenious acid becomes friable and opaque when exposed to air and light, and it was justly observed by Dr. Stevenson that when a powder of various degrees of fineness is shaken in a bottle, the coarser particles rise to the surface and would be first removed, hence the half-ounce or so of arsenical verdigris presented to him—being the remains in a bottle from a larger quantity—would necessarily consist of smaller particles than many of those previously removed. The discovery of the arsenic mixed with verdigris led to a further analysis of the viscera. From three-fourths of the liver one-fifteenth of a grain of metallic copper was obtained, and the stomach yielded satisfactory evidence of an imponderable quantity of the same metal, but not a trace of copper salt could be found adhering to the arsenic removed from the stomach by mechanical means. Hence the attempt to connect the arsenic in the stomach with the verdigris and arsenic mixture utterly failed. It must be borne in mind, too, that copper is a by no means infrequent constituent of the liver; and though the quantity found in that organ in this case was unusually large, yet greater quantities have frequently been met with in the livers of sheep. Copper, too, is stated to be a common constituent of many articles of vegetable diet, but great doubts are thrown upon these statements by the fact that most of the analyses made have been performed by the aid of brass burners and lamps, and thus a fertile source of error has been introduced.

No one can doubt the justice of the acquittal. That the deceased met with her death from the administration of white arsenic no reasonable man can doubt; but by whom administered must remain a mystery. Suicide was not even suggested. Had the coroner ordered a post-mortem examination, as he indubitably ought to have done, the question of death from hæmorrhage might have been set at rest; arsenic would have been discovered, and the circumstances attending the death would have been more searchingly investigated whilst still fresh in the minds of those about the deceased. As it was, the inquest appears to have been one of those meagre and useless inquiries which too often obscure rather than elucidate the cause of death. We commend these considerations to the notice of the Middlesex Justices and of all those who wish to reduce the number of post-mortem examinations by order of the coroner on the score of expense.

BISHOP'S STORTFORD AND THE LOCAL GOVERNMENT ACT.

When the Local Government Act became law it was anticipated that in some quarters it would be carried out, notwithstanding its undoubted usefulness and value, in as far as possible a niggardly and inefficient spirit. The "impatience of taxation" on the part of those who had to bear the burden was but natural, and it has exhibited itself in some places in an unmistakable manner. But it was argued, and justly, that the good sense of Englishmen would meet the difficulty fairly, and, however the Act was administered by the Local Boards, it would not on any occasion be made an absurdity, and, after the taxation consequent upon it had been acquiesced in, it would not be made all but inoperative by the want of common sense and common prudence on the part of those who had to administer it. We venture to hope, and believe, that the case we are about to state is unique in its suicidal and short-sighted policy. Bishop's Stortford, some thirty miles from London, will be remembered by travellers on the Great Eastern Railway for its picturesque situation, its fine old church, and its apparently clean and healthy condition. This flourishing little town contains between five and six thousand inhabitants, most of

them well-to-do, and its pauperism is below the average of many towns in the county and much below many similar towns throughout the kingdom. When the Local Government Act passed, to carry out its provisions Bishop's Stortford taxed itself to the extent of some £20,000. The Local Board immediately set itself to work in right good earnest to do its duties efficiently. One of the main objections to the river which passes through the town as a disposer of sewage was, that it communicates with the Lea, which is one of the chief suppliers of water to the metropolis. It was essential that the sewage of the town should be diverted from the stream, and means were immediately taken by the Local Board to carry out this object, under the guidance of engineers fully qualified for the task; a system of deodorising the sewage, and making it useful for agricultural purposes, was initiated, and is now being carried out to what, we have no doubt, will be a most useful and beneficial result. The Local Board has in other matters not neglected its duties. But we now come to a phase in its transactions which is most incomprehensible and foolish. When the facts were first communicated to us they seemed so incredible, and the whole thing looked so much like a "hoax," that we were inclined so to treat it. Unfortunately, however, we regret to state that the facts are "too true." We have placed the statement we received before gentlemen of the neighbourhood of Bishop's Stortford, and they assure us that we have not been misinformed. Bishop's Stortford, notwithstanding its admirable position, its picturesque appearance, and its respectable community, is not free from certain nuisances constantly found in towns of its size. Collections of manure, offal, and other fertile sources of disease abound in its streets, yards, and out-buildings. Many of the inhabitants have constantly complained of this evil, unquestionably on good grounds. Accordingly, about three weeks since, the Board passed a resolution to the effect that the nuisances referred to should be removed once a week. No sooner was this order promulgated than it was denounced by certain persons as an attack upon "vested interests." An agitation was accordingly commenced, and carried on with such vigour that at the meeting of the Board on Saturday last a memorial was presented to them calling on them to rescind the obnoxious resolution. Strange as it may appear, this memorial was signed by thirty of the influential persons in the town, and, stranger still, by four out of six of the resident medical practitioners! Overawed or convinced by the formidable array of names against them, the Local Board actually rescinded their wise and sensible order. We should be obliged if the clerk of the Local Board would furnish us with a copy of this memorial. It must be, indeed, a curious document, and one worthy of being placed on record, not only for the sake of the interests involved, but to know on what grounds the memorialists found their opinions. If the "wise men of the East" still retain their character for "wisdom" and "common sense" they can have no objection that their "reasons" and their names should have more than a Bishop's Stortford celebrity. In sober seriousness this case is one calling for more than a passing notice, and, as the guardians of the public health, we direct especial attention to it, as an instance proving the truth of the axiom that "tyranny sometimes works with the machinery of freedom."

THE CORONER'S COURT.

Recent events have abundantly proved that if the coroner's court is to maintain its hold either on the esteem or respect of the public, the laws relating to it must be either considerably modified or altogether reformed. The essential object of the coroner's inquest is the prevention and the detection of crime. It is evident that an imperfect inquest, instead of effecting either of these objects, has the very contrary effect. "Unnecessary" inquests are to be deprecated; but, if an inquest be deemed necessary in any case, the inquiry should be full and exhaustive. In all cases of death under "suspicious" circumstances it is the bounden duty of the coroner to order a post-mortem examination to be made. If this be not made, the inquiry into the cause of death is not only imperfect and unsatisfactory, but, as has been lately proved, may lead to the commission of crime. Those who complain of the expenses incurred by post-mortem examinations take a short-sighted view of the duties which a coroner and his jury are called upon to perform. The expense of these examinations, if properly carried out, would, we are convinced, in the long run be found consistent with the spirit of true economy. The detection of a single crime by this means might prevent numberless offences against life, and by its example not only lessen the number of criminals, but consequently the expenditure of the county in prosecuting them. "Prevention is better than cure;" and the main object of a coroner's court is the prevention of crime. With respect to post-mortem examinations in certain cases, so long as the coroner's court is constituted as it is at present, it is an imperative necessity for the interests and safety of society that the question of the necessity of medical evidence in any particular case should be left to the discretion of the coroner. To do away with this power on the part of the coroner, to criticise it unnecessarily, or "rejudge his justice," would make the coroner's court a mere by-word and a jest. It is surely not the province of a bench of magistrates to assume to be judges on this important subject. We are certainly anything but satisfied with the present position of coroners and their proceedings. It is not for us to suggest a remedy for the abuses which undoubtedly exist in this department of our judicial proceedings, but some reform is unquestionably demanded. What that reform should be must be left for statesmen to carry out; but we unhesitatingly affirm the present state of things with respect to the court in question is most unsatisfactory, and therefore to be deprecated.

THE WEEK.

TOPICS OF THE DAY.

The election of Medical Officer of Health to the parish of St. George, Hanover-square, continues to attract no small amount of professional attention. We announced last week that of the fifty or sixty candidates for the office the committee appointed by the Vestry had selected twelve for a personal interview. From the twelve so selected they have this week chosen six from whom to make the final election. The six gentlemen are—Drs. Corfield, Stocker, Reginald Thompson, Bianchi, Roberts, and Seaton.

In case of the election of Dr. Corfield to fill the Officership of Health in St. George's, Hanover-square, the Islington Officership of Health will become vacant. We hear that Dr. Meymott Tidy and Mr. Haviland, who, it will be remembered, were both candidates at the last election, will again present themselves for the post.

The Association of Medical Officers of Health has drawn up an admirable set of suggestions for the purpose of rendering the working of the Adulteration of Food, Drugs, etc., Act of last session effective. These suggestions we publish in another column. The Association suggests that the analysts employed by the vestries and district boards should work conjointly on some pre-arranged system, that the work of analysing should be performed in a few laboratories—for the metropolis the Association suggests two,—and that skilled assistants should be constantly employed in conducting the analyses under the superintendence of the responsible analysts. To meet the expense of these laboratories it is proposed that all the metropolitan food analysts should contribute according to the amount of work done. The Association suggests that the remuneration of each analyst should be from £100 to £200 per annum, an amount which we should have thought hardly

sufficient to meet the working expenses and to allow anything like a fair remuneration for time and skilled labour. One of the most valuable suggestions of the Association is the sixth. It is to the effect that all appointed analysts should be strictly debarred from giving any certificate or testimonial as to the purity or impurity of any article of food, drink, or drug. Already we hear much of jobbery in various parts of the country under cloak of the new Act. It is quite clear that it may be made an instrument of great good by preventing the dishonest practices of trade and the injury which accrues from them to the public health and pocket. But it may be easily made an instrument of great harm. It may be made to encourage injustice, persecution, quackery, and all sorts of jobbery. We therefore would strongly reiterate the warning contained in these suggestions, and would impress its importance on the Local Government Board and on all district health authorities.

The Canadian newspaper press is calling especial attention to the condition of the Canadian emigrant ships. It seems that on board these vessels there is great over-crowding, no proper separation of the sexes, and that the provisions and hygienic arrangements are bad in the extreme. We would suggest that the requisite powers should be obtained for the Medical Officers of Health of British ports to inspect these vessels, and have the power of preventing any ship sailing in which the comfort and decency of the emigrants are not sufficiently cared for. The Emigration Commissioners are, we believe, responsible. They have large powers.

The horse epizootic which has prevailed in Canada, and is now rife in New York and other parts of the States, seems to be a kind of influenza. The mortality has not been great. In some parts of Canada it is said that three-fourths of the horses have been affected. The symptoms are—dulness, coryza, severe hacking cough, staring coat, and in severe cases pulmonary engorgement.

Suicides are reported to have increased in England in the last six years from an annual average of sixty-six to every million of population to an annual average of nearly sixty-eight to the million. The annual average of suicide by drowning has increased, by hanging has diminished.

The case of the young woman who was sent away from the Leamington Arboretum, a water-cure establishment, and died a day or two afterwards from typhoid fever, has attracted considerable attention. She was a domestic servant in the employ of one of the patients at the Arboretum. She had been ill for some days, and had been told by the bath-woman at the Arboretum that she had "black spots" on her body. She was treated hydropathically, and was seen by Mr. George Frank Maberly, the medical attendant, and proprietor of the Arboretum, previously to being sent away. She was sent on Friday, the 18th ult., in a first-class carriage to London. On arriving at her home she was seen by Mr. E. P. Young, Surgeon to the Western Dispensary, who pronounced her hopelessly ill from fever. She died on the following Sunday. As Mr. Young and Mr. Maberly do not seem to agree as to the nature of the young woman's case, we subjoin part of the evidence given at an adjourned inquest held by Dr. Hardwicke on Tuesday:—

Mr. Young, in answer to questions, said he was prepared to reiterate his opinion that the case was one of typhoid fever, and he was prepared to give further evidence in support of his statement. Mr. George Frank Maberly, who described himself as proprietor and surgeon of the Arboretum at Leamington, was then examined. He said deceased was staying there with the daughter of General Sir George Lawrence. She was delicate. On Sunday, October 6, deceased came to him and wished to go to church, but was unable to do so, as there was a sick child of Colonel Benyon's, whose wife was Miss Lawrence's sister. On Monday, October 7, deceased was ill, and he went to see her. He ordered her warm fomentations, and made a minute examination of the abdomen and other parts of the body, and failed to discover spots or hear any gurgling. On Wednesday she was able to attend on Miss Lawrence and enter into rational conversation. On Thursday she entered into conversation with Miss Lawrence about accounts, and he understood she had expressed a wish to go home; but it was not in his presence. On Friday he went to the deceased's dressing-room, and, addressing deceased, said, "Ellen, do you wish to go—are you able to go?" She said, "I wish to go," and Miss Lawrence then sent her up to London in a first-class railway carriage. She walked down the steps alone, and was, he believed, supplied with some wine and biscuits. There was no foundation for a statement that there was any case of typhoid fever in the establishment. He was a Member of the Royal College of Surgeons, but held no medical degree. He had not had time to go up for it. She did not show any bad symptoms of giddiness, but she had pains in the head. During the last six months two boys had died from affections of the brain from tubercular causes. It was true that symptoms of diarrhœa preceded typhoid fever. She was, in his opinion, in a fit state to travel in a railway carriage. There was nothing contagious in her symptoms. Mr. Young was then again examined by Mr. Woods, and repeated his evidence, that when called to see deceased on Friday week he found her in an exhausted state, with an irregular pulse of from 140 to 150, and pain over the abdomen, which increased on pressure. She had diarrhœa, and he was told she had just come from Leamington by railway in that state. There was great heat of body. He told her mother, when asked, that she was in a critical state, and he looked upon her case as hopeless from the first. The tongue was dry and in the same state as invariably exhibited in cases of typhoid fever. The brother called and asked his opinion, and he said she was dying, and that she was sinking from symptoms of typhoid fever, and must have been suffering from it before her removal from Leamington. The mother of deceased called upon him for a certificate, and as she expressed her regret that deceased had been sent away from Leamington in such a state, on consideration he declined to grant it. On the last occasion he stated that if cold water was applied it would prevent excretion from the skin, and he adhered to that statement. Deceased must have contracted the disease before she left Leamington; she could not possibly have caught it between her arrival at the Leamington station and getting home. It was difficul to ascertain at first sight a case of typhoid fever.

At the termination of the inquest the jury returned the following verdict:—

"That the deceased, Ellen Sarah Hiscocks, had died from the effects of typhoid fever, and that, in their opinion, the proprietor of the Arboretum at Leamington had not used sufficient judgment in removing the deceased, and that the water-supply of Leamington was in an unsatisfactory state."

We cannot but think that it was a pity, whatever might have been the nature of the case, that a young woman so ill should have been allowed to travel up to town by herself; and we therefore endorse the substantial justice of the reproof contained in the verdict of the jury. The absence of any report of a post-mortem examination in the case is, however, to be regretted, as the lesions of typhoid fever are sufficiently evident in most instances, and in all probability all doubts about diagnosis might at once have been cleared up. At Leamington we hear that it is denied that any typhus exists in the town; but is there no typhoid?

FEMALE MEDICINE AND QUACKERY.

Wandering the other day through the wilds of central London, we came across a shop devoted to the sale of a quack nostrum warranted to cure all manner of diseases. Apparently nothing else was to be had in the place; but a placard stuck in the window attracted our attention. From it we learned that in this abode of science a lady-member of the Female Medical Society, Licentiate of Midwifery of the Ladies' Medical College, or otherwise possessed of some such honours, could be consulted there within certain hours. Well, just as we expected and predicted! No sooner do such ladies acquire a modicum of knowledge, however small, than they ally themselves with what every medical man holds in abhorrence—quackery.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

The half-yearly general meeting of this Society took place on Wednesday evening, October 23, in the rooms of the Royal Medical and Chirurgical Society, Berners-street. The chair was taken at half-past eight by the President, Dr. Burrows. The statement of the Acting Treasurer showed receipts during the half-year ending June 30, available for the payment of grants and expenses, amounting to £1522 1s. 3d.; the grants made were £1271 10s., the expenses £144 14s. 3d., leaving a sum of £135 17s. to meet any further demands on the funds. The number of widows relieved during the half-year was fifty-five, that of children forty-three, and extra assistance from the Copeland Fund had been given to two children suffering from incurable diseases. The chairman called the attention of the meeting to the great loss sustained by the Society by the death of Martin Ware, Esq., formerly President, and that of Robert B. Upton, Esq., honorary member and solicitor. Dr. Burrows stated that Mr. Ware was the son of one of the founders of the Society, and had always been most active in working for its welfare, had filled the offices of Director, Vice-President, and President. Mr. Upton had by his professional advice rendered most essential services to the Society, more especially when the Charter was obtained, for all which Mr. Upton had most generously refused any pecuniary remuneration. The following votes of condolence and sympathy were unanimously passed:—

"That the Society, being informed of the death of Martin Ware, Esq., formerly President, wish to convey to his family by the Secretary their deep regret, esteem, and condolence."

"That the Society have heard with great regret of the death of their valued friend and solicitor, Mr. Robert B. Upton, and the President and members generally are anxious to convey to the late Mr. Upton's family their deep sympathy with them in their bereavement, and also their great sense of gratitude for the many valuable services rendered to the Society by the deceased."

The proceedings were brought to a close by a vote of thanks to the Chairman.

CHOLERA.

Bad tidings have been received from Poland, where cholera has derived a fresh impulse from the late holidays of the Jews. On the occasion of their autumn holidays they generally flock in great numbers from the country and the villages to the larger places, throng their narrow places of worship, filled with offensive, foul air, for the greater part of the day, inflicting upon themselves and their children fasting and other religious observances. This, as well as the large meals of unwholesome food in which they are used to indulge in the intervals of fasting, has given new strength to the epidemic. The largest increase has been witnessed in Lemberg and its vicinity, where the total number of cases of cholera has been augmented by about 300 within the last two weeks of September. Up to October 1 in the whole province of Gallicia 224 places have been visited by cholera. The number of cases known amounts to 6941, out of which 2176 ended fatally, 2196 recovered, 1130 remaining under medical care. Warsaw, too, and the whole of Russian Poland is still gravely infected. The only course adopted by the authorities there, with the exception of Petersburg, is to conceal the facts. Another outbreak near the Baltic coast, close to the Prussian frontier, is reported to have taken place quite recently in a little place named Shetellen. In St. Petersburg itself no fresh cases have occurred since the 5th ult. The epidemic there has extended over three months and a half, with 3413 cases and 1693 recoveries, making a daily average of thirty-three cases, and a percentage of ½ per cent. in 650,000 inhabitants.

From Hungary we hear it is officially announced that the cholera has broken out in the district of Gumbinnen, in the vicinity of the town of Johannisburg, and that several cases have proved fatal. Ninety-four cases of cholera have occurred at Buda, twenty-seven proving fatal. Twenty-nine soldiers were taken ill simultaneously, and five of them have died.

Typhoid fever has lately been raging in Berlin, owing, as is believed by the medical profession, to the infection of the water by sewage in consequence of the extraordinary drought of this summer. The average mortality is about 4 per cent. Doctors advise their clients to abstain from water as a drink altogether if possible—at least if not boiled previously.

CHOLERA AND DENGUE IN INDIA.

The *Times of India* says that cholera is very prevalent on board the shipping at Calcutta. Out of the 600 native soldiers quartered at Trichinopoly, 530 are or have been down with dengue. A correspondent, writing from Calcutta on October 4, states—

"I believe we may now hope that the cholera epidemic of 1872 in the Bengal Presidency has come to a close. Though less fatal as regards numbers than many that have preceded it, it has been of an unusually virulent type where it has attacked. I have not been able to obtain trustworthy statistics of its effects on the civil native population, but I gather that the deaths fall not far short of 100,000. The returns from the army are of course accurate and up to date. The whole number of European troops attacked, inclusive of women and children, is 750, of whom 480 have died. The native troops, with the exception of the large garrison of the Punjaub frontier force at Kohat, have escaped with comparative impunity, having had in all less than 100 cases, with from 30 to 40 deaths only. At Kohat, however, the disease was very fatal, there having been nearly 80 deaths out of 130 seizures. It is a remarkable feature in this epidemic that the hill stations and convalescent depôts have been especial sufferers. Dugshai lost 22, Kussowlie 27, and Murree 28. Subathoo and the new station of Chukrata were also visited, but very lightly, while in none of them were the native inhabitants or the surrounding population otherwise than ordinarily healthy."

ROYAL COLLEGE OF SURGEONS, IRELAND.

Last Monday, the 28th ult., the session 1872-73 was formally opened with an address by Dr. Edmund W. Davy, Professor of Medical Jurisprudence in the College. Dr. Frederick Kirkpatrick, President, occupied the chair; and the lecture-room was largely filled by members of the Profession and by students.

In the opening sentences of an admirable address, Dr. Davy paid a graceful compliment to the memory of the late Dr. Beatty, formerly one of the collegiate professors. He then proceeded to speak of the importance to medical men of an accurate acquaintance with the science of forensic medicine. Students were to seek proficiency not in Surgery and Medicine only, but also in medical jurisprudence, whereby they might be in a position to assist the law in the discovery of crime. Secret poisoning was now a thing of the past—a result to which the ability of medical explorers had greatly tended. No more interesting study lay before the student of Medicine than that of poisons—animal and chemical—and their antidotes. To this branch of the subject the lecturer then directed the more particular attention of his audience.

DISEASE AND MORTALITY IN LONDON AND THE COUNTRY.

Scarlet fever continues to prevail at Oldham, Birmingham, and Manchester, in which places 117 deaths occurred last week from this epidemic.——Small-pox is declining at Portsmouth, but fever was fatal at Sheffield and Hull.——During the four weeks ending October 12 the mortality in Kensington was only 13·26 per 1000.——Two cases of small-pox were removed from St. Marylebone parish last week to the Small-pox Hospital at Homerton.——Small-pox has appeared in a very virulent form in different parts of Bradford.——Scarlet fever is very prevalent at Radcliffe, and several cases have appeared at Prestwich.——In the Whitechapel district, during

the quarter ending September 25, Mr. Liddle reports as follows amongst the pauper population :—The medical officers of the Union have attended, during the last quarter, 1151 new cases of illness out of the workhouse—including 26 of small-pox, 31 of measles, 3 of scarlet-fever, 29 of hooping-cough, 30 of diarrhœa, 4 of fever, 79 of febricula, 1 of pyæmia, and 10 of erysipelas. In the corresponding quarter of the previous year, the number of pauper cases of illness was 2657, including 174 of small-pox, 101 of measles, 8 of scarlet-fever, 28 of hooping-cough, 83 of diarrhœa, 29 of fever, and 14 of erysipelas.——The health of the metropolis continues highly satisfactory; the death-rate was 22 per 1000 last week.

AN AMERICAN HEALTH RESORT.

THE *Times* correspondent, writing from Minneapolis, Minnesota, on the banks of the Upper Mississippi, on September 23, says :—"Though the cold as registered by the thermometer is very great, being through the winter many degrees below zero, it is mitigated by a bright sun and a clear and dry air. While the winter is bracing, the summer is not so hot as to be relaxing, and lasts about seven months or upwards out of the twelve. The seasons can be predicted with considerable certainty. When winter commences after the 'Indian summer' of October and November it manifests an earnestness about which there can be no mistake; and when spring dissolves the snow and the ice, vegetation commences at once and proceeds with tropical rapidity. A residence in Minnesota is recommended by American physicians to patients suffering from diseases of the throat and lungs, and I have met several such seekers after health. A consumptive patient, according to European views, could be subjected to a temperature of 20° below zero only on the kill or cure principle, but it is said that the bright sun and clear dry atmosphere of the Minnesota winter has a beneficial effect, even when the tubercular stage of phthisis has commenced. A poor fellow from the South, whom I met at the log hut of a Danish settler out in the forest, was evidently far gone. He had dragged himself from the bed he scarcely hoped ever to leave in order to come up the Mississippi to Minnesota, and related with much satisfaction that he was able to shoot all day, and had increased 9 lb. in weight since he arrived. I left him starting to pass the night at a hunter's camp eight or ten miles from the cabin where we met."

"FINIS CORONAT OPUS."

MR. O'BRIEN, having lately retired from the medical charge of Johnstown Dispensary District, co. Kildare, after a service of fifty-two years, has been presented by the Dispensary Committee and other friends with a splendid carriage and a purse containing 230 sovereigns, accompanied by the following address :—

"Dear Sir,—Your retirement from the charge of this medical district affords us the occasion of expressing to you our feelings of respect and regard, requesting you to accept a testimonial of our gratitude for the manner you have discharged its important duties for a period of fifty-two years. At the time of your appointment your district comprised more than three of the present medical districts, with less than half the present remuneration, and we bear our willing testimony that you never sacrificed your duties to the poor for private practice. You have endeared yourself to the poor, and you enjoy the respect and regard of all your neighbours. With ardent wishes for your enjoyment of health and happiness, we remain your sincere and devoted friends."

HOSPITAL SUNDAY, BIRMINGHAM.

THE collections in the different churches on Sunday last in Birmingham and suburbs amounted to the handsome sum of nearly £5000. This year it goes to the funds of the Queen's Hospital, and will nearly wipe off the debt which hangs upon that excellent institution.

SANITARY SCIENCE IN DUBLIN.

WHAT between Dr. Cameron's lectures at the Exhibition Palace, Mr. O'Leary's lectures at the Mechanics' Institute, and the efforts of the new Sanitary Association, our friends in Dublin appear to be determined at last to seek how they may vindicate the honour of their city, and render obsolete its *soubriquet* of "Dear, dirty Dublin." We learn that a general meeting of the members of the Sanitary Association is to be summoned for November 14, when reports of the working committee and various sub-committees are to be brought forward. Meanwhile, the working committee holds weekly meetings, and has already reported to the health authorities respecting nearly 200 cases of overcrowding, defective sanitary arrangements, and local fever outbreaks.

CHAIR OF ANATOMY AND CHIRURGERY, TRINITY COLLEGE, DUBLIN.

ON Saturday last the Board of Trinity College, by a majority of votes, re-elected Dr. Benj. G. MacDowel to this Chair. It has, however, been resolved upon to set apart a portion of the professor's fees as an endowment for a new chair of Comparative Anatomy. To the latter no appointment has yet been made. We believe that a very strong feeling of dissatisfaction at the splitting up of so valuable a Professorship prevails both in the School of Physic, Trinity College, and in the outer medical world of Dublin.

HEROISM OF AN ARMY SURGEON.

DURING a late incursion of Indians on a station in Honduras, Assistant-Surgeon Edge, who has worn uniform scarcely twelve months, behaved with great gallantry and heroism, and succeeded with Lieutenant Smith in driving off the enemy after a prolonged and bloody struggle. General O'Connor has addressed a letter to the *Times* on the subject, and Major Johnston, in command of the troops in Honduras, has sent home the strongest recommendation of these officers to the Horse Guards.

SANITARY INSPECTORS UNDER THE PUBLIC HEALTH ACT.

THE following petition was signed at the annual meeting of the Herefordshire Medical Association, on October 30, by all the members present, and will be forthwith transmitted to the Local Government Board :—

"*Petition from the Herefordshire Medical Association to the Honourable the President and Members of the Local Government Board.*

"My Lords and Gentlemen,—We, the undersigned medical practitioners in the city and county of Hereford, several of whom will in all probability be called upon to act as Officers of Health under your honourable Board, beg respectfully to bring under your notice the great necessity—as it appears to us, in order to secure the efficient working of the Public Health Act—of appointing as sanitary inspectors only such gentlemen as are competent by education and experience to conduct and give authority to those important questions which must have to be brought before them by the Officers of Health.

(Signed) "HENRY VEVERS, President,
and Twenty Members of the Association."

"UNION IS STRENGTH."

AT a meeting of the Poor-law Medical Officers of the Cavan Union, held at Cavan on Wednesday, October 16, 1872, the following among other resolutions were unanimously adopted. Proposed by Dr. O'Reilly (Ballynagh), seconded by Dr. Thomson :—

"That we now form ourselves into a Union Poor-law Medical Association, with permanent chairman, secretary, and treasurer—Dr. Moore (Cavan) to act as chairman, and Dr. Malcomson as secretary and treasurer."

Proposed by Dr. Malcomson, seconded by Dr. Thomson :—

"That, as 'union is strength,' we will zealously endeavour to co-operate with the other Poor-law Medical Officers throughout the county, so as eventually to form a county association, and to bring ourselves into immediate connexion with the Irish Poor-law Medical Officers' Association."

BRITISH MEDICAL BENEVOLENT FUND.

At the usual monthly meeting of the Committee, held on Tuesday last, the sum of £122 was distributed in grants among seventeen applicants. Eight other cases were either postponed for further inquiry or passed over as unsuitable for relief. A vote of thanks was passed to T. Holloway, Esq., for a donation of £50, through the chairman, Dr. G. C. Jonson.

FROM ABROAD.—PROFESSOR CHAUFFARD ON THE ETIOLOGY OF TYPHUS—A NEW RULE FOR DOSES—MEDICAL EXPERTS.

Professor Chauffard, at the meeting of the Académie de Médecine, October 15, developed some original views on the "Etiology of Exanthematic Typhus." He observed that all classical works on the subject declared that typhus may be voluntarily produced, it sufficing for large agglomerations of men to be exposed to want and great physical and moral suffering. Overcrowding, defective ventilation and cleanliness, insufficient or improper food, cold, fatigue, depression from defeat, and the too superficial interment of the dead, have been deemed sufficient explanations of the occurrence of typhus in camps, armies, and besieged cities. But without denying the considerable part such causes may play in its generation, the history of the late war shows that other factors must be taken into consideration. For did not all these etiological conditions exist in their full potency during the sieges of Metz and Paris? and yet typhus, which was so naturally expected, did not prevail in these cities. The various diseases which did afflict both their civil and military population were all characterised by one common feature—viz., an adynamic, putrid, ataxic, or typhoid condition. The slight vital resistance that existed was shown by the ravages which were caused by purulent infection; but of exanthematous typhus "not a single case of the disease was met with, either in its complete form or in its irregular forms, or in the milder form termed relapsing or abortive typhus." At Metz, where overcrowding, wretchedness, and famine prevailed to a greater extent than in Paris, typhus did not prevail, as we know from very detailed medical histories by observers who were present during the siege, and by the evidence after it was raised of such distinguished Germans as Frerichs, Niemeyer, and Langenbeck. Still more surprising is the fact that while the besieged city was spared by typhus this disease committed great ravages amongst its assailants, who were victorious, well-provisioned, and widely disseminated.

Other essential and major etiological conditions must then be present, and these M. Chauffard believes will be found in circumstances connected with race, soil, and climate. He illustrated his views by narrating the progress and development of typhus which attended the invasions of 1814 and 1815, and the return of the troops from the Crimea in 1855 and 1856. The fever contracted in foreign lands was only introduced into France by importation, and the epidemics thus introduced into a soil that was not their own speedily became extinguished, not finding there the elements of fecundity and renewal provided for them elsewhere. "There are, then, in our race, climate, and soil, conditions which do not favour the acclimatisation of typhus among us." If it be objected that there are observed slight epidemics in prisons and the hulks, and other local epidemics met with in Algeria, it may be replied that it would be very difficult to show that most of these were not due to importation, while in many of these occurrences it is possible that true typhus has been confounded with typhoid fever of unusual form, cerebro-spinal meningitis, etc.

The general conclusions, then, at which M. Chauffard arrives are—(1) that we should not limit the occasional causes of typhus to the deleterious effects of wretchedness and overcrowding, and that by means of these factors alone we could not produce the disease; (2) that race and soil supply the essential and major conditions of the etiology; and (3) that typhus, like cholera, should be ranged among epidemic diseases having an exotic origin, and which, appearing on the soil of France only by importation, are unable to acclimatise themselves when so imported. M. Chauffard developes these points in the *Bulletin* of the Academy of the above date at considerable length, and with great knowledge of the history of the disease he is treating of.

Dr. E. H. Clarke proposes, in the *Boston Medical and Surgical Journal* for September 26, "A New Rule for Doses." After adverting to the two rules hitherto in use, that of Gaubius and that of Young, contained in Paris's "Pharmacologia," he goes on to say:—

"Physiological experiment has shown that the weight of animals is not only as important an element in apportioning doses as age, but is probably a more important one. Thus, Dr. Fraser, in his recent admirable monograph on Physostigmia and Atropia, has shown that the minimum lethal dose of sulphate of physostigmia for rabbits is 0·04 grain for every pound; and M. Claude Bernard has called attention to the fact that in physiological experiments the dose should vary with the weight of the animal. Clinical experiment shows that men in this respect are not unlike other animals, and that in the administration of remedies the dose should vary with the weight of the patient, in order to obtain the best therapeutical result. Assuming the weight of an adult to be 150 lbs., for whom an appropriate dose is 1, the dose of most medicines must be increased or diminished in the proportion of the weight of the patient to that number of pounds. This proportion is represented by a fraction, whose numerator is the patient's weight, and whose denominator is 150. If a child at birth weighs 6 lbs., the appropriate dose would be $\frac{6}{150}$, or $\frac{1}{25}$; if it weighs 10 lbs., $\frac{10}{150}$, or $\frac{1}{15}$. A child 2 years old, weighing 20 lbs., would require $\frac{20}{150}$, or $\frac{1}{7\frac{1}{2}}$, which is exactly half-way between the quantity indicated by Gaubius and that indicated by Young's scheme. A person whose weight is 200 lbs. should have $\frac{200}{150}$, or $1\frac{1}{3}$ of an average adult dose. A child 12 years old, weighing 75 lbs., would require $\frac{75}{150}$, or $\frac{1}{2}$ of an average dose."

We extract from the same number of this journal some excellent remarks on the shortcomings of medical experts, which are just as true in their application to our own country as in that for which they were written:—

"Medical expert witnesses in the present order of things generally accomplish little to forward the cause of justice either through their impartiality, their mature judgment, or their power of telling what they know so that others may also know it clearly. Scarcely a trial in the civil or criminal courts occurs that does not bring into unenviable notoriety not the medical witness alone, but the Profession which he represents. It is a scandal and a reproach to all decent physicians that, by the methods at present employed to fortify partisan interests in courts of law, the medical profession should allow itself to be so disreputably compelled to prop up one-sided justice. We need not cite a single case of all those which recently in this country have reflected such discredit on the Profession, or specify in detail any of the notorious instances, on the one hand, of the absolute incompetency of expert testimony, so that innocent men are brought to the foot of the gallows, to be saved from execution only 'by the interposition of Providence;' or, on the other, of experts so partisan and so forgetful of their position, that they make the witness-stand the vantage ground for the recrimination of their fellows and for the indulging of professional acrimony. This state of things grows out of the ignorance of medical men in matters pertaining to medical jurisprudence, and out of a legal system which permits the employment of expert testimony in a partisan way, no matter how serious the issue at stake. It will continue until more systematic instruction is given in the medical schools in the practice of legal medicine, embracing technical study in the law as well as the medicine of the subject. It will more especially continue until some amendment is made in the prevailing system of summoning medical witnesses—theoretically to testify as experts, but in reality to give opinions as medical advocates."

A resolution was adopted at a public meeting at Hackney, on Monday, calling upon the Vestry to carry into effect the provisions of the Baths and Washhouses Act by providing baths and washhouses for the use of the public.

SUGGESTIONS FOR THE EFFECTIVE WORKING OF THE ADULTERATION OF FOOD, DRUGS, ETC., ACT, 1872.

At a large meeting of the Association of Medical Officers of Health, held October 28, it was resolved that the following report of the Association should be printed and circulated :—

1. That, in their opinion, the Adulteration of Food Act, 1872, notwithstanding its imperfections, is capable, with proper management, of being made an important and valuable public measure ; but to this end it will be necessary to carry out its several provisions in the fullest and fairest manner, having proper regard for the interests of commerce and trade, as well as for those of the public.

2. That if the Act be put in force in this metropolis, it will be most desirable and expedient that the several analysts appointed by the vestries and district boards should work conjointly, and in accordance with some pre-arranged system. This will not only be the means of securing uniformity of results and agreement of opinions, but it will also serve to check the conflict of scientific testimony, and will afford the best guarantee for the full, fair, and effective working of the Act.

3. That to this end, as well as for the sake of economy, it is advisable that all the work of analysis throughout the metropolis should be performed in as few laboratories as possible, —say two ; and that skilled assistants should be constantly engaged therein to conduct the analyses, under the superintendence and in the presence of the appointed analysts.

4. That as this will entail a large expense, it will be necessary for each of the food analysts appointed by the vestries and district boards of the metropolis to contribute, *pro ratâ*, according to the amount of work done, towards the maintenance of the said laboratories, etc.

5. That, guided by the practical experience of two of the members of the Committee—namely, Dr. Letheby, the Professor of Chemistry in the College of the London Hospital, and Dr. Stevenson, the Lecturer on Chemistry at Guy's Hospital,—the Committee are of opinion that the work of analysis, etc., under the Act, cannot be fully and effectually performed at a less charge to the vestries and district boards of the metropolis than from £100 to £200 per annum to each of the appointed analysts ; for, in considering the question of salary, the Committee have had regard, not merely to the great expenses of the laboratory, but also to the time and attention required from each of the analysts, in the supervision and conduct of his laboratory work, and in the proceedings which must arise out of it.

6. The Committee are strongly of opinion that if a too strict economy is exercised by the local authorities who are appointed to carry out the provisions of the Act, whether in this metropolis or in the country, the objects of the Act will not be attained, and the interests of the public will not be served ; for the Act will either become a dead letter, as in the case of the Act of 1860, or it will be made the medium of persecution, and perhaps also of the most offensive quackery. Already there is evidence of this, and we submit, for the earnest consideration of local authorities, that those who are appointed analysts under the Act should be strictly debarred from giving any certificate or testimonial as to the purity or impurity of any article of food, or drink, or drug, other than for the purposes of the Act, and every certificate should be so worded as to prevent its use for advertising trade purposes.

7. That as the success of this Act will largely depend on the manner in which the duties cast on the Inspector are carried out, it is considered advisable that he should be under the direct control of the local authority or of the analyst in purchasing or procuring samples of food, drink, or drug, for analytical examination.

—Hy. Letheby, M.B., President.

The Rev. C. Hargrave, a Roman Catholic priest, of Port of Spain, West Indies, unable any longer to dispel the doubts caused by the doctrine of Papal infallibility, has resigned his clerical offices, and commenced the study of Medicine at the University of Cambridge. A few sessions since another Roman Catholic priest, the Rev. John Bonus, of Greenwich, resigned his clerical functions, and has completed his professional studies at University College Hospital, London.

REVIEWS.

Diseases of the Ovaries : their Diagnosis and Treatment. By T. Spencer Wells. London : J. and A. Churchill. 1872.

The publication of this book is the event of the present medical season. It has long been looked for, and much further delay would almost have justified impatience and remonstrance.

Some seven years ago the author issued a provisional volume, containing the history of 114 cases of ovariotomy, interspersed with a variety of practical matter and pathological details ; and in the interval he has kept faith with the Profession by recording from time to time in the journals and the *Transactions of the Royal Medico-Chirurgical Society* every step, whether true or false, in the progress of his practice of this operation. Naturally enough curiosity was thus periodically stimulated, and the rapid advance which was announced seemed gradually to establish and enforce a claim on the part of those who were looking on, either in the interest of science, or with the anxiety of suffering to know more. As the completion of the unprecedented number of 500 operations approached, the obligation of justifying his work and giving to others the benefit of so much observation and experience was as freely admitted as it was strongly urged. But human powers are limited, and the working hours of the day fly so quickly, that the marvel is how, with calls incessant and imperative, time has been found to face and to fulfil a duty such as this. In the book now presented to us Mr. Wells has perfected a work of art and science, of which he may rightly be proud, which the whole Profession may accept with self-gratulation as it feels the reflected honour, and which, on behalf of suffering womankind, the world at large must welcome as a general boon. Every surgeon must study it for himself, and our task is simply that of pointing out the treasures it contains, and urging attention to some of the important questions which it opens up.

The book consists of a series of twenty well-arranged chapters, crowded with facts, advice, suggestions, and things introduced incidentally out of the fulness of knowledge, which will for a long time serve as a rich quarry for investigators in search of well-authenticated illustrative matter. It reminds us much of early classical medical literature—the writings of Harvey, the Hunters, and the Bells—in which everything bears the impress of individuality, and we find the teachings of the master clear, concise, and, so far as based upon personal knowledge, dogmatic. The author reasonably assumes that, with unrivalled experience, he can speak with authority, needing no support or corroboration from contemporary followers ; and he leaves those who are curious and captious to seek out for themselves the shades, and nebulosities, and contrasts of thought and practice emanating from other sources, and floating about his own settled views, doctrines, and dicta. The book is therefore remarkably free from quotations, and there is satisfaction, open it where one may, in the certainty of being in direct relation with the author, and learning at once what he knows upon the subject, without the distraction, not to say the confusion, of a multitude of other men's opinions ; though at the same time evidence crops up everywhere that these, even the most recent, have been carefully weighed and allowed their due influence in directing thought and determining conclusions. This is very manifestly the case in the first chapter, on the Anatomy and Physiology of the Organs of Generation. Everything presents itself in the most condensed form ; but without entering into discussion, or tracing out for the reader the stages by which he has arrived at it, the author's position as holding some of the most advanced philosophical views on the subject of structure and development is plainly indicated.

Very few diseases of the ovaries come under the notice of the surgeon without some appreciable increase in bulk, and this may be either of the organ as a whole, or of some part of it. The pathological and practical part of the book is consequently a treatise on ovarian tumours, and such other abdominal and pelvic growths as may simulate them or require much the same treatment.

The classification adopted by Mr. Wells is as simple and natural as can be expected in the present state of pathological science, and objection can only be made to parts of the nomenclature ; but we believe that the time is not far distant when the greater part of both notions and nomenclature now accepted will have passed away before clearer light, and be known only as historical curiosities. He arranges all into two groups—ovarian tumours and extra-ovarian tumours. The

ovarian tumours are of three kinds—adenoid, fibrous, and malignant. The extra-ovarian tumours are developments of cysts naturally existing in neighbouring parts, such as the vesicles of the Fallopian tube, or the tubules of the parovarium, or of cells found accidentally on the adjacent peritoneal surfaces, in the shape of aberrant ova. Now, as the ovary is not in any sense of the word a gland, but merely a mass of formative cells, as it so happens, more closely packed in the human subject than in most of the lower animals, its component cells having very different function and destiny from the cells of the true glands, the term "adenoid" is evidently only a compromise, and is used conveniently, in compliance with ordinary pathological custom. This theoretical classification of ovarian tumours is intended to express the author's views as to their origin and mode of development. But he says, "for descriptive purposes, and in order to discuss more consecutively the necessary remedial procedures, it will be better to arrange the simple cysts into two classes:—

"1. Ovarian.

"2. Extra-ovarian.

"The compound adenoid tumours also fall into two divisions:—

"1. The multiple, consisting of cysts aggregated together.

"2. The proliferous—parent cysts filled with cysts of secondary growth;

"Leaving for after consideration the tumours arising from fibrous and malignant growths."

The infinite variety found in the contents of these ovarian tumours quite baffles description. But as a curiosity of compactly disposed matter and facts coming under personal observation, we cannot help pointing out the account given of what are usually called dermoid cysts. Of these Mr. Wells has met with an extraordinary proportion, with contents of the most anomalous kind. Many of the osseous parts were most beautifully preserved by Dr. Junker, and have been presented by Mr. Wells to the College of Surgeons. They may be seen in the museum.

But the practitioner will turn instinctively to the chapter on diagnosis, and here he will not be disappointed. This is saying a great deal, for we know only too well the Protean forms that these diseases assume, and the almost endless difficulties which arise in coming to a definite opinion as to their exact nature and condition, and in distinguishing them from the abdominal enlargements due to other causes. Cancer, tubercle, and encysted dropsy of the peritoneum, tympanites, phantom tumours, fibroplastic and fatty tumours of the peritoneum, hydatids, pregnancy, uterine fibroids, renal cysts, distended bladder, fæcal accumulation, pelvic abscesses, hæmatocele, enlarged glands, aneurism, and pelvic enchondroma have all, at one time or other, been mistaken for ovarian tumours. These subjects are so fully discussed, so much acumen is brought to bear upon them, such an amount of information is given respecting them, so many wise counsels, cautions, and instructions are laid down for guidance in investigating and judging of cases in which questions involving them occur, that it is no great exaggeration to say, that if any man has had the power of mastering and retaining what is to be found in this chapter, he has almost made himself, so far as they are concerned, infallible.

In the hands of the author diagnosis may be carried much farther, and the different kinds of cysts distinguished from one another, the nature of their contents foretold, and their freedom or the extent of visceral and parietal adhesion indicated. But this is the work of an expert, and book-knowledge avails little. What is known is here told; but the mode of manipulation, the delicacy of tactile perception, the power of balancing and estimating the value of minute differences in the sensations conveyed by examinations, are personal gifts, or acquisitions made by long time and experience, such as can be accorded to but few individuals.

The author goes on to explain his method of inquiring into and recording his cases. And here we touch upon a clue to one of the secrets of his success. He appends the printed form which he uses for his notes; and this appears to be in daily use. The most minute details of the nature of the disease are entered as soon as known: every peculiarity of operation, every misadventure, every counteracting influence during the treatment, every hint for improvement, every physiological and pathological fact of importance—all find their place of easy reference. Nothing is lost; memory can play no tricks; imagination is wing-bound, by the *ipsissima verba*, jotted down as much as possible at the time things are seen and done. Who can calculate the value of the store of information bound up in these 500 note-books of cases? for, concentrated as is the matter on every page of the printed work, we are quite sure that much more remains for future telling.

And this brings us to the subject of treatment. Medicine can do but little; and the author, though a surgeon, has reason on his side when he says—"The sum of medical doctrine, therefore on the subject amounts to this: palliate where you can; do no mischief where you cannot. . . . . The question when surgical aid really is required, or how long a patient should be left to ordinary medical care undisturbed by any surgical treatment, is one which is daily occurring in practice; and the answer should be framed upon some such common-sense rules as the following:—So long as the patient does not suffer much pain, is not annoyed by her size and appearance, has no great difficulty in locomotion, does not suffer from injurious pressure on the organs of the chest, abdomen, or pelvis; and so long as the heart and lungs, digestive organs, kidneys, bladder, and rectum perform their functions tolerably well, surgical treatment is seldom called for. It is only a projected marriage, or a necessary voyage, or some such family circumstance, that may justify or render expedient earlier resort to surgical aid. Under ordinary circumstances the surgeon would not interfere until an ovarian tumour either distressingly deforms a patient, or seriously impedes her locomotion, or prevents the free action of heart or lungs, or obstructs the circulation through the large veins of the abdomen, or by deranging the digestive organs leads to emaciation and weakness, or by its pressure causes pain, loss of rest, or mechanical obstruction to bladder or rectum."

The surgical treatment of ovarian tumours comprises something more than ovariotomy, though Mr. Wells's name is principally associated with that operation. Simple tapping through the abdominal wall is occasionally followed by a radical cure; and several cases are related by the author to prove this. He, moreover, has taken great pains to sift thoroughly the whole subject of tapping in ovarian disease, in order to ascertain the true weight of the objections often urged against the practice, its importance as a curative measure, and its influence on the safety of the operation of ovariotomy when preceding it once or several times. The conclusions he comes to are stated in the following propositions:—

"1. That one or more tappings do not increase considerably the mortality of ovariotomy.

"2. That tapping may often be a useful prelude to ovariotomy, either as a means of gaining time for a patient's general health to recover, or of lessening shock by relieving her of the fluid a few hours or days before removing the solid portion of an ovarian cyst; and

"3. That when the syphon-trocar, which I brought before the profession in 1860, is carefully used, in such a manner as to prevent the escape of ovarian fluid into the peritoneal cavity, and the entrance of air into the cyst, the danger of tapping is extremely small."

Tappings through the vagina and rectum require much more caution, are more dangerous, and should be employed only in exceptional cases.

Boinet, of Paris, and Krassowski, of St. Petersburg, have been hitherto the surgeons best known as practising the treatment by injections of iodine; but the number of cases for which it is suited is comparatively small, and there seems to be no great advantage in it over the simple abdominal tapping. Krassowski's results are very unsatisfactory, and even Boinet sums up what he has to say in these words: "Never treat any other tumours with iodine than the simple, movable, uncomplicated cysts with thin, unchanged walls, and clear, serous, or sanguineous, or purulent contents. Trust only to ovariotomy for the removal of any other kind of cyst."

Judging by the way in which surgeons from all parts and countries crowd to see the operation of ovariotomy, one might conclude that the great interest of the book would centre in the chapters which treat of the mode of its performance. This is not the case. Curiosity will necessarily lead to their general perusal, in the same way that we followed every detail of the narrative of the laying of the first Atlantic cable; but only a few men, such as Keith, of Edinburgh, or Kœberlé, of Strasburg, or some others who have advanced to a certain number of cases of ovariotomy, can enter with full appreciation into all that the writer has thought fit to state and illustrate in reference to every stage and proceeding of the operation. Unlike amputation, or herniotomy, it is not likely to become a work of common adoption, and will probably remain more or less exclusively in the hands of a limited number of experts. The fact that in cases where it becomes necessary there is always time to wait, that the patients can generally bear removal, the formidable nature of

the task itself even under the most favourable conditions, the uncertainty of the complications which may be met with as it proceeds, the almost inevitable necessity of some modification of the way of dealing with the pedicle in every case, the perplexities which arise in the after-treatment, the criminality of any man's attempting it whose ordinary practice furnishes the least suspicion of morbid poison, and the difficulty of securing the all-important isolation and skilled nursing, are a concatenation of circumstances which carry away from most men the probability of their ever being engaged in the actual operation. Perhaps the greater part of us ought to be thankful that our lines are laid in smoother tracks; but we happen to know that, already, some of the men who are cautiously and skilfully following in the footsteps of the author have in recent cases found and acknowledged the guidance they wanted under peculiar emergencies, and have gratefully expressed their obligation. After such testimony to the value of the practical part of the book, what more has an ordinary critic to say?

But we are especially concerned to know the results of practice so extended as that of Mr. Wells. Time was when the operation required apology and justification, when Lawrence could publicly moot the question, "Whether attempts to treat diseased ovaries by surgical operations can be encouraged and continued without danger to the character of the profession," and the leading medical review could denounce the operation as "one which, though it may excite the astonishment of the vulgar, calls neither for the knowledge of the anatomist nor the skill of the surgeon," and declare that, whenever an operation was performed "so fearful in its nature, often so immediately fatal in its results, a fundamental principle of medical morality was outraged."

In spite of discouragement such as this, Mr. Wells, on his return from the Crimea, commenced his career as an ovariotomist. With him it was a matter both of feeling and principle. He was touched by the sight of numbers of women lingering hopelessly, and dying miserably; he read all that others had to relate, experimented on the lower animals himself, and carefully prepared in every way for an undertaking which had the commendation of his deliberate judgment. About midsummer of this year he had completed 500 cases of ovariotomy. It was time to speak, and let the light of simple facts dispel the mists of fears, prejudices, and misrepresentation. And in stating the case as it now stands, it would be wrong to use any other words than those in which the author chooses to express himself. In the chapter on "The Results of Ovariotomy and Subsequent History of Patients who Recovered," he writes—"The fact that of 500 women who have had one or both ovaries removed, 373 have recovered from the operation, is alone sufficient to justify the principle of the operation, and to prove that the mortality—namely, 25·4 per cent.—is smaller than that of many capital operations which are constantly performed without hesitation in suitable cases. And when we consider that a patient from whom the ovary has been removed can scarcely be said to be mutilated, as she is perfectly capable of fulfilling all the duties of a wife and mother, menstruating regularly, and bearing children of both sexes, without any unusual suffering either during pregnancy or labour, all doubt as to the 'legitimacy' of ovariotomy must be at an end. And the operation ought to be accepted as a more certain means of saving life from threatened death, restoring the sufferer to perfect health, and rendering her more apt for all the requirements of daily life than in the case of a patient who recovers after almost any other surgical operation."—P. 473.

So much for the operation itself; and as for the consequences upon the women subjected to it, after obtaining information by circulars and other means from all the survivors, he tells us that he is "able to say that thirty-five women who were unmarried at the time of the operation have married since; that 14 have had one child, 6 two, 3 three, and 3 four children; 2 have had twins. Of 259 women who were married when the operation was performed, 23 have had one or more children since; of 25 I could obtain no information—the circulars were returned through the post-office marked 'Gone away' or 'Not known'; 310 were in good health in 1872, many of them adding that they were well and strong, or better than they had been for many years, or some such phrase expressive of their complete restoration. A few complain of some trifling ailment, and a few have died at various periods, of disease—in some connected, in others not in any way connected, with the operation." (P. 475.)

This is the first time in the history of Surgery that such an extended inquiry has been instituted into the subsequent condition of so many patients who have recovered from so important an operation under the care of one surgeon; and it is pre-eminently satisfactory. It not only clears away every vestige of doubt as to the morality, safety, and advantages of the operation of ovariotomy, but it effaces every little aspersion of ignorance and imbecility; it has set flowing copious streams of simple but eloquent gratitude from the happy patients, and has secured for the author of so much good the full assurance that his early aspirations were not visionary dreams, and that the path which his ambition led him to select for doing useful service in his day and generation has, through the faithful performance of his allotted task, brought him at last to the full possession of the goodwill, respect, and confidence of the Profession. It is, however, all very well to say that a man finds compensation in the consciousness of having done his duty faithfully to his fellow-men, of having been true to the dignity, and zealous and successful in the work, of his Profession, in listening to the freely given praise of his brother-workers who know best the severity of his trials and the dangerous pitfalls he has escaped in his career, and in receiving the heartfelt thanks of the cloud of rescued witnesses whose living voices testify to his unremitting skill and kindness; but this is not enough. If science is advanced, if suffering is sensibly lessened, if valuable lives are saved in noticeable numbers, if the Profession is honoured and the world at large benefited by the persevering labours of any one man, it is only just and seemly that the country to which he belongs, and which derives lustre from his citizenship, should publicly recognise his merit, and reward him with honourable and hereditary distinction.

NEW BOOKS, WITH SHORT CRITIQUES.

The Hospital Prayer-Book. Arranged by Edward J. Waring, M.D., F.R.C.P. J. and A. Churchill, New Burlington-street.

*** The author of this interesting little volume is favourably known to the promoters of cottage hospitals as a fellow-labourer in their cause. Although many excellent manuals for the use of patients have been framed (some of which are in the catalogue of the Christian Knowledge Society), we think there will be both room and welcome for the present author's endeavour to encourage and guide devotional exercises in hospitals. Some forms of prayer have been composed for the private use of sick persons, but Dr. Waring's aim comprises the observance of united acts of worship and prayer for Sundays and each day of the week. He has also appended a choice selection of approved hymns, and it may be hoped that where facilities can be found the voice of praise may be heard in these spiritual songs, to soothe and gladden the heart of many a Christian in the season of infirmity and tedious confinement. Perhaps few publications of the kind deserve a more cordial reception than this work of a zealous layman. The devotions are expressed in great part in words of solemn piety, familiar to the memory of all who value the Book of Common Prayer (or the standard formularies of the English Church), and all are simple, natural, and unstrained, and in a spirit congenial to the minds of our people. We trust that committees of hospitals and chaplains of these institutions will make themselves acquainted with this little volume which attempts to edify our afflicted brethren, and that they will find reason to thank the author for the labour of love which we commend to their notice.

Salt and Son's New Illustrated Catalogue. Fifth Edition.

*** A marvellous collection of every kind of surgical instrument, artificial limbs, trusses, abdominal and umbilical belts, apparatus for all kinds of bodily deformity, respirators, etc., illustrated excellently. Viewed apart from its intrinsic merit and its value to the medical practitioner as a book of reference, it is interesting as a work of art, and its perusal will well repay the reader.

Hospital Sunday.—We repeat the question (says the *London Mirror*) which we put some weeks ago. "How long is London to be without a Hospital Sunday?" It seems unaccountably strange that London, the great centre of the philanthropic operations of the country, should not profit by the example set by many of the provinces; and we therefore express the hope that some common action will be taken on the part of our charitable institutions to extend the movement to the metropolis.

GENERAL CORRESPONDENCE.

PUBLIC ANALYSTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I should feel much obliged if you could inform me whether a public analyst, under the new Act, is expected to perform a quantitative or simply a qualitative analysis of food, drink, etc. The fee of five or ten shillings would be a small remuneration for the time, trouble, and responsibility without the addition of a salary; but the law does not, I believe, require a public analyst to possess a medical qualification. It appears almost impossible for Medical Officers of Health to undertake the work of "public analyst," as the duties are directly opposed to each other—the one being indoor, the other outdoor work. Still, however, every Health Officer should possess sufficient knowledge of chemistry to perform a preliminary analysis of water, food, etc., in the absence of a public analysis. I am, &c., A PHYSICIAN.

P.S.—I believe there is no work published on what might be termed the "ready method" of detecting adulteration of bread, etc., by chemical tests.

"RATIONAL THERAPEUTICS."

LETTER FROM DR. MERYON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The above title, which I have selected for a short essay on the functions of the sympathetic system of nerves as a physiological basis for a rational system of therapeutics, has been adopted for a text to an article in the *Medical Times and Gazette* (October 26) for the purpose of protesting against a system of therapeutics so founded.

The article is written in so amiable a spirit, and in such flattering terms respecting my essay, that I do not hesitate to offer a rejoinder, in the same expression of feeling, in vindication of the theory I have ventured to enunciate.

In the first place, it is objected that I found my system on phenomena "connected with the most highly specialised mode of force found in the body." But it can be no disparagement to a theory which relates to the action of medicine that it should be associated with tissues which are coextensive with the vascular tissues themselves, on which the nutrition of every part of the animal body depends; and if a correlation can be established between the nerve-force of the sympathetic system, as manifested in the distribution of the blood-current and medicinal action, surely it must be a step towards the removal of the rebuke of empiricism which has ever attached to Medicine, and also towards the establishment in its place of a comprehensive knowledge relative to the phenomena of life, their relationship with each other, and, when that relationship is disturbed, the data which are necessary to form a scientific theory for the administration of remedies with the view to its readjustment—to establish Medicine, in fact, as an inductive science.

The next exception taken to my essay is the omission of any remarks on the solubility and diffusibility of medicines. With respect to the importance of the first property, I may say, *ça va sans dire;* but, as regards their diffusibility, I regard local action as a strong point in my theory. I have pointed out that we have many medicinal agents which localise their power on some special organ, just as the localised ganglionic centres of innervation have a localised function; and I am, in truth, disposed to think that if we had drugs which exerted their attributes on one organ exclusively, we might have a more perfect system of therapeutics.

To the stricture that before a centre can respond to a nerve stimulus it must be properly nourished, I would reply that the three forms of nerve fibres of the sympathetic system are capable of adjusting the healthy balance of circulation; and that by such means every part of the body may be and is properly nourished, if the condition of the blood be suitable for its nourishment. My friendly critic asks, "How is the ganglionic nerve-force brought to bear on the leucocytes as they change their shape in the blood or permeate the various structures of the body?" Incidentally I have attempted to explain how such drugs as quinine, beberiæ, etc., may influence the blood by acting on the nerves of Remak, and so preventing the undue formation of white corpuscles which are never destined to arrive at the stage of red corpuscles, and the physiological phenomena which result.

My theory is censured because it does not explain the action of pepsine and hydrochloric acid on the stomach in the act of digestion; but a moment's consideration will suffice to satisfy the reason of any therapeutist that those drugs are given to supply to the stomach elements in which it is supposed to be deficient, whilst, in point of fact, I do suggest remedies which, by acting on the vaso-motor nerves of the stomach, are calculated to induce a healthy secretion of those elements.

In my essay I have expressly stated that I do not refer to those remedial agents which act mechanically or chemically, but on those only which have an influence on the vaso-motor nerves; and the great majority of drugs with which we are acquainted will fall into the category of these latter. It is a sketch only, but a comprehensive sketch, of my theory that I have ventured to publish; and if there be truth in it, as I firmly believe there is, I cannot see that it is possible to overestimate its importance. I am, &c.,

EDWARD MERYON, M.D., F.R.C.P.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, OCTOBER 22.

T. B. CURLING, F.R.S., President, in the Chair.

DR. W. H. DICKINSON contributed a paper "On the Morbid Effects of Alcohol as shown in persons who trade in liquor." The paper is a contribution to the morbid anatomy of alcoholism founded upon a comparison of post-mortem appearances between persons trading in liquor and persons occupied independently of it, and not known to have been drunken. The assumption that people who get liquor for nothing drink more than those who have to pay for it, is, the author said, justified by the common tendency of mankind, as well as by the notorious inebriety and liability to delirium tremens of potmen, waiters, cellarmen, draymen, brewers, barmen, and publicans—the chief members of the liquor-trading class. The paper is based upon an analysis of the post-mortem and casebooks of St. George's Hospital for a period of thirty years. This comprised the particulars of the examination of the bodies of 149 traders in liquor. For comparison, there were taken from the same source the same number of examinations of persons otherwise and very variously employed, chosen by rule so as to afford a fair standard. The full details were tabulated and laid before the Society. Tabular abstracts, representing the condition of each organ in the two classes, were incorporated in the paper. The two classes were first compared with reference to the distribution of in-door and of out-door occupations, in order to ascertain how far any morbid differences might be due to a different measure of exposure to weather. The result was that of the alcoholic traders 4 to 3, of the non-alcoholic 3 to 4, worked in-doors—no great disparity. A comparison of the ages at which the members of each class died showed that to trade in liquor costs $3\frac{1}{2}$ years of life; the alcoholic trader dying on an average at the age of 36·8 years, the non-alcoholic at 40·6; the shortness of life on both sides being partly due to the calculations referring only to hospital patients. The morbid changes belonging to the two series were then considered in detail, the organs being taken in the order in which they would be reached by a fluid absorbed by the veins of the stomach. Passing over the stomach, the changes in which are not always evident to rough morbid anatomy, it was shown, with regard to the liver, that in the alcoholic series was a great and unmistakable increase of cirrhosis, which disease was found in twenty-two persons of the alcoholic, to eight of the non-alcoholic series; the liability to cirrhosis being thus nearly trebled by a liquorous pursuit. Fatty degeneration was also increased. In the lung, pneumonia proved to be rather less frequent with the alcoholic, but empyema, as distinguished from simple pleurisy, belonged especially to the alcoholic series. The most important conclusion related to tubercle, which in every shape was most frequent in the alcoholic traders. As the relation between alcohol and tubercle has been the subject of some difference of opinion, it was shown in detail that under alcohol every kind of disease of the lung to which the term tubercular could be applied was increased. The increase, however, was greatest where the disease was certified as truly tubercular by the concurrence of

disease of the same kind in other organs. This multiple form of the disease affected thirty persons of the alcoholic series, nineteen of the non-alcoholic. Tubercle, including all kinds, affected the lungs in sixty-one persons of the alcoholic, to forty-four of the non-alcoholic class. It was further shown that in each of the following organs—the brain, the liver, the kidneys, the spleen, bowels, mesenteric glands, and peritoneum,—tubercle was at least twice as common in the alcoholic as in the non-alcoholic category. The conclusion is inevitable that alcohol engenders tubercle. As to the heart and arteries, atheroma and fatty degeneration were found most numerously in the alcoholic series; endocarditis and pericarditis in the non-alcoholic. With regard to pericarditis, though less frequent under the influence of drink, it was more often suppurative, following the same rule as pleurisy. Hypertrophy of the left ventricle, unconnected with valvular or aortic change, dependent therefore upon minute arterial change, such as is often associated with granular degeneration, was also most frequent in the alcoholic series, and its excess was greater than could be explained by the increase of renal disease. The brain in the alcoholic class displayed a marked preponderance of inflammatory affections of every kind, and of hæmorrhages. Under the same influence there was also a decided excess of such accumulations of watery fluid as indicate that an atrophic process has taken place in the cerebral substance. Next were considered the morbid results of accidents and injuries in the two classes. It was found that in the alcoholic class the power of healing was weakened and processes of repair rendered slow and unsafe by liability to diffuse cellulitis, and, in general terms, by the substitution of purulent and non-adhesive products, apt to spread and disseminate, for those of the adhesive and circumscribing sort. Lastly were considered the kidneys, which have been credited with a morbid susceptibility to alcohol much in excess of what is warranted by facts. These organs were described as natural, or presenting no change beyond simple congestion, in almost exactly the same number of cases in the two series. Tangible renal changes were noted in eighty-two persons on the alcoholic side, in eighty-three on the non-alcoholic. Thus, if one kind of renal change is encouraged by an alcoholic pursuit, others are to some extent diminished, so that the total is unchanged. Under alcohol the most marked excess was in the number of kidneys described as enlarged, coarse, and congested. Lardaceous disease, possibly in connexion with the fewer accidents among the traders in liquor, and also the large white kidney of tubal inflammation, occurred most often in the non-alcoholic list. With regard to the intertubal or fibroid change, this occurred as granulations in thirty-one of the alcoholic to twenty-seven of the non-alcoholic category. This slight preponderance under alcohol of the granular kidney was accompanied by a more than proportionate prevalence of vascular disease as evinced by apoplexy and simple hypertrophy of the heart. Thus, under alcohol, acute, active, and obvious forms of renal disease were partially replaced by the chronic, insidious, and latent. With liquor was a smaller amount of dropsy and of discovered albuminuria, and a smaller number of deaths directly attributable to renal disease, but a larger amount of cerebral uræmia, apoplexy, and cardiac change. From the information comprised in the tables, to which was superadded a comparison of the condition of the kidneys in fifty-eight persons who had died with delirium tremens, and the same number who were killed by accident, without that complication, it was inferred—firstly, that alcohol has no effect in causing lardaceous disease; secondly, that it promotes granular degeneration, though not to an extent commensurate with the arterial change; thirdly, that the frequency of active nephritis is not increased by alcohol, though fatty and other latent tubal disturbances often result from this agent; lastly, that the kidneys are, on the whole, affected less injuriously by liquor than are the liver, the lungs, the bloodvessels, and the nervous system. The general conclusions of the inquiry were thus summed up:—"Alcohol causes fatty infiltration and fibroid encroachment; it engenders tubercle, encourages suppuration, and retards healing; it produces untimely atheroma, invites hæmorrhage, and anticipates age. The most constant fatty change—replacement by oil of the material of epithelial cells and muscular fibres,—though probably nearly universal, is most noticeable in the liver, the heart, and the kidney. The fibroid increase occurs about the vascular channels and superficial investments of the viscera, where it causes atrophy, cirrhosis, and granulation. Of this change the liver has the largest share; the lungs are often similarly but less simply affected, the change being variously complicated with, or simulative of, tubercle; the kidneys suffer in a more remote degree. Alcohol also causes vascular deteriorations which are akin both to the fatty and the fibroid. Besides tangible atheroma there are minute changes in the arterial walls, which show themselves by cardiac hypertrophy and cerebral hæmorrhage. Drink causes tuberculosis, which is evident not only in the lung but in every amenable organ. Drink promotes the suppurative at the expense of the adhesive process, as seen in the results of pneumonia, of serous inflammations, and of accidental injuries. Descending from general conditions to the individual organs, the effect of alcohol upon the nervous system must be looked upon as special, and taken by itself. Apart from changes which, like delirium tremens, are more evident during life than after death, the brain pays a large reckoning in the shape of inflammation, atrophy, and hæmorrhage. With regard to the other organs, they are damaged by alcohol much as they stand in its line of absorption. Next to the stomach the liver suffers, by way of cirrhosis and fatty impregnation. Next the stress falls upon the lung, taking every shape of phthisis. A large share in the pathology of intemperance is also taken by the arterial system, as seen in its results—atheroma, cardiac hypertrophy, and hæmorrhage. Lastly, the kidneys, more remotely exposed, have a smaller participation in the common damage of alcoholism. They undergo congestive enlargement, fatty and fibroid change, but they do not suffer commensurately with the bloodvessels, or as frequently as the other viscera. So far we have seen only the ill which alcohol produces. It may be asked, Is there none which it obviates? Apart from its medicinal action, which the evidence before us does not touch, has it no *per contra* of prevention? It is not easy to answer this inquiry. Some active inflammations, such as pneumonia and endocarditis, are diminished in the alcoholic trades; but it must at once be seen that the increase of the alcoholic disorders must necessarily cause an apparent diminution in all which are unaffected by this agent. A man may be saved from pneumonia or acute rheumatism, not because alcohol is antagonistic, but because it kills him prematurely in another way. He can die but once. Therefore, though under alcohol some forms of disease are comparatively infrequent, we must use much caution in concluding that it has a directly preventive influence. Nevertheless, it may be laid down as an axiom that any drug which can do harm can do good. Disease is most various, and may, or rather *must*, represent contrary conditions. It may be positive or negative, *plus* or *minus*. Too much or too little of any of the shapes of heat, food, and work may spoil the equipoise of health. If a drug promotes one change, it may prevent its opposite. Alcohol certainly gives an asthenic type to disease. Although we cannot as yet say that it defibrinates, yet it retards adhesive and plastic processes. This influence may be beneficent if it hinders the development of acute inflammation, and obviates the formation of coagula where, as in acute rheumatism, the process is harmful. It is possible that by some such antagonism we may explain the remarkable paucity of endocarditis in the alcoholic series. But, at the best, the protecting is less certain and less effective than the deteriorating influence. In brief and final enumeration, alcohol replaces more actively vital materials by fat and fibrous tissue; it substitutes suppuration for new growth; it promotes caseous and earthy change; it helps time to produce the effects of age; and, in a word, is the genius of degeneration.

Dr. ANSTIE said that the paper contained facts of high interest, but which required consideration as to how far the number of cases warranted the conclusions; those cases only having been included where alcohol had been taken in excess, and thus a large number of persons subject to chronic alcoholism having been included. He did not agree with the conclusion as to the suppurative form of inflammation being the more common. With regard to the frequency of cirrhosis, Dr. Anstie would say, from his experience of over thirteen years, in which he had seen a large number of patients suffering from the effects of chronic alcoholism, that it was rarely met with; he had only seen thirteen cases in which there were symptoms of cirrhosis, though some of the patients had been under observation for ten years. He agreed with the prominence given to nervous change and symptoms; they were always in advance in the effects of alcohol. It was interesting to note how frequently inflammatory changes, such as slight attacks of inflammation of the brain, occurred, delirium and convulsions, and from which the patient recovered. He thought the effects of alcohol, long continued, tended to the fibroid form of phthisis. He was pleased to see that the tables showed that kidney disease on a large scale was not increased by alcohol; this had been shown by statistics collected in Glasgow. He believed the notion arose from false ideas of

the elimination of alcohol by the kidneys—too much work was thrown upon them, so causing degeneration.

Mr. Savory observed that the abuse of alcohol appeared to shorten life by about three years and a half. Might there not be an error through not comparing the number of patients in hospital and the mortality with that of the whole population?

Mr. Power drew attention to a form of disease attending spirit-drinking—namely, atrophy of the optic nerve; patients came complaining of dimness of sight, and on examination a whiteness of the optic discs from nerve atrophy was observed. This condition was relieved by abstaining from alcohol, and taking strychnine and iron.

Dr. Green said that the nature of the change appeared to be a fibroid degeneration, a chronic inflammation of the various organs. He thought the difference of opinion as to the frequency of cirrhosis of the liver was owing to the different sense in which the word was used—Dr. Dickinson applying it to what was observed at the post-mortem examination, Dr. Anstie to clinical observation. Often the fibroid tissue was found increased at the autopsy, whilst no symptoms had been observed during life.

Dr. Symes Thompson said the fact that suppurative pericarditis and purulent pleuritic effusions were common in spirit-drinking was of importance in diagnosis. It was often difficult to decide whether pus or serous fluid were present, but the knowledge that the patient was given to drinking would determine an early operation. Whether pneumonic change was frequent or not from the abuse of alcohol, all agreed that chronic lung disease often occurred, and the chronicity was due to the fibroid change.

Dr. Anstie observed that suppurative pleurisy was very common in children, who took no alcohol.

Dr. Dickinson, in reply, said he regretted the fewness of the cases, and wished they were more numerous; still they extended over thirty years. The paper was based upon post-mortem observations, which he considered more valuable than clinical observations. He was aware that suppurative pleurisy occurred in children, but drinking caused it in adults. In his tables there was no case of empyema, except on the alcohol side; there was also a tendency to suppuration in other organs, pericardium, etc., and from injuries. He thought it would have been better to take the proportion of patients in hospital to the population, and thus an error may possibly have occurred.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, October 2.

J. Braxton Hicks, M.D., F.R.S., President, in the Chair.

The following gentlemen were elected Honorary Fellows of the Society:—Fordyce Barker, M.D., Professor of Clinical Midwifery and Diseases of Women at the Bellevue Medical College, etc.; Otto Spiegelberg, M.D., Professor of Clinical Midwifery, Breslau; and T. Gaillard Thomas, M.D., Professor of Obstetrics in the College of Physicians and Surgeons, New York.

The following gentlemen were elected Fellows of the Society:—J. H. Gornall, Esq., Warrington; J. B. Spence, M.D., Lichfield; Professor Trenholme, M.D., Montreal; and T. Webster, Esq., Bristol.

Dr. Snow Beck read a paper "On a case of Pelvic Hæmatoma, or Retro-uterine Hæmatocele," with remarks especially as to the source of the hæmorrhage. A woman, aged 40, who had suffered from considerable dyspeptic symptoms, with severe hæmorrhoids, who had never been pregnant, and in whom the catamenia had always been profuse, suffered during the periods for the last two or three years from severe pain in the left iliac region. During the last period this pain had been very severe; it suddenly ceased, and a few minutes afterwards an oval lump resembling a duck's egg was perceived, firmly pressed against the abdominal wall in the left hypogastrium. This was the uterus. A soft elastic swelling existed between the uterus and the rectum, bulging forwards the posterior wall of the vagina, and presenting a soft depression directly behind the orifice of the uterus. No constitutional symptoms followed, nor anything to indicate inflammatory action. On the seventh day some dark-coloured clots and port-wine-coloured blood passed with a gush from the rectum, the swelling slowly subsided, and the patient gradually became well. It was concluded that an effusion of blood had suddenly taken place amongst the loculi of the pelvic fasciæ, probably from the rupture of a congested pelvic vein. The sources from which the blood came in pelvic hæmatoma were considered to be—(*a*) Rupture of an ovary which had previously undergone some process of degeneration; (*b*) rupture of a Fallopian tube, or the escape of blood from the congested vessels of this part, in which cases the blood would be effused into the cavity of the peritoneum; and (*c*) rupture of some varicose veins. When the vein was situated in the broad ligament, the blood might be effused into the pelvic cavity, or into the subserous cellular tissue. When the vein was situated in the pelvis, the blood was effused in some of the loculi formed by the pelvic fasciæ. The reputed source of the blood by regurgitation from the uterus through a Fallopian tube, consequent upon some disorder of the menstrual function, was considered highly improbable, and the cases upon which this opinion was founded were closely examined. There was no evidence of this in any of the cases collected by Bernutz and Goupil, except where there was permanent obstruction to the outward flow of the catamenia, and consequent distension of the uterus. And the evidence was equally unsatisfactory in the twenty-seven cases recorded by Dr. Barnes. Some of these cases, with the remarks upon them, were closely examined. In the treatment it was considered unnecessary to interfere where there were no constitutional symptoms, and the effused blood was evacuated by the rectum or the vagina in a short time. But when this fortunate course did not occur, as a general rule it was desirable to procure the artificial evacuation of the effused blood. When some weeks had elapsed without any signs of decrease in the swelling; when the swelling became more tense, more tender, and more painful; when the temperature increased, the complexion became of a dirty, yellowish hue, the abdomen swollen and tense; when there were repeated shiverings, vomitings, rapid pulse, etc.,—the evacuation might be effected by a curved trocar passed in towards the centre of the swelling, or by a free incision into the tumour. As a rule, the rectum was to be preferred to the vagina as the place for the artificial evacuation.

Mr. Scott said that the various opinions which had been expressed as to the true nature of cases published as cases of hæmatocele indicated in some degree the difficulty of arriving at a correct diagnosis. He had seen cases in which, after a few hours of acute cellulitis, collections of fluid had taken place which would have been difficult to distinguish from hæmatocele, and which yielded on tapping clear serous fluid only. Mr. Scott took exception to the statement that no regurgitation occurred from the uterus through the tubes unless there be complete occlusion of the os and cervix, as he thought it could not be doubted that in acute flexions, especially anteriorly, where dysmenorrhœa was very marked, regurgitation was possible.

Dr. Rasch thought an important aid in the diagnosis might be found in the temperature. In one case, which came early under his notice, the temperature was for some time between 96° and 97° Fahr., and never rose beyond normal. If, in addition to this, we found fainting, sudden anæmia, and rapid appearance of a doughy tumour near the womb, our diagnosis was clear enough. The uterus also, though displaced by a hæmatocele, was not so immovable as in cellulitis. He had never resorted to puncture, and thought it would be interesting to know how far an incision had to do with the production of the offensive discharges which had been noticed in some cases.

Dr. Heywood Smith thought sufficient stress had not been laid on the information elicited by the double touch or recto-vaginal examination. Mobility in itself should not be insisted upon, as that might vary in degree according to the interval of time that had elapsed. With regard to the soft portion referred to on the anterior aspect of the post-uterine swelling in the case, he asked if it might not be due to the interspace between the two portions of the sacro-uterine ligament.

Dr. Playfair thought the difficulty in diagnosis was between hæmatocele and pelvi-peritonitis. The uterus, however, was apt to be much more displaced and pushed out of its central position in hæmatocele than in pelvi-peritonitis. The uterus might be movable at a very early stage in hæmatocele, but later on the blood coagulated, and the uterus generally became quite fixed. The introduction of the finger into the sac after puncture, to break down the contents, he considered to be attended with a certain amount of risk.

Dr. Snow Beck then replied.

Mr. Lowndes (of Liverpool) read a paper "On the Registration of Still-births," to which were appended tables showing the ratio of still-births in Continental States to those in British practice. The want of registration of still-born children in

this country had generally been regretted on medico-legal grounds, but the author thought it was to be regretted also from an obstetrical point of view; and he took occasion to refer to the more frequent application of the forceps as a means of diminishing the number of still-born children. In those countries where a systematic registration was enforced, it included a very large number of still-born illegitimate children—the ratio of legitimate still-births to illegitimate ones being as 3 to 5. A comparison was then instituted between the foreign still-births and those in this country, the tables from which the latter were calculated being the reports of the Guy's Hospital Charity and the eastern districts of the Royal Maternity Charity, and in private practice the statistics published by Uvedale West, Anderson Smith, Hadaway, Lambden, Harper, etc. The Continental tables gave an average of 5 still-births per cent., while in British practice they ranged from 3 to 10 per cent. Inquiries made at local cemeteries revealed that the still-births amounted to at least 6 per cent. of the whole number of births. The author urged the formation of a committee of the Society to collect more information on the subject, to consider the best mode of registration, and to urge upon the President of the Local Government Board the importance of compulsory registration of still-births. In a medico-legal aspect this registration would tend to check artificially-induced abortion and fœticide; from an obstetrical point of view it would be desirable in helping us to judge how many still-births are preventable, how many result from syphilis, and how many are due to premature, protracted, complex, and instrumental labour.

Dr. Playfair referred to the remarkable statistics of Dr. Hamilton, in whose practice, by the frequent use of the forceps, there had been 731 consecutive labours without a single still-birth.

HARVEIAN SOCIETY OF LONDON.

Thursday, October 17.

Dr. Handfield Jones, F.R.S., President, in the Chair.

Mr. Fairlie Clarke narrated a case of Imperforate Anus in a male infant operated on by him thirty-four hours after birth, who died two days after the operation of exhaustion. At the post-mortem no signs of peritonitis were found; the gut terminated in a septum about an inch from the anus. He inquired as to the relative number of male to female children thus affected.

Mr. H. Power referred to three cases he met with at the Westminster Hospital, all male infants. All died; one lived three weeks, one a year.

The President narrated two cases of Rheumatic Fever with unusual complications—in one case with purpura, swelling of thighs, back, penis, scrotum, erysipelas of the head, melæna; in the second, acute rheumatism was followed by severe vomiting and purging.

Dr. W. H. Day read a paper on "Headache in Children." After some remarks upon the symptomatic value of headache as a term, the author glanced at the commonest varieties of headache in childhood, and then dwelt especially on a peculiar functional form of which numerous examples had come under his notice. These were doubtless associated with some intricate change—physical, structural, or chemical—which may not be capable of detection, but going on within the cranium, giving rise to some confusion or abnormal sensation in the head, or to actual headache. This peculiar cerebral change is accompanied occasionally, but not of necessity, with some enlargement of the head, wasting of the extremities—the muscles become flabby and the joints loose; also there are pallor and debility, restlessness by night, irritability by day, a slow and sometimes irregular pulse, with dull and persistent headache. The temperature is normal. Dr. Day noted in treatment of these cases the value of bromide and iodide of potassium in the early stage; tonics, iron, and bark, with cod-oil, being inappropriate till later, when they aid the cure.

Dr. Farquharson gave some interesting experience in relation to headache in children, based upon cases treated by him at Rugby. He referred to the importance of not overlooking headache as a symptom of slight sunstroke, and in connexion with over-work; in the latter cases the urine contained alkaline phosphates.

Dr. Broadbent regarded persistent headache in a child as a suspicious symptom. Dr. Day's cases he regarded as examples of the headache of rickets or hydrocephalus. He advocated the use of small doses of mercury continued for a long time.

NEW INVENTIONS.

CLARET FROM CHÂTEAU LIVRAN.

M. le Dr. Jules Guyot, in one of those admirable reports on the cultivation of the vine and the manufacture of wine in France which he wrote under the auspices of the Emperor Napoleon III., speaks of the manifold advantages that would ensue if it were the custom to have wine direct from the grower. The consumer would have the satisfaction of knowing the genealogy and history of the wine, the grower would be impelled to devote all his energies and care to the production of the best possible wine. Acting on this hint, and after consultation with a well-known medical œnologist, M. le Baron du Peices de Livran, and his son-in-law, le Comte de Lambert des Granges, are sending over their wines direct, and have appointed Mr. Denman their agent to receive and transmit orders. Medical men will find in these wines, all of which we have tasted with approbation, examples of good, pure, nutritive wines of the lesser age and lower prices, and good, fine, elegant wines if older and higher priced. The Château Livran (1858), which comes in cases, bottled at the estate, and the Château Bricailleux (1869), at 300 francs per hogshead, are extremes of a very good series.

OBITUARY.

DR. GLASS BLACK

Was born at Exmouth in the year 1800, and was educated at Tiverton Grammar School. He was an apprentice from 1815 to 1821 to Messrs. Black and Rowe, surgeons and apothecaries, at Exmouth; his father, Thomas Samuel Black, being the principal partner. He then went to London, and studied at Guy's and St. Thomas's, and returned to his native place in 1822 a Member of the Royal College of Surgeons of England and Licentiate of the Apothecaries Company. Mr. Rowe retiring from the firm above mentioned at that time, Glass Black entered into partnership with his father and a Mr. Spettique; Glass Black being the second in the firm, which continued up to 1836. He went to Glasgow and took his M.D. degree, returning to Exmouth, where he resided for some years. He became an extra-Licentiate of the College of Physicians in London in 1840. He was also an M.D. of Giessen. He was successful and liked in his profession. After retiring from practice he went to reside at Torquay, where he met with his death on October 5, 1872, from the effects of a severe accident. He died regretted by all who had the privilege of coming in contact with him, being particularly distinguished by his courteous manner and gentlemanly bearing, and by his sincerity as a friend. It is a matter of uncertainty as to whether he wrote any work or not.

MEDICAL NEWS.

Royal Colleges of Physicians and Surgeons, Edinburgh.—Double Qualification.—The following gentlemen passed their first professional examination during the October sittings of the Examiners:—

Court, Adam Smith, Barrow-on-Humber.
Kelly, Robert Vandeleur, County Westmeath.
Hunter, Robert Shaw, County Down.
Martin, John, County Down.
M'Laren, Peter Henry, Bedlington.

And the following gentlemen passed their final examinations and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Anderson, William Henry, Lincolnshire.
Bell, John William, Brydekirk.
Braid, Charles, Cheshire.
Bower, William, Lincolnshire.
Cochrane, John, Edinburgh.
Daniel, Jacob, Bombay.
Graham, Arthur, Hendon.
Hirons, George Merriman, Worcestershire.
Macnab, Finlay, Glasgow.
Jackson, Richard Atkinson, Lancaster.
Lithgow, Robert Alexander, Belfast.
Molony, John Francis, Ennis.
Saer, David Protheroe, Pembroke.
Scott, Alexander, Ireland.
Small, Thomas, Forfarshire.
Smith, William Ashe, Armagh.
Versfeld, Jacob John, Cape of Good Hope.

Royal College of Surgeons, Edinburgh.—The following gentlemen were elected Fellows of the College at a meeting held on October 16:—

Carmichael, Daniel, Bedlington, Northumberland.
Hepburn, William Joseph, Dublin.
Lowe, John, Edinburgh.
Ketchen, William, Middlesborough, Yorkshire.
Seaton, James, Leeds.
Underhill, Charles Edward, Edin.

The following gentlemen passed their final examinations during the October sittings of the Examiners, and were admitted Licentiates of the College:—

Laidlaw, Robert, Saltcoats.
Wood, Oswald Gillespie, Kingston, Canada West.
Martin, John, Cork.
Whyte, Joseph Allen, Charleston, South Carolina.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 24, 1872:—

Bedford, Charles William, Brighton.
Clark, Peter, Stathern, Leicestershire.
Finzi, Judah Moses, 105, Gower-street, W.C.
Hopkins, Rees, Pontypridd, Glamorganshire.
Le Mottée, George Herbert, Guernsey.
Parker, George Williams, New Cross-road, S.E.
Read, Charles, 41, Jewin-street, E.C.

As Assistants in Compounding and Dispensing Medicines:—

Harley, Edward Thomas, Enfield, Middlesex.
Taylor, Stephen John, Westbury, Wilts.

The following gentleman also on the same day passed his Primary Professional Examination:—

Smith, Herbert Neale, Guy's Hospital.

At the recent competitive examination for the Society's prizes in Materia Medica and Pharmaceutical Chemistry, the successful candidates were—First, Alfred Felix Stevens, of St. Bartholomew's Hospital, a gold medal; second, William Henry Harsant, of Guy's Hospital, a silver medal and a book.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

COLTHUST, JAMES BUNTER, M.R.C.S.E., L.S.A.—Medical Officer for the Wincanton West District of Wincanton Union, *vice* Dr. James Surrage, M.D., resigned.

GREENING, FREDERICK JOSEPH, M.R.C.S. Eng.—House-Surgeon and Secretary to the Infirmary, Kidderminster.

LAW, W. T., M.B. Edin., M.R.C.S.E., L.S.A.—Assistant Resident Medical Officer at the Workhouse of the Chorlton Union, Withington.

SPURGIN, FREDERICK W., M.R.C.S. Eng., L.R.C.P. Edin., L.S.A.—Divisional Surgeon to the D Division of Metropolitan Police, *vice* F. Clarke, M.R.C.S., L.S.A., resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—John A. Robertson, Assistant-Surgeon to the *Mosquito*; John Campbell, Assistant-Surgeon to the *Decoy*.

BIRTHS.

CONDON.—On October 27, at Eastgate House, Rochester, the wife of J. H. Condon, M.D., Cawnpore, India, of a daughter.

GARLIKE.—On October 23, at Cheshunt, Herts, the wife of E. W. B. Garlike, L.R.C.P. Edin., M.R.C.S. Eng., of a daughter.

MORRIS.—On October 27, at 13, Somers-place, Hyde-park-square, W., the wife of James Morris, M.D. Lond., Fellow of University College, of a son.

SEQUEIRA.—On October 25, at 1, Jewry-street, Aldgate, the wife of H. Sequeira, M.R.C.S., of a son.

WATTS.—On October 29, at Caterham, Surrey, the wife of Robert George Watts, M.D., of a son.

MARRIAGES.

BODMAN—OSMOND.—On October 24, at Bath, Francis H. Bodman, M.B., M.R.C.S.E., L.M., of Devizes, Wilts, to Mary Jane, eldest daughter of the late Richard Osmond, Esq., of that city.

CAMPBELL—MACFIE.—On October 23, at Gerhallow Lodge, Dunoon, N.B., William M. Campbell, M.B., son of the late D. A. Campbell, Esq., of Barrimore, Appin, to Jessie Barbara, younger daughter of the late James Macfie, Esq., of Glasgow.

DUNCAN—CHESALLIER.—On October 23, at Holy Trinity Church, Brompton, Peter Martin Duncan, M.B. Lond., F.R.S., Professor of Geology in King's College, London, to Mrs. Mary Chesallier, eldest daughter of the late John Whitmarsh, Surgeon R.N.

FISHER—BONNAR.—On October 22, at Cupar-Fife, Henry Edward, younger son of H. F. Fisher, Esq., of Blandford, Dorset, to Margaret, only daughter of G. L. Bonnar, M.D., of Natal, late of Cupar-Fife.

MORGAN—STAMPER.—On September 30, at Cuba, Crawford County, Missouri, North America, W. Morgan, resident surgeon of the above town, to Mary, second daughter of George Stamper, Esq., of London and Selhurst.

ROBERTS—WILLIAMS.—On October 22, at St. Austell, John D. Roberts, Surgeon, 73, Southwark-bridge-road, London, to Ellen, daughter of the late Richard Williams, of St. Austell.

SIMPSON—BARBOUR.—On the 29th inst., at 11, George-square, Edinburgh, Alexander Russell Simpson, M.D., Professor of Midwifery, etc., in the University of Edinburgh, to Margaret Stewart, daughter of George F. Barbour, Esq., of Bonskeid, Perthshire.

DEATHS.

COOKE, WILLIAM ROBERT, M.R.C.S.E., L.S.A., son of Thomas and Ann Cooke, of Northampton, and many years of Burford, Oxon, at Gonville-villas, Slough, after many years suffering from paralysis, on October 26, aged 56.

DAVIES, JOHN, M.D., at Hertford, on October 26, in his 76th year.

DEWSNAP, HUGH SEDGWICK, youngest son of the late Mark Dewsnap, and grandson of Robert Willis, M.D., of Barnes, Surrey, at Bushey, Herts, on October 23, aged 3 years.

GAUSSEN, ALICE ADA SOPHIA, only child of Mrs. J. R. Gaussen, widow of the late Assistant-Surgeon Gaussen, Royal Artillery, at the residence of T. Cairnes, Esq., Stameen, Drogheda, on October 24, aged 2 years and 6 weeks.

HAWKINS, MARY, widow of Frederick Hawkins, M.D., at Hitchin, Herts, on October 27, in her 77th year.

HUMPHREYS, JOHN, M.R.C.S., second son of Thomas Humphreys, Esq., solicitor, of East India-chambers, Leadenhall-street, E.C., at Cheltenham, Gloucestershire, after a short illness, on October 24.

HUNTER, THOMAS DAVIS, M.R.C.S. Eng., L.S.A., formerly of Addison-terrace, Notting-hill, at Ipswich, on October 14, aged 69.

INGLE, The Rev. WHITBRED HAGGERSTON, of Darlaston House, Jamaica, eldest son of the late Thomas Ingle, M.D., of The Villetta, Emsworth, at Tunbridge Wells, on October 21, in his 50th year.

TAYLOR, ROBERT STOPFORD, M.R.C.S. Eng., L.S.A., at Sheffield, on October 22, aged 63.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ALNWICK INFIRMARY.—House-Surgeon. Applications, with testimonials, to J. A. Weson, Esq., Honorary Secretary, on or before November 18.

BIRMINGHAM HOSPITAL FOR WOMEN.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

CENTRAL LONDON OPHTHALMIC HOSPITAL, GRAY'S-INN-ROAD.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons. Applications, with testimonials, to the Secretary, on or before November 12.

DONCASTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Honorary Secretary.

DURHAM COUNTY ASYLUM, SEDGEFIELD, FERRYHILL.—Assistant Medical Officer for the Female Department. Applications, with testimonials, to be sent without delay to Dr. Smith, Medical Superintendent.

EVELINA HOSPITAL FOR CHILDREN, SOUTHWARK-BRIDGE-ROAD, S.E.—House-Surgeon; also Registrar. Applications, with testimonials, to the Committee of Management, on or before November 13.

METROPOLITAN FREE HOSPITAL, DEVONSHIRE-SQUARE, CITY.—Honorary Assistant-Physician. Candidates must be Members of the Royal College of Physicians of England, or pledged to become such within twelve months. Applications, with testimonials, to the Committee of Management, on or before November 9.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART.—Consulting and Junior Physician. Applications to W. F. Portlock-Dodson, Honorary Secretary.

NEWTON ABBOT UNION.—Medical Officer for Workhouse, and Medical Officer for District No. 4. Applications, with testimonials, to John Alsop, Clerk to the Guardians, Newton Abbot, on or before November 5.

PORTSEA ISLAND UNION.—Medical Officers for the Southsea and Landport Districts. Candidates must possess qualifications approved by the Local Government Board. Candidates to attend, with testimonials, at a meeting of the Dispensary Committee to be held at the Clerk's Office at 3 p.m. on Friday, November 8.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Assistant House-Surgeon. Candidates must be Members of one of the Colleges of Surgeons of the United Kingdom, and also Licentiates of the Apothecaries' Hall of London, or graduates in Medicine of any University in England, Scotland, or Ireland. Applications, with testimonials, to Dr. J. C. Hall, Honorary Secretary, on or before November 9.

SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL, CORK.—Resident Surgeon and Apothecary. Candidates must be Licentiates of the Apothecaries' Hall, Dublin, and hold a diploma in Surgery from the Royal College of Surgeons of England or Ireland, or from an Irish University. Applications, with testimonials, to the Trustees of the South Charitable Infirmary and County Hospital, Cork, on or before November 8.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATION.

Fulham Union.—Mr. Alderson has resigned the Fifth District; area 1650; salary £50 per annum.

APPOINTMENTS.

Alverstoke Parish.—Warren Meade, M.R.C.S. Eng., L.K. & Q.C.P.I., to the Country District.

Liverpool Borough.—James Campbell Brown, D.Sc. Lond., F.C.S., as Analyst.

Liskeard Union.—John Kempthorne, F.R.C.S. Eng., L.R.C.P. Lond., L.S.A., to the Callington District.

Skipton Union.—Robert McPherson, M.B. and C.M. Univ. Aber., to the Grassington and Kettlewell Districts.

Dr. YOUNG, Superintendent of the Civil Hospital at Hong-Kong, has resigned.

DR. CHALMERS, Deputy Inspector-General of Hospitals, Bengal, has retired from the service on a pension of £706 per annum.

THE St. Marylebone Board of Guardians have granted the following gratuities to the district Medical Officers for extra services during the small-pox epidemic—viz., to Mr. Chapp £25, Mr. Benson Baker £15, and Dr. Thomas £10.

Dr. Frankland reports that during October all the metropolitan water companies delivered well-filtered, clear, and transparent water.

The Town Council of Halifax have appointed Mr. Daniel Ainley, of North-parade, Medical Officer of Health for the borough at a salary of £100 per annum.

A convalescent home for the county of Hereford is about to be provided by the liberality of Miss Desbrowe, she having taken Elmstead House, at the Link-top, Malvern, for that purpose.

Mr. Thomas Lloyd Evans, an assistant to Dr. Steel, of Blaenavon Ironworks, was last week presented with an address and a purse containing £61 by the inhabitants of the town.

Cambridge University.—The return of the number of freshmen at the various Colleges in the above University has just been prepared, from which it appears that there is a great increase over the number of last year, as shown in the following report, viz.:—

	1871.	1872.
Trinity College . .	156	163
St. John's „ . .	115	105
Caius „ . .	35	44
Jesus „ . .	36	44
Corpus „ . .	35	39
Trinity Hall . .	33	35
Christ's College . .	20	31
Pembroke „ . .	12	19
Emmanuel „ . .	14	18
St. Peter's „ . .	13	17
Clare „ . .	26	17
Magdalene „ . .	15	14
St. Catharine „ . .	12	13
Sidney „ . .	16	13
Downing „ . .	8	12
King's „ . .	8	8
Queen's „ . .	9	5
Non-Collegiate . .	9	25
Totals . .	572	622

In 1869 the freshmen numbered 567, in 1870 the number had increased to 612, in 1871 it fell to 572, and in the present term it is 622—the largest number ever known.

Royal College of Surgeons.—At a special meeting of the Council on Thursday, the 31st ult., Mr. John Birkett, F.R.C.S., Surgeon to Guy's Hospital, was elected a member of the Court of Examiners, in the vacancy occasioned by the resignation of Mr. George Busk, F.R.S., late President of the College. Mr. Birkett, who is a member of several learned and scientific societies at home and abroad, obtained the Jacksonian Prize in 1848 for his "Essay on Diseases of the Breast and their Treatment," and is an Examiner in Surgery at the University of London.

Norfolk and Norwich Hospital.—Mr. T. W. Crosse has been unanimously elected Surgeon to this institution in the room of Mr. Nichols, retired.

Association of Medical Officers of Health.—At a special meeting of the Association of Medical Officers of Health, held October 28, 1872, John Liddle, Esq., Medical Officer of Health for Whitechapel, was unanimously elected treasurer, in room of the late Dr. C. J. B. Aldis.

Death of Professor Daremberg.—A great loss has just been sustained in the death of M. Charles Daremberg, Professor of the History of Medicine at the Faculty, and Librarian to the Mazarin Library. He died on October 24, aged 55 years, only recently having attained the chair of History in the Faculty, which had long been an object of his ambition.

"Going ahead."—On August 21 Mrs. Bradloe, of Trumbull, county Ohio, gave birth to eight children, three girls and five boys. They are all living and healthy, but quite small. She was married six years ago, when she weighed 273 lb. She has given birth to two pair of twins—making twelve children in six years. She was herself a triplet, her mother and father also having been both twins, and her grandmother the mother of five pair of twins.——Mrs. Charron, of Ware, died a few days ago after twenty-six years of married life, during which time she had twenty-two children, all at single births.—*Boston Journal*, September 26.——Mrs. Crowell, of Anaka Minn, having given birth to three sons on July 1, the citizens of that place have given her two corner lots and $100.—*Medical Record*, October 1.

The Paris Medical Faculty.—The following are the winter courses of lectures for 1872-73, which commence on November 4:—Medical and Biological Physics, M. Gavarret; Surgical Pathology, M. E. Cruveilhier (for M. Dolbeau, who is ill); Anatomy, M. Sappey; General Pathology and Therapeutics, M. Chauffard; Medical and Biological Chemistry, M. Wurtz; Medical Pathology, M. Axenfeld; Operations and Apparatus, M. Tillaux; Histology, M. Robin; History of Medicine and Surgery, M. A. Ollivier (in place of M. Daremberg, deceased); Clinical Medicine, M. Bouchard (for M. Bouillaud) and M. Sée at La Charité, MM. Béhier and Richet at the Hôtel-Dieu, and M. Lasègue at La Pitié; Clinical Surgery, M. Gosselin at La Charité, and M. Verneuil at La Pitié; Clinical Midwifery, MM. Depaul and Broca at the Hôpital des Cliniques; Diseases of Children, M. Roger at the Hôpital des Enfants. The subjects of study are distributed as follows over the winter sessions:—1st year, Medical Chemistry and Medical Physics; 2nd year, Anatomy, Histology, and Dissections; 3rd year, Anatomy, Histology, Dissections, Operations and Apparatus, External and Internal Pathology, Medical and Surgical Clinics; 4th year, Internal and External Pathology, General Pathology, Medical, Surgical, and Obstetrical Clinics.

Gangrene and Suppuration of the Toes in China.—These affections, from cold, or over-paring, are alas! too prevalent here. The former speaks of the destitution of a certain class and the severity of our winters, the latter of the force of custom. The Chinese shoe, at whose door the most of the blame must rest, cannot be too strongly condemned. The soles are an inch shorter than the "uppers"; this device makes the shoe appear small and neat, and in walking supplies the want of elasticity on account of their thickness. Everybody has remarked on the small hands and feet of the Chinese; few have seen the damage done to the feet by the shoe and the nail-parer. Although the shoe is "boxed," the toes suffer pressure as the foot pushes forward in the act of walking. The sedate, slow, and fancied dignified official and literary gait—that which is never gained by foreigners who assume their dress—counteracts this evil of the shoe to some extent, and may, for aught we know, have had something to do with moulding the style. If relief be found in a hole, decency requires that it be patched, and this only increases the evil. Very few bare-footed persons are to be seen in Peking. The beggars, devoid of everything else, are seldom destitute of this article. The ridge or ridges of leather which strengthen and ornament the front of the shoe only aggravate the evil. Long toe-nails are impossible. The Chinese, to appear in easy circumstances, are in the habit, we all know, of wearing ridiculously long hand-nails, from one or two inches to half a foot, which require shields to protect them from injury. Those of the foot, on the contrary, require to be pared beyond the quick, sometimes till hardly a bit of the nail is to be seen—for the very shortest give excruciating pain—to prevent injury, and hence the thriving trade of these nail-parers in Chinese towns. The foot, sooner or later, revolts against this treatment, and ingrowing nail and continued pressure and friction cause what is worse, extensive suppuration and sometimes destruction of the bones, against which the parers are powerless to help their victims. They admit the absurdity of the shoe, but although convinced through their understandings, the force of custom and fashion and the dread of innovation are, I suppose, too strong. In this connexion we may mention an affection of the opposite extremity, to which the Chinese are equally subject—viz., ulcers and skin diseases of the scalp, caused by the irritation of shaving, or shaving with a dirty razor. But we are not inclined to be severe here on this Manchu custom, from the belief that among a dirty people any operation is useful which tends to cleanliness.—*Report of the Peking Hospital, by Dr. John Dudgeon.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

M. G., Wisbeach.—Yes. Dr. W. L. Lindsay, Physician to the Ballarat Hospital. See *Australian Medical Observer*, October, 1864.

Christian.—1. Not in a medical case. 2. Yes.

Rus.—Yes, we believe it possible; such cases have occurred.

N. N.—The International Medical Congress was held at Lyons, in the latter end of September.

Chloral.—The *New York Medical Journal*, for June last, by Dr. Robert Amory, of Boston.

S. C.—1. *Indian Annals of Medical Science*, 1855, page 170. 2. *Dublin Quarterly Journal of Medical Sci-nce*, February, 1857.

Nemo.—Dr. Prichard's work "On the Physical History of Mankind."

Epidemics.—Undoubtedly Sydenham was, of all English physicians, the chief observer of the different forms of epidemic diseases, and was entitled to the appellation of "the English Hippocrates."

A Subscriber.—We are always willing to comply with the wishes of our correspondents as far as we can, but the matter sent to us is not within our compass.

X. Y. Z.—The best small compendium is that by Dr. Russell Reynolds on the medical uses of electricity. If you want anything larger, try Althaus's work or Hammond's translation of Meyer. The new edition of Duchenne's work is exceedingly interesting, but he deals with interrupted electricity only.

Dundee.—The "card" of Dr. Cocks in the *Dundee Courier* is scarcely in good taste, and certainly it is not advisable it should be imitated

Lithotomy.—The anecdote by Bertrandi of our famous Sharp, the surgeon, as to his manner of performing the operation, is that it consisted of three motions, which were all executed within the minute. This Bertrandi witnessed not only in a case of Sharp's, but in cases of Cheselden, Hawkins, and Bromfield.

A Country Brewer.—Yes; attention was called at a recent meeting of the London publicans to the circumstance of a number of men being trained by Government as brewers, in the laboratory at Woolwich, for the purpose of enabling them to analyse the various ales, beers, etc., sold by publicans.

Bethnal-green.—We think, from the correspondence, the certificates from medical practitioners in the neighbourhood, and articles in the local papers, that the case against the fish-curing factories is clearly proved. There can be no doubt that persons living in the neighbourhood of such establishments may suffer materially in health in consequence. If the Local Board refuse to interfere to stop the nuisance we should recommend the inhabitants to apply to the Government Local Board. There must be some means in the power of that body to remove such an abominable nuisance.

Something like a Bath!—The late Dr. ——, a well-known and clever practitioner in Pembrokeshire, was at times somewhat absent and forgetful of his patients, as the following authentic anecdote will prove:—A lady consulted him one day on behalf of her little son. The doctor called, examined the little invalid, ordered him a warm bath immediately, and, taking out his gold repeater, said to the anxious mother, "Keep him in the bath till I return, which I shall do in a very few minutes,"—and so saying he took his leave. "Out of sight, out of mind,"—the worthy doctor quite forgot his little patient, whose ailment proved to be but transitory. Three weeks afterwards the lady met Dr. —— in the street unexpectedly, and being somewhat given to *repartee*, said very simply and quietly, "Can I take John out of the bath now, doctor? You told me not to do so till you returned."

Whitechapel.—The following extracts from Mr. Liddle's last report are of interest:—

"The constant system of water supply, by the use of waste-preventers in the poorer districts, is increasing, and continues to give great satisfaction. There are now 154 waste-preventers (eight new ones having been erected during this quarter), by which upwards of 880 houses are supplied. This mode of supply to the poor localties appears to me, after a long experience, to be the best for houses which are let in separate tenements. In some of my previous reports I have made mention of the danger of drinking water which is drawn from the cistern that supplies the water-closet; and this danger is increased when the water in the cistern is not sufficient to cover the valve through which the water flows into the pan of the closet when the valve is raised, for then the foul air of the closet passes directly into the cistern. When waste-pipes are used in cisterns care must be taken to ascertain that they are properly trapped, for if the waste-pipe passes into the drain of the house the emanations from the drain will not only contaminate the water but will occasion a nuisance in the house.

"For the following reasons I am of opinion that the provisions of the Act of 1844, relating to slaughter-houses, should be continued:—

"1. Because slaughter-houses as now conducted are nuisances, and injurious to health; and although, theoretically, they may be kept 'as clean as any paved wash-house,' it would be found impracticable to do so; and it would be impossible to enact a law which should compel the owner of a slaughter-house to prevent offensive smells from issuing from his premises.

"2. Because private slaughter-houses afford facilities for the slaughtering of diseased animals, and enable the owners of such diseased animals readily to dispose of the unwholesome meat. The improper use which is made of private slaughter-houses was pointed out in my Quarterly Report for December, 1869.

"3. Because the driving of cattle through the crowded streets of London is not only a great annoyance to the inhabitants, but is a source of danger to life and limb.

"4. Because the erection of a sufficient number of well-ventilated public slaughter-houses in suitable places within reasonable distances from the centre of the metropolis would be highly advantageous to the whole population, inasmuch as the animals intended for slaughter would be inspected by qualified officers, and if found to be diseased, proper steps would be promptly taken to prevent the use of such meat for human food.

"5. Because the flesh of the animals slaughtered in airy and well-ventilated public slaughter-houses, and under proper inspection, will keep longer in a fresh state than when animals are slaughtered in some of the ill-ventilated slaughter-houses in London.

"If the city of Glasgow, with a population of 500,000, has thought it expedient, as a means of improving the public health, to prohibit the use of private slaughter-houses, and has erected three public slaughter-houses for the use of the butchers, it is surely quite possible, with the same object in view, for the local authorities in London to erect a sufficient number of public slaughter-houses for the slaughtering of all the cattle which are required for the use of the inhabitants of this vast city."

B. W.—1. Emphatically, No! 2. As follows:—

"Imagination, thro' the trick
Of doctors, often makes us sick;
And why, let any sophist tell,
May it not likewise make us well?"—*Churchill.*

Prosing.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The reader perhaps may remember a picture by Delaroche of the Princes in the Tower. The figure in the velvet coat, silk stockings, and jewelled garter—often repeated by Sant and Millais—somewhat recalls to recollection the once bright pretty little lad over whose grave the writer affectionately lingers this September afternoon. Whilst the turning leaves lightly rustle against the clear cloudless sky, the golden sun of autumn sheds a mellow radiance over the sable mourners, curious idlers, or happy lovers, who, treading silently along, stop occasionally when the sad familiar spot, the fine monument, or the recently turned green sod, arrests attention. Amongst the sleepers here are colleagues together with their patients, each resting from their labours, awaiting the great day when the talent entrusted must be accounted for. Rank, ragged weeds marking neglected spots, painfully contrast with miniature gardens bordered with ground ivy, where hardy shrubs, well-watered ferns, or else freshly cut flowers, strewn over the neatly mown turf, not merely tell their own story, but in addition again and again point out to us medical men the amount of misery or happiness materially influenced by ignorance or skill. The simple marble cross, erected by heart-broken parents to the dearly beloved memory of the little boy, bearing inscribed "Behold, He taketh away; who can hinder Him? who will say unto Him, what doest Thou?" raises the inclination to prose a little about croup, an insidious disease to which aid has frequently been summoned only when asphyxia, coma, or convulsions are about to close the scene. Late on a wet night comes the violent tug at the bell, breaking the dream of Cavendish-square, Physician Extraordinary, President of the Royal Society, landed property, Sir Kidney O'Brien, Baronet, portrait in the *Illustrated London News*, statue at the Hospital *vis-à-vis* to Dr. Fodd,—with a sigh and a weary yawn waking up to the grim reality of a desponding young practitioner. There's no help for it but to strike a light rapidly, dress hurriedly, go—taking, in addition to the pocket case, calomel, antimony, ipecac., chloroform, mustard, perhaps leeches. On the road find out every possible point available: the child's age, history, previous sickness, how long ill, constitution, family ailment, mother's health, nurse's capability; expressing, however, no opinion in return (every word now uttered may adversely be exaggerated hereafter). In the sick-room try not to be flurried, remembering that your first glance at the patient—so fiercely, eagerly, anxiously scanned by the distressed mother—unconsciously may tell the secret, reveal the extent of danger, perhaps paralyse the hope, confidence, and energy now implicitly and urgently required. Kindly but firmly assuming command, ask more questions, take nothing for granted, decline to argue, concede nothing except the wish for further medical advice. *Nulli secundus* you will stand if victorious; you *may* lose half your practice if you fail. Also, at such times, sink individuality, say not a word about the storm outside, the child ill at home, your own fatigue, or rheumatism,—indeed, excepting to give directions, be as taciturn as possible. It has been my lot, as it will be that of every doctor, to be concerned in many battles, to cross fierce swords with death and disease *alone*, against overwhelming odds; when, temporarily to divert thought, to keep judgment clear, to conceal anxiety, my plan is to scribble. Thus several disjointed, flighty, frivolous letters kindly inserted in the journal have been written under such circumstances during the night after a heavy day's work. Referring to the manuals of West, Churchill, Evanson and Maunsell, Meigs and Pepper, Meadows, and others, no definition of croup appears so good as that compilated by Dr. Aitkin—namely, "A non-infectious inflammation of the mucus of the trachea occurring in children, differing from other inflammations in like tissue in the presence of plastic exudation; or else a disease accompanied by the exudation of a fibrino-albuminous material, rapidly coagulating upon the mucous membrane of the epiglottis, glottis, larynx, or trachea, and sometimes over all these parts, indicated by accelerated difficult wheezing, a shrill respiration, short, dry, constant barking cough, voice altered by hoarseness, with spasm of the interior laryngeal muscles and pain and constriction above the sternum." In a recent lecture—*vide* page 221 of this year's journal—Dr. Jordan regards the disease simply as catarrhal inflammation of the larynx and trachea, attended with secretion of tenacious mucus, and also considerable swelling caused by effusion into the submucous areolar tissue, and considers that all other cases where exudation is really present are diphtheria. Space not permitting further quotation from the latter author, who draws an elaborate difference between diphtheria and croup, the reader is referred to the writings of Drs. Crisp, Inman, Cheyne, Niemeyer, Fuller, Vogel, and Fordyce Barker, and many others. Trousseau saved one-third of his patients by tracheotomy; Mr. Spence, out of ninety-one operations, saved one out of three; the late Mr. Jones of Jersey, Mr. Henry Smith, and most modern surgeons of standing in the present day, teach us that the disease, unless tractable within a reasonable period, imperatively demands surgical aid. In the *Dublin Journal of Medical Science* for 1867 you will read the case of a lady whose sisters and children died of croup. In her fourth pregnancy, placenta prævia, involving induction of premature labour, she suffered from choleraic diarrhœa, followed by croup, which terminated fatally. To my mind the case—which occurred in the practice of Dr. McVeagh—reads very like diphtheria. However, as regards diphtheria the distinction still remains a bone of contention. This letter imperceptibly having been spun out too long, with your permission this important subject will be continued some other time. One word regarding composition—a well-known applicable quotation—"Toiling over the elaboration of an unhappy style, I am never satisfied when all is done," said

Balzac.

COMMUNICATIONS have been received from—

Rus; Dr. D. A. Campbell; Messrs. Salt and Son; Mr. Staples; Mr. W. Rivington; Dr. Bakewell; Mr. H. C. Lawrence; Mr. Gurnell; Dr. Playfair; Mr. W. W. Reeves; Mr. Blackett; Mr. H. E. Armstrong; Mr. G. S. Taylor; Mr. John D. Roberts; Mr. T. Watson; Dr. Whitehead; Mr. J. Robertson; Dr. Felce; Dr. Meryon; Mr. T. G. Morris; Dr. Sheppard; Dr. J. Ward-Cousins; Mr. Bevan Lewis; Mr. J. Chatto; Mr. E. Nettleship; Dr. John Cockle; Dr. F. R. Hogg.

BOOKS RECEIVED—

Transactions of the Pathological Society, vol. 23—The Treatment of Syphilis with Subcutaneous Sublimate Injections, by Dr. George Lewin, Professor at the Fr. Wilh. University, and Surgeon-in-Chief of the Syphilitic Wards and Skin Diseases of the Charité Hospital, Berlin, translated by Carl Proegler, M.D., and E. H. Gale, M.D., late Surgeons in the United States Army—Ovarian Tumours, their Pathology, Diagnosis, and Treatment, especially by Ovariotomy, by E. Randolph Peaslee, M.D., LL.D.—The Terror of the Tents, or Quarantine Restrictions as imposed and enforced in Jamaica during the prevalence of Small-pox, under so-called Parental Government—Defective Teeth as the Unsuspected Cause of Various Forms of Constitutional Derangement, with numerous cases, by Adams Parker, L.D.S. Eng.—The Treatment of Aneurism of Large Arterial Trunks by Complete Compression, by R. J. Levis, M.D., Surgeon to the Pennsylvania Hospital—Remarks on Vaccination, by William Draper, M.R.C.S.—Legal Tests of Insanity, by J. Russell Reynolds, M.D., F.R.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

American Journal of Medical Science—Pharmaceutical Journal—The Anti-Game-Law Circular—New York Medical Journal for October—The Little Dressmaker—Western Daily Press—Dundee Courier and Argus—Western Lancet—Journal of Gynæcological Society of Boston, U.S.A., September.

APPOINTMENTS FOR THE WEEK.

November 2. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

4. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. General Meeting, for making such Alterations and Additions to the Laws as may be thought necessary. Dr. Clement Godson, "A Case of Hæmatoma of the Vagina." Mr. Jabez Hogg, "On the Relation of Cataract, Stricture of the Urethra, and Enlarged Prostate."

Royal Institution, 2 p.m. General Monthly Meeting.

5. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Anthropological Institute, 8 p.m. Meeting.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Dr. Duffin, "Perinephric Abscess." Mr. Hulke, "Multiple Dermoid Cysts;" "Calculus removed from the Neck, the nucleus of which is formed by a fragment of wood;" "Stricture of the Rectum." Mr. Lawson Tait, "Cystic Polypus from the Uterus." Mr. Norton, "Loose Cartilage removed from the Knee-joint." Mr. Croft, "Chronic Herpes (a living subject)." Dr. Tilbury Fox, "A Case and Specimen of Scleroderma." Dr. Crisp, "Gordius in the Lungs of Sheep." Dr. Moxon, "Abscess of the Liver, bursting through Hepatic Vein into Cava and Right Heart;" "Acute Interstitial Pneumonia." Mr. Cripps Lawrence, "A Serous Cyst presenting at the Anterior Fontanelle;" "Constriction of the Left Humerus by the Funis."

6. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

Obstetrical Society, 8 p.m. Dr. Wallace, "On Vaginal Stethoscopy." Dr. Edis, "Systematic Examination of the Abdomen, with a view to the rectifying of Malpositions." Dr. Meadows, "On a Case of Extra-uterine Fœtation." And other Papers.

Royal Microscopical Society, 8 p.m. Mr. H. J. Slack, "On the Structure of the Valves of *Eupodiscus Argus* and *Isthmia enervis*." Mr. John E. Ingpen, "A Proposal for a Standard of Comparison of the Magnifying Powers of Compound Microscopes."

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Harveian Society (Meeting of Council, 7¼ p.m.), 8 p.m. Mr. H. Power, "On Wounds of the Eye."

8. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Clinical Society, 8½ p.m. Mr. Geo. Lawson will exhibit a patient from whom he has removed a large Cancerous Growth from the Antrum by excision and the application of chloride of zinc paste. Dr. Duffin will read a paper "On the Value of Puncture in Hydatid Tumour of the Liver." Dr. G. Johnson, "A Case in which Trismus and Facial Palsy were apparently excited by a Foreign Body in a Wound on the Cheek."

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 26, 1872.

BIRTHS.

Births of Boys, 1161; Girls, 1044; Total, 2205.
Average of 10 corresponding weeks, 1862-71, 2108·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	714	667	1381
Average of the ten years 1862-71	681·1	666·5	1347·6
Average corrected to increased population	...	...	1482
Deaths of people aged 80 and upwards	...	...	59

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	4	1	5	1	3	2	5
North ...	751668	...	...	7	...	8	...	3	1	10
Central ...	333887	...	...	1	2	5	...	1	2	3
East	638928	2	1	5	1	8	1	7	1	5
South	966132	4	2	5	5	5	1	5	...	9
Total	3251804	6	4	22	9	31	3	19	6	32

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·302 in.
Mean temperature	47·4°
Highest point of thermometer	59·1°
Lowest point of thermometer	32·6°
Mean dew-point temperature	45·0°
General direction of wind	S.S.W.
Whole amount of rain in the week	2·04 in.

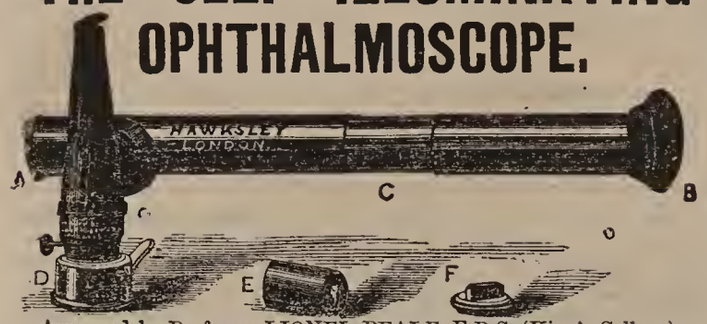
BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 26, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Oct. 26.	Deaths Registered during the week ending Oct. 26.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2205	1381	59·1	32·6	47·4	8·55	2·04	5·18
Portsmouth ...	115455	12·1	51	43	57·4	33·4	46·0	6·78	0·91	2·31
Norwich	81105	10·9	51	45	57·0	33·0	46·8	8·22	0·69	1·75
Bristol	186428	39·8	106	74	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	41	40	53·3	32·9	44·5	6·95	2·38	6·05
Birmingham ...	350164	44·7	267	175	54·0	35·1	45·2	7·33	1·97	5·00
Leicester	99143	31·0	94	48	54·2	32·2	45·1	7·28	1·81	4·60
Nottingham ...	88225	44·2	53	45	54·3	33·0	45·7	7·61	1·64	4·17
Liverpool	499897	97·9	394	240	54·9	39·0	46·4	8·00	1·69	4·29
Manchester ...	352759	78·6	260	191	55·5	28·0	44·1	6·73	1·73	4·39
Salford	127923	24·7	96	66	55·7	34·1	44·9	7·17	1·70	4·32
Oldham	84004	20·2	65	57	...	...	...	...	...	...
Bradford	151720	23·0	107	50	54·8	40·6	46·4	8·00	1·79	4·55
Leeds	266564	12·4	238	157	56·0	38·0	45·9	7·72	1·63	4·14
Sheffield	247847	10·9	208	106	53·0	34·0	44·2	6·78	2·07	5·26
Hull	124976	35·1	120	61	54·0	37·0	46·4	8·00	0·95	2·41
Sunderland ...	100665	30·4	56	41	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	86	62	53·0	41·0	45·4	7·44	2·29	5·82
Edinburgh	205146	46·3	120	82	54·0	40·7	46·5	8·05	1·90	4·83
Glasgow	489136	94·8	363	254	53·8	41·0	46·7	8·16	0·80	2·03
Dublin	310565	31·9	162	167	56·0	31·0	45·5	7·50	1·05	2·67
Total of 21 Towns in United Kingd'm	7393052	34·0	5143	3385	59·1	28·0	45·7	7·61	1·61	4·09

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·30 in. The highest was 29·60 in. on Wednesday morning, and the lowest 29·04 in. on Thursday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

THE SELF-ILLUMINATING OPHTHALMOSCOPE.



Arranged by Professor LIONEL BEALE, F.R.S. (King's College). May be used to examine a patient in any position, in daylight, generally without atropine. Is held in the hand. No dexterity required in its management. Is adapted to form an Otoscope, Endoscope, Laryngoscope, &c. Descriptive Circular forwarded. *Vide* "British Medical Journal," April 2nd, 1870. Price, in case, 42s. Sole Maker, HAWKSLEY, Surgical Instrument Maker, Blenheim-street, Bond-street, London, W.

HAWKSLEY'S PATENT CLINICAL THERMOMETER.

HER MAJESTY'S LETTERS PATENT have been granted for this Thermometer, the index of which cannot be shaken into the bulb, or the black divisions rubbed out. Prices of the 6-inch patent instrument, in safety case, upon which are three engraved scales, 12s. 6d.; 5-inch ditto, in ivory case, 13s. 6d.; 3-inch ditto, in silver case, for waistcoat pocket (Prof. Beale's), 16s. Post free.

Hawksley's Improved Clinical Thermometer.

Section showing actual size, range 90 to 110.

Vide "Lancet" Report, July 3rd, 1869; Brit. Med. Association Reports, 1869.

At the last meeting of the British Medical Association, in a paper read by Dr. Cornelius Fox, on "Clinical Thermometers," it was announced that this instrument was far superior to that of any other maker. Prices of the Improved Clinical Thermometers, with indelible divisions, in similar cases to the patent instrument, 6-inch, 10s. 6d.; 5-inch, 12s. 6d.; 3-inch (Prof. Beale's), 15s. Post free. Temperature charts bound for the pocket. Descriptive Circulars forwarded. Inventor, Patentee, and Sole Maker, **HAWKSLEY**, Surgical Instrument Maker, Blenheim-street, Bond-street, London, W.

FIRST-CLASS SURGICAL INSTRUMENTS.

The Cheapest House in London is C. BAKER'S, 244 & 245, High Holborn.

Every article is warranted of the best manufacture.

STETHOSCOPES, every variety, from 2s. each.
DISSECTING CASES, in Ivory Handles, from 16s. 6d. the set.
DISSECTING CASES, in Ebony Handles, from 10s. 6d. the set.
POCKET DRESSING CASES, from 15s. 6d.
CLINICAL THERMOMETERS, of the best make, with all the latest improvements, in case, 7s. 6d.
POCKET MIDWIFERY CASE, 8s. 6d.
OPHTHALMOSCOPES, for the Pocket, from 6s.6d
LIEBREICH'S, ditto, 14s. 6d.
TOOTH FORCEPS, Tomes, all kinds, 5s. each.
Ditto Clendon's, ditto, 3s.6d. each.
FERGUSSON'S SPECULA, all kinds, 3s. each.
SILVER-PLATED CATHETERS, from 1s. 6d.
HYPODERMIC SYRINGES, from 6s. 6d.
URINOMETERS, from 2s. 6d.

All other articles equally cheap.—Catalogues free by post.—Established 1765.

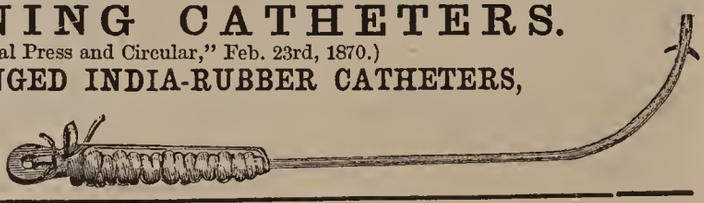
THE NEW SELF-RETAINING CATHETERS.

(Vide "The Lancet," Feb. 19th and May 14th, and "Medical Press and Circular," Feb. 23rd, 1870.)

MR. BARNARD HOLT'S SELF-RETAINING WINGED INDIA-RUBBER CATHETERS,

both for Male and Female use, sold only by

C. BAKER, 244 & 245, HIGH HOLBORN, W.C.



Price, complete with Stilette and Plug, 6s. 6d.—Illustrated Descriptions free by post.

STUDENTS' MICROSCOPES, £3 3s.

C. BAKER'S Students' Microscopes have all the latest improvements, with

Object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 & 245, HIGH HOLBORN.

Second-hand Surgical Instruments by Weiss, Savigny, Coxeter,

Simpson, Maw and Son, and all the best makers, at greatly reduced prices. A large assortment of Microscopes by Powell and Lealand, Ross, Collins, and others. Astronomical and other Telescopes of great power, by Ross, Dollond, Dixey, &c. Race and Opera Glasses by Voigtlœnder, Callaghan, Burrows, Chevalier, &c. Cameras and Lenses by Dallmeyer, Ross, Voigtlœnder. Amateur Photo. Sets from £2 2s.

WILLIAM LAWLEY, 78, Farringdon-st., London, E.C. Revised Illustrated Surgical Catalogue, 4 stamps. Mathematical Catalogue, 3 stamps.

PRIZE MEDAL, 1862. PRIZE MEDAL, 1865.

JOSEPH F. PRATT,

SURGICAL INSTRUMENT MAKER, ORTHOPÆDIC MECHANICIAN TO ST. BARTHOLOMEW'S HOSPITAL,

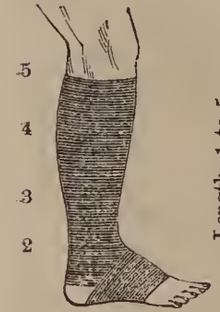
420, OXFORD-STREET, W.

SOLE AGENT FOR DR. E. STÖHRER'S GALVANIC APPARATUS.

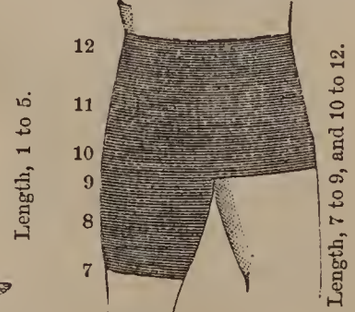
ELASTIC STOCKINGS, LADIES' ABDOMINAL BELTS, IMPROVED WATER-PAD TRUSSES FOR SCROTAL AND UMBILICAL HERNIA.

HOOPER'S SPIRAL ELASTIC BANDAGES.

The Measures should be taken next the Skin, as follows:—



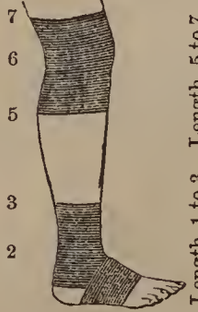
Stocking.



Abdominal Belt & Thigh-piece.

1, Round thickest part of instep.
2, Round ankle-bone.
3, Round small of leg.
4, Round thickest part of calf.
5, Round leg just below knee.
6, Round knee-cap.
7, Round leg just above knee.
8, Round middle of thigh.
9, Round top of thigh.
10, Round body at hips.
11, Round body at umbilicus.
12, Round waist.

The Length should also be given.



Knee-cap & Ankle-sock.

Abdominal Belt.

HOOPER, Manufacturer, 7, Pall-mall East, and 55, Grosvenor-street, London.

ORIGINAL LECTURES.

LECTURES DELIVERED IN THE

COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

(Continued from page 455.)

Purulent Ophthalmia of Infants.

This is essentially the same disease as purulent ophthalmia in the adult, merely modified by the undeveloped tissues of the babe and the activity of the growing processes—the infant organism—and generally more severe.

Symptoms.—About three or four days after birth the eyelids have a tendency to stick together, their edges are a little swollen and redder than natural; in the daytime the light is distressing, and the eyes are kept closed. After this a little muco-purulent secretion is found, then follows palpebral inflammation with the formation of pus. The tumefaction is greater in proportion than in the adult, so that the palpebræ stand out like round tumours, and the upper is often pushed down over the under one. Such swelling necessarily presses them tightly together. Under this mechanical state, and as the discharge is not very copious, it is scarcely noticeable, and its character is not readily discerned. Its colour varies, being sometimes yellowish, sometimes greenish, and sometimes red from the admixture of blood. In a jaundiced child it is very decidedly yellow.

It is seldom that the disease at once assumes intensity. In consequence of this it is often erroneously supposed to have a later origin—that of two or three weeks after birth. The overlooking of it at an early period is unfortunately frequent in all classes of society. The child cannot complain and express its sensations. The concomitant tegumentary swelling conceals the conjunctiva, and the effects of the inflammation on it. Even when the early inflammatory symptoms are noticed, too commonly they are attributed to a cold in the eye, and expected soon to pass away. The consequence is that irreparable damage occurs before treatment is applied.

The conjunctiva swells more than in the adult, and there is farther dissimilarity in its being very much raised and actually loosened in all its regions by effusion of serum in the sub-conjunctival areolar tissue rather than liquor sanguinis. In consequence of this a prolapse of it is always impending, and occurs at any attempt to examine the eye, whereby the under or both eyelids may be everted. Soon after this the retrotarsal fold may prolapse of itself, like a circular red roll, and evert the tarsal margins. The action of the orbicularis muscle increases the eversion.

In from eight to twelve days from the early symptoms, when the ocular chemosis is greatest, the cornea gets hazy in spots or generally, and red at its edge, then semi-opaque and infiltrated with pus to a small extent, or through the entire breadth, followed by penetrating ulceration; or, without an abscess forming, it may slough in part or entirely; or sloughing through a portion of the laminæ may be succeeded by ulceration and penetration, or circular ulcers may form and perforate it. Just preceding either of these processes the eyelids swell yet more, especially the upper one, which is also very red and shining, and the secretions are more purulent and more copious. The child is restless through pain. There is considerable photophobia, the tongue is white, and the body wasted.

The ulceration, or the slough, or the abscess, is usually central, unless there be a multiple of the one or the other.

The lens is more prone to escape through the corneal breach in infants than in adults. With much loss of the cornea its expulsion is the rule.

As chemosis does not become hard and adhere to the cornea, there is, so far as I have observed, an absence of the grooving marginal ulcer.

With mere penetration of the cornea, or considerable or entire destruction of it, the acute symptoms decline, the bright red swollen upper eyelid becomes flaccid and dark red, and the discharge lessens and is less purulent. With the first condition (penetration) the iris prolapses, and may effectually plug up the aperture, or, closing it imperfectly, a staphyloma is formed. With the second, if the lens and the whole or a part of the vitreous humour have escaped, the eyeball shrinks to a mere button. If the humour be retained, whether the lens be lost or not, it shrinks with a flattened front, partly covered by shrunken cornea and partly by transparent cicatrix, or entirely by the latter.

Relapses do not occur, and the conjunctiva does not become affected by the process of proliferation ending in granulation, as in the adult.

Milder cases are met with in which the inflammatory symptoms are very much less, but the difference as to sthenic and asthenic action is never so marked as in manhood.

Course.—The disease generally begins in one eye, but not infrequently in both. When only one is primarily affected, the other is sure to be inoculated from it unless precaution be observed.

When very sthenic, it is never subdued under ten or fourteen days, and weeks elapse before the conjunctiva is again healthy.

The eyeball is more likely to be involved from the extension of the inflammation than in the adult.

When the cornea becomes turbid at several points, or throughout, the danger has reached its height.

Diagnosis.—Catarrhal ophthalmia is often mistaken for purulent ophthalmia. This accounts for the cures which we hear of from slight agency, such as excluding the light, applying a small blister to the temple, and so forth. It accounts also for reported epidemics of purulent ophthalmia among infants in this or that place, and said to be mild, and not inflicting damage to the eyes.

Hereditary syphilitic inflammation of the eyeball, with the symptoms of hazy cornea, and hyperæmia of the conjunctiva and of the edges of the eyelids, may be mistaken for purulent ophthalmia. The absence of any purulent discharge ought to be enough to prevent any blunder being made.

When the disease is developed, the merest inspection of the conjunctiva will cause the purulent discharge to flow out, the appearance of which always proves the existence of purulent conjunctivitis; and its stage can generally be told from the condition of the eyelids.

But more information is necessary than a mere knowledge of the existence of the disease. We ought to ascertain if any and what damage has been done. A systematic inspection must be adopted. This can only be done effectually by retracting the eyelids with two retractors. If these instruments be not at hand a pair may be extemporised out of bits of wire or hair-pins. If the conjunctiva be much swollen it is useless to attempt the examination with the fingers, because the cornea cannot be sufficiently exposed. An eye which might have been saved may be destroyed by the bursting of a damaged cornea from rough handling, whereby the lens and some of the vitreous humour escape.

Causes.—Were I to give the result of my own observation from cases in which I have made careful investigation, and these amount to hundreds, I should attribute the origin to vaginal discharge of the mother, which has been transmitted to the eyes of the child during parturition, such discharge being for the most part leucorrhœal, and sometimes gonorrhœal.

Surgeons speak of cases occurring in the children of perfectly healthy mothers—at least, of such as deny the existence of any kind of vaginal discharge whatever when they are questioned. As the investigation cannot be carried farther, the non-vaginal source in such instances must remain doubtful.

The same kind of agencies which produce purulent inflammation in the adult may of course excite the disease in children, but this applies rather to a later age than I am considering.

It is supposed to be occasionally due to inoculation with the lochia, from the hands of the mother or those of the nurse.

That it is sometimes communicated from infant to infant, in nurseries and lying-in institutions, is certain. It is equally clear that it arises in such places where puerperal diseases prevail.

Whatever be the reputed origin, the disease is most frequent in weakly children, who are exposed to the debilitating causes of bad air, cold, insufficient clothing, insufficient food,—in fact, among the poor. But I ask, Are not the mothers of these children very prone to leucorrhœa? Again, it is more common in premature infants.

Prognosis.—The effects are more severe when there has been gonorrhœal inoculation. Then the destructive end quickly follows the first symptoms. The eyelids and the conjunctiva always swell and inflame more, the discharge is thicker and more copious, and the child suffers much pain.

Ordinarily it is more severe in damp and cold than in dry and warm weather, and among the children of the poor and

necessitous, than among those of the higher classes. It is the cause of blindness in the greater portion of the blind poor.

The longer the disease has been allowed to remain untreated, the more tedious will it be to cure.

While the cornea is yet clear the eye may be saved from any damage. If it be hazy, some destruction of it will probably follow.

If there be superficial ulceration without onyx, probably only a slight speck of opacity may remain, which would be of no consequence provided that it is not over the pupil. If the ulceration be deep, there will be a large opacity. Haziness in association with ulceration may be dense enough to hide the iris, and yet clear sufficiently to enable the eye to be used. When slight it may entirely pass away, except just around the ulcer or the spot of penetration, where it is always densest, and always remains in some degree.

With prolapse of the iris through any corneal breach, the effects on the pupil will be the same as those I have given under the head of "purulent ophthalmia of adults."

If there be considerable onyx, in all probability the eye will be destroyed. The same may be said of sloughing.

Small partial central capsular cataract, like a white dot, sometimes very minute, and very rarely half as large as the pupil, may occur. Its nature has been explained under the head of "capsular cataract." I dissociate it from any connexion with ulceration of the cornea. The opacity proceeding from an ulcer and it seldom correspond in position. It remains indelible; it interferes with the function of sight according to its size, apparently more by disarranging the adjustment than in any other way. The acuteness of sight is very often impaired in consequence of injury to the choroidal and retinal coats. This may occur when the cornea has not been much damaged.

Nystagmus and strabismus are sometimes sequelæ.

Ectropium and partial ptosis may occur, as in the adult.

Treatment.—The principles are precisely the same as those which I have given for the adult disease. The sthenic action must be reduced. A leech to the upper eyelid, or a leech to both lids, will produce sufficient bleeding. Children are quickly affected by the loss of blood, and the leech-bites should not be allowed to go on oozing. The application of cold is next called for, and its effects must be watched, so that there may be no undue chilling of the surface. The astringent should be resorted to rather earlier than in the adult, because it irritates less, and a quicker result is obtained. It may be applied after the manner I have described for the adult, or in this way:—Two persons are required for the work. The head is held. The eyelids are opened gently, and the discharge which gushes out is wiped away with a piece of soft, wet rag. The lower and then the upper lids are next everted and wiped with another piece of wet rag. The lotion is then introduced with a brush.

The repetition should be as frequent as in the adult. One or other of the eyelids may become everted during this operation, especially if the child cry. It is overcome by pushing the swollen conjunctiva back and bringing the edges of the lids together. I have never incised the conjunctiva, nor have I resorted to any internal treatment.

Other details for general and local treatment should be the same as those given above for the adult, regulated to meet the tender age of the patient. If the mother cannot supply the natural food a wet nurse is requisite. Artificial feeding under the best system is defective, and its insufficiency is more marked when an infant is diseased.

When the inflammation of the palpebræ is but slight, and the increased temperature is not marked, the leeching should be dispensed with, and the astringent at once applied.

The effect of treatment is marked. In two or three days the child begins to open the eyes, and in a week the symptoms of active inflammation have disappeared. The general health improves quickly.

Prevention.—In this destructive malady, the stopping of infection is all-important. For many years I have pointed out that washing the eyes of the new-born babe might be a preventive measure, and insisted on the method when the presence of leucorrhœa or gonorrhœa has been detected.

How far it is admissible to wash out from the vagina of the infectious mother the mucus secreted for the lubrication of the parts, is a question for the accoucheur to determine. I have spoken to several about it. Some mothers, with leucorrhœa, infect all their children.

ORIGINAL COMMUNICATIONS.

ON THE CONNEXION BETWEEN

OCCLUSION OF THE LEFT COMMON CAROTID ARTERY AND THE EXISTENCE OF LAMINATED CLOT IN THE SAC OF AORTIC ANEURISM.

By JOHN COCKLE, A.M., M.D., F.R.C.P.,
Physician to the Royal Free Hospital.

(*Continued from page* 485.)

The second division includes those cases in which deposit of laminated clot has taken place in an aortic sac from ligature of the left carotid artery, although done with indirect intention.

For a record of the first two cases we are indebted to Velpeau.(a) A man was admitted into the Hospital at Amsterdam with an aneurismal tumour extending above the sternum. Tillanus, supposing the case to be one of carotid aneurism, tied this artery a little higher up. The patient recovered. Five months subsequently he died suddenly. The aneurism occupied the arch of the aorta, and was completely filled with fibrinous clot. The specimen is still in the anatomical museum.

In the second case the aneurism occupied a similar position, and was on the point of bursting. Taking the case to be one of aneurism of the left carotid, Rigen, of Amsterdam, tied the artery a few inches higher up—February 21, 1829. All the more serious symptoms disappeared, and the size of the tumour considerably diminished. It was necessary to operate for strangulated hernia on this man on May 9 following, but on the 13th he died, with symptoms resembling those of asthma. Post-mortem examination showed the sac to occupy the arch of the aorta, between the innominate and left carotid arteries. It was filled with solid fibrinous clot, and very considerably diminished in size.

The following case occurred in a patient under the care of Mr. Montgomery, of the Mauritius:—A negro, about 40 years of age, was admitted into the hospital February 20, 1829, for an aneurismal tumour the size of a pullet's egg, situate immediately above the sternal end of the left clavicle, and so close to the bone that it seemed to emerge from behind it, or rather from within the cavity of the chest. The tumour rapidly increased until March 29, when it had acquired an enormous size, the base occupying the space of two-thirds of the sternal end of the clavicle, and ascending nearly four inches upwards to the angle of the jaw. Under the impression that it was a case of aneurism of the left carotid artery, Mr. Montgomery tied the vessel above the sac, as recommended by Mr. Wardrop, and the tumour rapidly diminished in size. The patient died July 11. It was found on post-mortem that a mistake in diagnosis had been made. An aneurism the size of an orange occupied the arch of the aorta between the innominate and left carotid arteries. The orifice of the sac was firmly closed by organised coagulable lymph, which completely prevented any blood passing from the aorta to the sac; the left carotid artery was firmly plugged with the same matter, and the right carotid much enlarged. Unluckily, inflammation and suppuration had occurred at the upper part of the sac, and ultimately extended to the pericardium.

Robert(b) cites this case:—"A woman, aged 63, had a large aneurismal tumour occupying the site of the left sterno-clavicular articulation, and greatly embarrassing the respiration. Colson, of Noyon, diagnosed aneurism of the left carotid, and tied the artery above the sac; gradual diminution of the size and pulsation of the tumour occurred, but these never completely disappeared. The patient recovered, and was alive some years after the operation." Now, as I have hinted in a prior memoir, this case may fairly be considered to involve an element of doubt. The great dyspnœa, if not caused by external tracheal pressure (which is not mentioned), in all probability arose from pressure within. But aneurism of the intra-thoracic portion of the carotid (if such a case ever occurred) could by no possibility be diagnosed from aortic aneurism. Again, aneurism of the left is far less common than that of the right carotid, and far more common at its distal than its proximal end; remembering, also, how very common it is for an aortic aneurism to ascend the neck in this locality,

(a) "Méd. Opératoire," tome i., p. 307. Bruxelles, 1840.
(b) "Essai sur les Anev. de la Région Subclav."

and warned by the error of diagnosis in all the preceding cases, it is possible that this was a case of aortic aneurism cured by ligature of the left carotid artery.

Pirogoff, the famed Russian surgeon (whose cases I am compelled to mention second-hand, having had no opportunity of consulting the originals), tied the left carotid artery in three cases of aneurism at the base of the neck, in all of which the arch of the aorta was known to be largely involved. Two of the cases were cured, although some pulsation still existed; the third case proved fatal from cerebral embolic softening.

The last case to mention is the one in which the carotid artery was tied for pure aortic aneurism, diagnosed as such.

As it is published in the current volume of the *Transactions of the Clinical Society* it is unnecessary to refer to it here, unless to add that the man keeps fairly well and capable of doing work.

With respect to the cases of Tillanus and Rigen, Broca(c) regards the ligation of the artery and the deposition of fibrine in the aortic sac as a "pure coincidence"; and Mr. Holmes, in his "Lectures on Aneurism,"(d) states that they prove nothing definite. In their isolation it might be so; but, looking to the collocation of the facts, we seem to catch glimpses of a truth that something bordering on law prevails. The cases offer, as it were, a crucial test. Looking to those of the first series, where Nature fills the sac, they indicate a way to Art; while if Art seek a justification for her measures, she points to Nature as her guide.

Viewed, however, under a less obtrusive aspect, if it were conceded that some causal relation may exist between the occlusion of the artery and the clotting in the sac, we naturally seek the proximate causation. I do not undertake the difficulty of the solution. We do not see those agencies in action which are generally considered indispensable to the formation of fibrinous deposit. It can hardly be considered in such cases that any slackening of the blood-stream can be a direct result of the operation so as to be at all operative in determining the formation of the clot. I could not assert that in my case the earliest sign of consolidation was in the immediate vicinity of the carotid mouth. From the most careful observation I could make, the impulse seemed to lessen, so to speak, all along the line of the aneurism, and seemingly to commence at the cardiac end. What part "diversion" of the current may play in the matter is difficult to conceive. There would appear only left to consider some special affinity between a plastic state of the blood and a plastic state of the wall of the sac. Notwithstanding all that has been said of late,—notwithstanding the able advocacy of Richet(e) as to the fitness of ordinary coagulum to harden *en masse*, and more or less gradually to laminate and adhere,—there still lurks a suspicion that such a clot wants the essential attribute —perdurability. It is, I believe, the teaching of the schools in these kingdoms that the "fibrinous coagulum" of Petit, Hodgson, Bellingham, Robin,—the "active clot" of Broca,—where the fibrine is deposited in a gradual and almost molecular condition from the blood, is still the most perfect mode of cure in these affections. In what the special condition of the sac-wall, other than its roughness, consists is yet matter of controversy. They who are specially interested in the inquiry should, if they have not, peruse the report of a very animated discussion on this matter at the Anatomical Society of Paris, and published in its bulletin for November, 1865.

I will conclude with a passing allusion to the possible accidents from the operation. That from secondary hæmorrhage would probably be reduced to a minimum by the employment of the carbolised catgut ligature. Pyæmia from venous thrombosis does not appear. Perhaps the chief danger is from cerebral anæmia. This result occurred, as has been stated, in one of Pirogoff's cases, and is the only one recorded among those I have submitted. Here, as in every case in Surgery in which a ligature is applied in the continuity of an artery, immunity from anæmia and its results depends mainly upon the rapidity and sufficiency with which the collateral circulation is established. But this is a risk that must be chanced, and does not appear sufficiently serious to contraindicate the operation.

COTTAGE HOSPITALS were last week opened at Paulton, in Somersetshire, and on the Roxeth road for the town of Harrow.

(c) "Traité des Anevrysmes," p. 652.
(d) Lecture III., p. 11.
(e) "Nouveau Dict. de Méd. et Chir.," p. 286.

A SHORT HISTORY OF THE

INTRODUCTION OF YELLOW FEVER INTO THE PORT OF MONTE VIDEO IN 1857,

AND OF ITS REAPPEARANCE IN 1872;

ALSO A FEW REMARKS REFUTING THE OPINIONS THAT THE FEVER IS LIMITED TO TEMPERATURES AND THE SEA COAST.

By J. H. SCRIVENER, M.D.

ON August 3, 1871, I had the honour of being appointed by the Provincial Government of Buenos Ayres special commissioner for the purpose of procuring in Europe such reports or information as I might deem of interest for the sanitary improvement of that city, which had been recently severely visited with yellow fever. I was thus placed in a position which led me to inquire with more care into the progress of that epidemic, and the circumstances under which it raged in the highlands of Peru, on the coast of the Pacific, as well as on the shores of the River Plate. I was also enabled to collect such treatises and official reports as have appeared in England, France, and the United States; also the reports of the Royal Sanitary Commission and the opinions of medical authorities as to the means to be employed to prevent the reappearance of the fever on the borders of the River Plate.

In a paper published in the *Medical Times and Gazette* of February 17 I have given a short account of the epidemic of yellow fever in the port of Buenos Ayres in 1858, and of its reappearance in 1871.

Since the publication of that paper the disease has reappeared on the shores of the River Plate, but on the opposite side of the river, and it may perhaps be interesting to some of your readers to learn a few particulars respecting the character it has assumed and the manner in which it was imported, as well as to know something of the countries which have been visited by this terrible epidemic. I shall also take this opportunity of stating some facts which appear to me to refute the assertions of those writers who say that yellow fever is only to be met with on the coast and in low marshy localities.

Buenos Ayres, capital of the Argentine Confederation, is situated lat. 35° S., long. 6° W., on the southern bank of the River Plate, about 200 miles from its mouth and twenty-five feet above the level of the river. It is a very healthy climate, and contains about 190,000 inhabitants, one-third of whom are foreigners. The city extends over a large tract of land, owing to the plan adopted by the Spaniards of making the streets cross each other at right angles. The streets are narrow, the pavement and side-walks are tolerably good, and the city has no drainage. It is an important seat of commerce, and a wealthy city. The province of the same name has many valuable productions, and the merchants carry on an active trade with the principal manufacturing towns in Europe. Many important enterprises have brought the River Plate into close contact with the London capitalists. There is a constant current of emigration to these shores; last year upwards of 40,000 immigrants arrived there. Buenos Ayres does not possess a good port.

Monte Video, capital of the Republic of Uruguay, is situated lat. 34° 54′ S., long. 56° 13′ 8″ W., on the left margin of the River Plate: it is a delightful and healthy locality. The town, which is 120 miles from Buenos Ayres, forms an amphitheatre, and is flanked on the left by a gulf; it is built on a rock composed of granite and mica. It extends, like Buenos Ayres, over a large tract of land, and the streets, which are narrow, cross each other at right angles. The pavement and side-walks are good, and the city is well drained. Its port is safe, and sufficiently deep to receive all descriptions of vessels; it is the largest, or to speak more correctly, the only one of La Plata, and has a fine harbour between the Cerro and the town, which forms a semicircular bay; it is well provided with water-supply. The city contains 80,000 inhabitants, two-thirds of whom are foreigners.

The houses in both these cities are almost without exception good; many of them are magnificent. The apartments are lofty; the windows descend to within two feet of the floor; but some of the rooms are narrow in proportion to their height. All the dwelling-houses in Buenos Ayres have an interior court, with a well of rain-water for the supply of the families living under the same roof. This water is principally used for drinking purposes. Within the last four years water has been abundantly supplied to the town by an aqueduct, bringing it from the river from a distance of two miles, and distributing it in

iron pipes. Before the present works were in operaiton the water was brought from the river in water-carts.

The sanitary condition of Buenos Ayres is very unsatisfactory. I directed the attention of the public authorities to this fact several years ago. I forewarned them during the epidemics of the cholera in 1866-67 that, if the pestiferous local causes in the town were not removed, they would result in a more serious calamity than any that had hitherto occurred; but, unfortunately, I could not prevail on them to take any decisive measnres. I little thought that my predictions in so short a time would be so painfully verified.

It is true that sanitary inspectors were appointed, but they did little for the removal of the impurities of the town, for we have only to penetrate into its mostly densely populated localities, and we are struck with the number of surface drains running in fetid riverlets, and traversing large tracts of land without finding an exit. We find open privies in almost all the houses, and we know that there is no local cause more injurious to health, and more justly considered an opprobrium in the present age. We learn from experience that the gaseous products which are given out by decomposing animal matter exert a strong poisoning influence on the atmosphere, and give rise to various forms of fever. The streams of fetid water in the suburbs of the town contain large quantities of filth and the refuse of beasts from the slaughter-houses. This must necessarily be highly pernicious in certain meteorological conditions of the atmosphere.

We could bring forward other local causes equally pernicious to health, which have no doubt favoured and increased the severity of the epidemics which have visited Buenos Ayres.

There are some facts which were observed before the outbreak of yellow fever in Monte Video and Buenos Ayres to which I should wish to call attention, as also some details in support of the assertions in my former paper—viz., that yellow fever was equally fatal in the highlands of Peru as on the borders of the sea; and that the opinions of those medical writers who state that the disease never appears in the mountains, nor at a distance from the coast, are erroneous.

There was daily intercourse between Monte Video and Buenos Ayres during the prevalence of yellow fever in 1857, notwithstanding it was not imported into the latter city. In the following year (1858), this epidemic made its first appearance in Buenos Ayres, and was brought there by the Royal mail steam-packet *Camila*, as stated in my former paper, for three persons on board that vessel, among whom was the purser, died from it.

It is a remarkable fact that the yellow fever was not introduced into Buenos Ayres in 1857, when there was daily intercourse with Monte Video, which is only at a distance of forty leagues; and it is equally remarkable that the epidemic did not reappear in Monte Video till 1872. We learn from these facts that yellow fever made its first appearance in Monte Video in 1857, and in Buenos Ayres in 1858. Then, again, that it reappeared in the latter city in 1871, and in the former in 1872. We may observe that on this second occasion it was preceded in both cities by an epidemic of small-pox of a confluent form, called by the name of viruela negra (black small-pox), because it appeared, at an early stage, like a black mask on the face. It is true that communication was interdicted between the two ports during the prevalence of the epidemic in 1871, and we might perhaps have attributed to that cause the immunity which the town enjoyed had it not been that in 1858, when it first prevailed in Buenos Ayres, the port was not closed, there were no quarantine regulations, and there were no cases of the epidemic.

The influence of the epidemic of small-pox which then reigned in Monte Video might have checked the advance of yellow fever from Buenos Ayres to that city, for it is a remarkable fact that during the prevalence of that epidemic in those towns there were only a few cases of yellow fever, which presented themselves a few days previous to its disappearance.

There can be no doubt on the influence of some epidemics on others in checking their development from the preceding fact, and from the observations of Dr. Lawson, in his paper "On the Influence of Epidemics of Fever in checking the advance of those of Cholera," published in the *Medical Times and Gazette* of July 6; he says "that when a cholera epidemic approached a district in which fever was epidemic, cholera did not become general and frequent within the fever field until the epidemic force of the latter was broken, and, *vice versâ*, fever as an epidemic did not penetrate a cholera field until the epidemic force of that gave way."

The yellow fever made its first appearance in Monte Video in 1857, and was confined to the northern part of the town, where the soil is low and marshy, and frequently covered with putrid animal and vegetable matters. The importation of this fever was clearly traced to a Genoese vessel, for four persons who went on board and returned on shore brought a bundle of dirty linen to be washed, were attacked with the fever, and died from it. The priest who was called to confess them also died from the fever. It did not spread to the other quarters of the town, for when a case occurred there it could be traced to the quarter where the pestilence existed. The fever broke out at the commencement of March, and did not disappear until the end of June. It carried off about 5000 victims.

It is currently believed that the yellow fever was imported into Monte Video in 1872 by the captain of a merchant vessel, which arrived from the port of Pernambuco, and was infected with that disease. The captain came on shore, and communicated the fever to a person in the house where he alighted; it then spread among the inhabitants in that quarter of the town. As soon as the facts became known to the public authorities of Buenos Ayres, they closed the port against all vessels coming from Monte Video, and the President of the College of Physicians addressed a note on March 3 to the Argentine Consul at Monte Video, requesting him to obtain answers from the Board of Health to the following questions:—

What is the nature of the disease which has lately produced such fatal cases in Monte Video?

Has it been imported, and from what place?

How many cases have occurred since the appearance of the disease?

Have the kindness to obtain from the Board of Health any details that may be of interest in elucidating the subject.

On the following day the Minister of the Buenos Ayres Government received a note from the Argentine Consul, in which he says that "he had seen the President of the Board of Health, who had authorised him to state that the first case of the disease occurred on March 15; that up to last night at eight o'clock (24th), there had been eight deaths, and that there were still eight cases under cure; that from that hour yesterday there had been no new cases, and that the Board of Health had reported the disease as yellow fever, but were unable to declare whether it was imported or sporadic."

Since that date the fever has continued increasing, and we learn from the *Standard* of Buenos Ayres and the public papers of Monte Video that there were from six to seven cases daily up to April 15, and that the municipality had established temporary hospitals for the patients. From that period, according to the *Siglo* of Monte Video, there were from twelve to thirteen cases daily, and the authorities called the attention of the public to the increase of the fever, recommending those who had the means at their command to leave the town; and in consequence of that recommendation upwards of 30,000 persons left for the country and the neighbouring districts.

It appears from May 1 the fever rapidly decreased, and we learn from the *Siglo and Tribuna* of Monte Video that from that date up to the 16th there were only three or four new cases occasionally, and that the Medical Board had reported that there had been no new cases for the last four days, which led them to hope that the epidemic was about to disappear.

These papers also state that it is satisfactory to know that the fever had been confined to the quarter where it broke out through the precautionary measures of the public authorities to prevent its propagation; that the Medical Board and most of the physicians reported the disease as yellow fever; that there were notwithstanding some who considered it as typhus fever, and others again who thought that it was a fever of a putrid form hitherto unknown in the country. But all confessed that it was a violent and dangerous disease, which carried off its victims in two, three, or four days, and that only one-fourth of those who were attacked with it were saved.

We also learn from the *Siglo* that the number of the victims of the fever is comparatively small, and that the bills of mortality only record 16 deaths from the fever in March, 86 in April, and 48 in May, making a total of 150 persons.

We consider this statement to be below the actual number, for those physicians who did not believe the disease to be yellow fever would not report their patients to have died from that fever.

It appears from what we learn that the yellow fever presented itself in Monte Video in the same forms as at Buenos Ayres—viz., the benignant or simple hæmorrhagic form, the bilious or icteric form, and the nervous or ataxic form.

The Medical Board declared at the end of May that the epidemic had ceased to exist.

The recent epidemic of yellow fever in Monte Video has not been accompanied with those coincidences—thermometric, hygrometric, and meteorologic—which were observed at its outbreak in 1857, and which are said to prognosticate its appearance. These coincidences were observed and reported by Dr. Brunel during the epidemic of 1857. A statement of them is annexed to this paper.

There was nothing remarkable in the state of the weather during the months of last March, April, and May; it was warm and pleasant—its normal state at that season of the year—and the sanitary condition of the town was tolerably good. We are convinced that, notwithstanding these favourable atmospherical conditions, the reason the fever did not spread was owing to the stringent measures which were taken by the public authorities, who isolated the fever patients, and placed them in temporary hospitals in the suburbs of the town. They also compelled those living in the infected quarter to remove to a distance from it.

In the admirable discourse of the President, Deputy Inspector-General Gordon, C.B., to the members of the St. Andrews Medical Graduates' Association, we find that the protective measures which were employed at Monte Video to prevent the spread of yellow fever were known and practised many years ago by the army surgeons. He says that "the efficiency with which protective measures are employed have rendered such a thing as a general epidemic of infectious disease—scarlatina, for instance—unknown; and although, unhappily, means have not yet been discovered to similarly exclude cholera, when that dire malady sweeps over a military station, as it does in India, nevertheless, by removing the troops away from the locality to a more healthy district, a great deal has been achieved to diminish its ravages. This measure, adopted first with regard to yellow fever in the West Indies, was practised in India so long ago as 1825; and yet, to judge from recent printed statements, the measure would seem as but of yesterday. In both cases its authors were army surgeons."

We have only to refer to the valuable reports on epidemic cholera and yellow fever in the army of the United States during the year 1867 for a confirmation of these opinions. Doctor Woodward, in his excellent report on yellow fever to Brevet Major-General Barnes, Surgeon-General, states that—"The strict blockade maintained for military purposes during the rebellion appears to have served to protect our armies from yellow fever. The troops at New Orleans and throughout the Department of the Gulf wholly escaped, and the disease appeared elsewhere to a limited extent during the years 1862 and 1864."

(*To be continued.*)

ON THE PATHOLOGY AND TREATMENT OF SMALL-POX.

By ROBERT H. BAKEWELL, M.D.,
Late Medical Officer of Health for the Colony of Trinidad,
President of the Medical Board, and Medical Attendant of the Small-pox Hospital of Port of Spain, etc.

(*Continued from page* 378.)

One complication was very common among Trinidad cases—that is, pregnancy. When the disease did not produce abortion the pregnancy probably added nothing to the danger, but when abortion occurred recovery was the exception. Case 95 shows the good effect of treatment under a marquee. The patient suffered from sloughing of the vulva in addition to small-pox and abortion, but ultimately recovered.

The destruction of skin by confluent eruption, and the partial or complete arrest of its functions as an excreting organ, naturally give rise to symptoms of blood-poisoning. These show themselves at an earlier or later period, according to the severity of the eruption. The comatose or semi-comatose condition which occurs from the fifth to the eleventh day of eruption appears to be owing to the retention in the blood of those matters which it is the special business of the skin to eliminate. To this cause is probably to be attributed that pneumonia of the dying which comes on so rapidly in some cases, and so quickly carries the patient off.

This secondary blood-poisoning is, of course, quite distinct from the blood-poisoning which occurs during the stage of primary fever, or when the eruption is imperfect or incomplete, as so often happens in hæmorrhagic cases.

I have no new observations to make on variolous laryngitis. The laryngoscope can only be used in the earlier stages of the cases in which this complication occurs, as laryngitis, so far as I have seen, only results from the presence of varioles in the mucous membrane of the larynx, and these only show themselves when the disease is confluent, and then the swelling of the face is generally too great to allow of the laryngoscope being used. I have not seen a case in which death has resulted from laryngitis alone, or where severe laryngitis has accompanied a discrete or semi-confluent eruption.

In all cases one of the best symptoms is the recovery of appetite, which soon becomes enormous. Great care is required that patients do not overload their stomachs. Allen's case (*vide ante*) is an illustration of a feverish relapse caused by over-feeding. There were several such, as even when extras were not given the convalescents would steal or beg the bread allowance from others who were too ill to require it all. One patient, whose grave-clothes were sent in with him by his wife, but who recovered, told me that after his discharge he ate one day sixteen plantains: now, a plantain weighs on an average half a pound! The usual allowance of the convalescents was a pound of meat (uncooked), a pound of bread, a pound of potatoes, or yams, or plantains, two ounces of salt fish for breakfast, rice *ad lib.*, and a bottle of porter (a little more than a pint), tea or coffee, etc.

The secondary skin diseases following small-pox require a short notice. The highly vascular and irritable condition of the skin after a copious eruption of small-pox predisposes to boils and abscesses. These are exceedingly common. Many patients suffered from pemphigus, which appeared about the eighth or ninth day. A rarer form of disease is a secondary scabbing. After the first scabs have fallen off an exudation occurs from the highly sensitive surface of the skin, which forms a secondary scab. This in time falls off, but is sometimes followed by another scab of less thickness and extent, which forms a third desquamation.

The corymbose form of eruption has been in all my cases combined with a confluent or semi-confluent eruption in the face. It was very common among the cases in Trinidad, and as it appeared to have less importance than the confluence of the eruption, I have not classified the cases as corymbose unless when this seemed the predominant form of eruption. Corymbs formed very commonly on the scars of old blisters. I think the curious fact out of which so much capital was made by the anti-vaccinators, that in Mr. Marson's cases the corymbose were rather more frequent among vaccinated than unvaccinated persons, is owing only to the small number of cases observed by him.

Variola aquosa was in my experience a much rarer form than either the simple or hæmorrhagic forms. I had only four cases at the hospital, not including those that were hæmorrhagic as well. A large proportion of the latter might be termed aqueous in one sense, as they never became "pustular"; but this was partly because they terminated fatally at an early stage of the eruption. Variola aquosa is characterised by large watery vesicles, many of which will run together in patches, thus becoming corymbs. The contents are somewhat different from those of the V. simplex. There are more free nuclei and bright nucleoli, and I never found any proliferous cells. The proportion of corpuscles to fluid is on the seventh or eighth day not one-sixth that of the ordinary variole. The varioles do not burst, they shrivel and dry up. The following description is taken from a fatal case:—

H. D., negro, aged 54, male, admitted December 3. Fever commenced on November 28; eruption appeared on December 1. The notes show that he was delirious on the nights of the 3rd, 4th, and 5th, and not quite right during the daytime. On the 6th and 7th he slept well; on the 8th the note is—"Slept well last night, but is rather light-headed this morning; knees and back covered with confluent vesicles in one mass." "10th: Delirious last night (tenth day of eruption). The knees and hands undermined with pus."(a) Chloral was given, but without effect, as the next note is—"11th: Did not sleep all night; mind still wandering, bowels open, tongue clean. 12th: The whole of the epidermis of the hands and numerous patches on the thighs and legs completely separated from the cutis, and lying on it in wrinkled folds. Pulse quick and sharp; no sleep." December 13 (thirteenth day of eruption), among other notes is, "skin of hands and knees as if macerated long in water; pulse imperceptible; feet cold." Died that night.

Here it will be observed that instead of scabs, which ought to have formed long before, there was a watery condition of the varioles even up to the thirteenth day of eruption.

(a) This case was taken before I had made any microscopic examination of the varioles.

I saw many cases of this form of small-pox at San Fernando among children who had been vaccinated about six months before.

Before quitting the subject of non-maligant small-pox, I must say a few words as to the class of persons most liable to contract this form of the disease. In the West Indies, where a large proportion of the population is unvaccinated, we have an opportunity of seeing the disease under conditions not obtainable for many years in Europe. As Medical Officer of Health for the colony, the epidemic during the first five months of its existence came officially under my cognizance. I had an opportunity of watching its rise and progress in Port of Spain, and its spread over the country districts. Now, in Trinidad there are two races as different from one another, except in the colour of their skins, as two races can be. The one, the Hindoo, belongs to the great Aryan family; the other is the negro. The Hindoo is feeble, timid, small-limbed, with very little muscular strength, for his blood and muscles are impoverished by the residence of his race having for thousands of years been fixed on the malarious plains of Hindostan, and by the almost exclusively vegetable diet on which they have fed. His blood is deficient in red corpuscles, often to such an extent that a drop under the microscope shows them only in such numbers as to approach one another without being actually in contact. To the naked eye the blood is pale and watery. The number of white corpuscles is many times more numerous than in the healthy European; it is common to see twenty to thirty in the field at once with a quarter-inch object-glass. The red ones, instead of showing that tendency to run together in *rouleaux* which characterises healthy blood, and which, for want of a convenient word, I have named "nummulation" (*vide* paper "On the Characteristics of the Red Corpuscles of the Blood in Various Races of Mankind," read before the Anthropological Society), only cohere by their edges, and not by any part of their concave surfaces; they have a tendency to lose very rapidly their smooth outline, and to have a stellate or serrated edge.

Now, the negro is the very opposite of all this. Strong and muscular, with the build of a Hercules, digesting well, and assimilating rapidly, he is capable for a short time of an enormous amount of physical labour. His blood is extremely rich in red corpuscles—more so than that of any other race I have examined. The red corpuscles "nummulate" rapidly, and are many times more numerous in proportion to the white than in the Hindoo. In fact, it is impossible after a little practice to mistake the one for the other. I used to be able to distinguish, in nine out of ten cases correctly, the blood of a Mahommedan from that of a Hindoo, the Mahommedan's (flesh-eater) being much better and richer than the Hindoo's. Even a debilitated and sickly negro's blood is richer than a healthy Hindoo's.

Now, these two races, with the characteristics above described, form the bulk of the labouring population of Trinidad. They live in the same localities; they do the same kind of work, inhabit the same kind of houses, eat the same kind of food, the staple of each being salted codfish, plantains, and rice; they use but little alcohol, and what they do is nearly always rum. They are exposed to the same climatic influences, yet their susceptibility to the poison of variola is remarkably different. The negro, even when vaccinated, is extremely liable to small-pox; and when he has it as an adult he suffers almost as severely as if unvaccinated. I have seen numbers of cases of small-pox in negro children vaccinated within two or three years preceding the epidemic. I examined personally a considerable number of cases in one district of the island, and found no less than 31 out of 90 were those of the children vaccinated since the commencement of the epidemic. In fact, we soon gave up all idea of a single vaccination as a preventive; it only modified the disease. The epidemic was extremely virulent: many persons who had had small-pox before, had a second attack; many revaccinated persons (the writer among the number) were attacked; and in two cases that were under my own care, and in one of which I had the particulars from a medical man, patients had the disease twice within six months. The coolies, on the contrary, have suffered but little from the epidemic. On the sugar estates, where their labour is chiefly employed, the cases have been few, and for the most part slight. Some of this exemption is doubtless due to the patients having been isolated, but this would only very partially protect the others from contagion, as there was no isolation of the creole or negro population, who, except in Port of Spain, refused with very rare exceptions to go into hospital. The severest confluent or perconfluent cases were among the negroes; bad cases among the coolies were, as far as I could hear or see, always hæmorrhagic.

The conclusion I was compelled to draw, from the large number of facts that came under my observation, was that small-pox is a disease which attacks most severely those who are in that condition of health which the older writers called "plethora," and that, *cæteris paribus*, the more plethoric a person was the more confluent the variola would be; and that as the patient approaches the condition of emaciation and anæmia, the less severe the variola becomes, provided always that the condition under which the hæmorrhagic form is produced does not occur. I speak now only of what I have called "variola simplex." A very curious illustration of the effect of anæmia and emaciation in modifying the action of the variolous poison happened in the earliest days of the epidemic. The first case was that of a negro named William Brown, who worked his passage out to Trinidad on board the Royal mail steamship *Nile*. During the passage out one or two cases of small-pox occurred, and Brown contracted the disease. He landed in Trinidad apparently well, but three days afterwards was attacked with the primary fever. On visiting the case for the first time I found him in the stage of desquamation. I, of course, inquired for any unvaccinated persons in the neighbourhood, and found in the next room a sickly, feeble, emaciated, and most anæmic mulatto girl of about 16. Her mother told me that she had never been vaccinated, and I therefore vaccinated her immediately with lymph I had brought from England a few days before. On examining the arm two or three days afterwards there were no signs of the vaccination having taken; but the mother told me that she had a vaccine spot on the thigh. On examination a fully developed and perfectly characteristic vesicle of the seventh day was found on the knee. The girl had, in fact, caught the small-pox, and this was the reason the lymph (which succeeded in every other case) produced no effect on her.

The experience of all who have written of small-pox from practical experience is that gross-feeding, intemperate, and plethoric persons have the disease in its severest form. For while very few escape it entirely, it is noteworthy that the thin, spare, temperate, even anæmic, people never have the confluent form. I have lately discovered a fact which may lead to some further knowledge as to what state of the blood, chemically speaking, is most favourable for the reproduction of the small-pox germ. While at Trinidad I put up for microscopical purposes some two dozen capillary tubes, filled with variolous matter at various stages of the eruption, so as to show the corpuscles mentioned on a former page. I also mounted some specimens between slips of glass, in the ordinary way. Some of these specimens were mixed with glycerine and water, and some were left in their natural state. Now, on examining the contents of these tubes I find that all I have opened—so far, seventeen or eighteen—contain crystals. These crystals are of two kinds—one I believe to be merely crystals of hæmatin or hæmatoidin, formed from the red blood-corpuscles always present in the variolous matter of variola hæmorrhagica, and from pigment cells; the other crystals are composed of tufts formed by bundles of minute acicular crystals, and resemble the top of a shaving-brush. They are often of a dumb-bell outline, but sometimes form a complete circle, and then strikingly resemble the crystals of leucine figured in Beale's "Microscope in Medicine" (ed. 1869), pt. xiv., Fig. 95,(b) or those of margarine, just below (Fig. 97). These circular tufts I have only found in the specimens of variolous matter mounted under thin glass. Possibly the compression of the glass slip may have something to do with their shape. Another form are evidently crystals of tyrosin. There is also an arborescent form of crystal, the nature of which I cannot make out.

Should it prove on further investigation that these crystals consist of some substance which exists only in the blood of persons who are susceptible to small-pox, or exists in excess in their blood, that it is removed by an attack of small-pox, and that its reproduction, either entirely or in excess, is hindered by that disease, we may possibly discover some means of neutralising or eliminating it during the primary fever, and before the eruption is fully developed.

If this could be done, the two dangerous periods of small-pox would be abolished,—that, namely, when the poison is in the blood, and when it kills if in great excess before it can be eliminated by the eruption; and that second period when an excessive eruption proves fatal by the destruction of skin, the consequent blood-poisoning from inaction of that excreting organ, or the exhaustion and irritation of the profuse discharge.

(b) Beale states (*op. cit.*, p. 120) that "Frerichs and Städeler have detected leucine in the blood, urine, and bile of patients suffering from typhus, small-pox, and other exanthemata." If in the blood it may exist in the fluid of the varioles.

For if we could in any way divide the eliminating process between the skin and some other organ, we should possibly be able to guide to a successful termination those cases in which the amount of poison received into the system has been so large that it kills at the very commencement of the eruption, or even before this comes at all, and we should be able to save the skin from the destructive effects of a confluent eruption. If, for example, we could throw upon the bowels or the kidneys part of the work that is now wholly done by the skin, we might immensely relieve the latter organ without seriously injuring either of the former.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

OVARIOTOMY—DEATH ON THE SEVENTH DAY FROM PERITONITIS.

(Under the care of Mr. RIVINGTON.)

H. R., AGED 50, was admitted into the London Hospital, under the care of Dr. Down, on September 16, 1872. She stated that she first noticed a swelling at the lower part of the abdomen four months previously, and that since then it had increased rapidly. She had always enjoyed good health, and had not had any serious illness, but she had been subject to "bilious attacks," which her daughter said would last a fortnight, and be attended with headache and vomiting of a greenish fluid. She had a xanthelasmic patch on her left upper eyelid. The abdomen measured nearly fifty inches in circumference, and yielded the typical signs of ovarian dropsy—dulness on the anterior aspect of the abdomen nearly to the ensiform cartilage, resonance in the lumbar regions, want of symmetry, rather obscure fluctuation, etc. There was considerable pain in the right iliac region, attended for a few days with high temperature, friction-sound, and grating perceptible to the hand laid on the surface. These symptoms were ascribed to an attack of local peritonitis, and it was believed that adhesions would be fouud at the spot.

Dr. Down was of opinion that an operation was advisable—an opinion shared by Mr. Rivington, who was requested to see the case. Mr. Hutchinson also sanctioned the procedure. Both Dr. Down and Mr. Rivington laid the bearing of the question of operation very fully before the patient, and she decided in favour of submitting to it.

On Thursday, October 10, at 2.30 p.m., ovariotomy was performed by Mr. Rivington in a ward in the east attic previously prepared for the purpose, aud brought to a temperature of 70°. Steam was not used. An incision of four inches in length was made in the middle line, beginning about an inch below the umbilicus. On reaching the peritoneum a considerable quantity of ascitic fluid escaped, and when the fingers of the left hand were introduced and swept round carefully between the tumour and the abdominal wall no trace of adhesion was found. The syphon trocar was introduced, and the cyst drawn forward with tenaculum forceps, but its wall was so thin that it gave way, rendering the trocar useless. A second cyst, which came into view behind the first, was punctured, and its contents evacuated, and then the whole mass was drawn forward through the wound. There was a solitary adhesion of omentum at one spot. Mr. Hutchinson's clamp was put on the pedicle as far forwards as possible, and the bulk of the tumour was then cut away. No fluid had entered the abdomen, so that harelip-pins were at once inserted through all the tissues, including the peritoneum, the wound closed, the abdomen bandaged, and the patient sent to bed. Mr. Hutchinson, Mr. Tay, and Mr. Reeves assisted Mr. Rivington. After the operation the patient vomited, and was sick two or three times during the evening. The after treatment ordered consisted of ice to suck occasionally, brandy and beef-tea enemata, hypodermic injections of morphia at night, abstinence from nourishment by the mouth during the first forty-eight hours.

October 11.—Very comfortable; no symptoms. Temperature 99·8°; pulse 104; respiration 22.

12th.—Some flatulence. Temperature 102°; pulse 100 to 120; respiration 20.

13th.—Severe shooting pains in abdomen; felt sick, but did not vomit; passed water, hitherto drawn off by catheter, and motion; very little tenderness on pressure, and no increase of pain in passing water and motions. Temperature—morning 103·6°, evening 102·2°; pulse 104; respiration 28.

14th.—Began to vomit in the morning, and continued to do so intermittently till 8 p.m.; vomit chiefly bile. Had an enema of tinct. opii mxxx. and gr. ¼ of morphia hypodermically. Passed a comfortable night, and did not vomit again.

15th.—2 p.m.: Patient recommenced vomiting. Temperature, which on the 14th was 101·2° and 101·4°, now stood at 100·4° and 101·4°. Two or three enemas of brandy, beef-tea, and opium were administered.

16th.—Vomited continually during the day; was free from pain, but evidently sinking. Temperature 103·1°; pulse 160. No pain.

17th.—Died at 5 a.m.

The clamp and harelip-pins were removed on the fourth day (October 14). As the abdomen began to swell soon afterwards, the pedicle retracted, and a considerable quantity of serous fluid escaped from the abdomen by the side of it. Almost all the wound healed by first intention. It is worthy of note that in some cases the patient appears to deteriorate after the removal of the clamp. We are informed that of two cases operated on at the Hospital on the same day by another surgeon one recovered perfectly without a cloud; the other went on well till the clamp was removed, and then sank rather quickly.

In the present case a proper post-mortem could not be obtained. The wound, however, was opened up; firm lymph was found on the prominent margins of the intestinal coils. There was no distension of the abdomen whatever, nor any fluid in the peritoneal cavity. Tho pedicle had retracted, but all the vessels were sealed. The ovarian cyst was multilocular, and contained fluids of different colours and consistence.

It would have been more satisfactory if a post-mortem examination could have been obtained, as probably the liver would have been found enlarged, with a structure resembling cirrhosis.

CLINICAL REMARKS ON A CASE OF NON-VENEREAL SYPHILIS, IN WHICH THE CHANCRE HAD SOME RATHER UNUSUAL CHARACTERS; THE CASE ALSO ILLUSTRATES WELL THE INCUBATION PERIOD OF THE DISEASE.

By JONATHAN HUTCHINSON,
Senior Surgeon to the London Hospital; Surgeon to the Moorfields Ophthalmic Hospital, and to the Hospital for Diseases of the Skin.

Mr. ——, aged 31, married, was first seen by Mr. Hutchinson about the end of the third week in September, on account of a sore on the ulnar side of his right ring finger. It had then existed for three weeks. It was at the end of the finger, and involved the matrix of the nail on one side. It was of considerable size, its edge prominent, its surface unhealthy-looking, and the surrounding tissues much inflamed. Great pain had been present from the beginning. It differed from onychia maligna in not affecting both sides of the finger and the whole matrix of the nail, in the presence of a very prominent edge and a considerable surface of ulceration, and in occurring in an adult. These features had led to a suspicion that it might be cancerous on the part of the surgeon who first saw him. Mr. Hutchinson removed the nail, and ordered the diligent use of lead lotion, in the hope that the case was a somewhat unusual one of ordinary onychia. After persevering for a fortnight with this treatment, Mr. Hutchinson found that the sore had increased in size, and still remained extremely painful and much inflamed. Suspecting now that it was a chancre, Mr. Hutchinson ordered black wash instead of lead lotion; not, however, being able to obtain any evidence of syphilis beyond that furnished by the appearance of the sore, it was not considered advisable to administer mercury internally. There was at this time no enlargement of glands at the elbow or in the axilla; no rash or sore throat; and finally, there was no induration whatever at the base of the ulcer. At his third visit, on October 21, when he was shown to the class, no doubt whatever remained as to the syphilitic nature of the sore on the finger. The sore had increased in size, but was still one-sided, one-half of the end of the finger and nearly all the matrix of the nail being converted into a highly inflamed ulcer, with prominent edges, and a surface covered by a little greyish, thin, unhealthy discharge. It was still very paiuful. There was a hard, enlarged, movable gland just above the elbow, and another of considerable size in the armpit; the latter had been noticed for about a week. For about five days a rash had been coming out, and the patient now presented a copious

eruption of dusky macula on the trunk, fronts of forearms, neck, etc. His throat had lately begun to feel "stiff" in swallowing, and the tonsils were found to be enlarged and ulcerated superficially, though not in a way characteristic of secondary syphilis. The patient, who hitherto had been quite unable to give any clue to the source of inoculation, had lately found out that at the time when he first noticed the sore on his finger one of his fellow-clerks was suffering from some venereal disease. Supposing this clerk's disease to have been syphilis, it is just possible that the patient may have been inoculated by using an office towel fouled by discharge from the sore lip of his fellow-clerk.

Mr. Hutchinson said that this case presented several points of interest besides the occurrence of a non-venereal chancre. Special stress was laid upon the fact that the sore occurred on one side of the finger, as distinguishing the case from onychia maligna, in which the matrix of the nail is uniformly affected, and the swelling and inflammation of the finger are therefore symmetrical. The extreme and persistent painfulness of the chancre was, Mr. Hutchinson thought, perhaps a result of the matrix of the nail having been involved in the specific inflammation. This symptom was present in another case where the chancre implicated the same part; while a third patient, whose sore was at a little distance from the nail, had no pain, and scarcely any inflammation. The absence of specific hardening of the chancre in the patient under consideration furnished the text for some remarks on the importance of keeping in mind the variations which exist in this respect between chancres in different persons and on different parts of the body. No doubt in the present case the great amount of inflammatory swelling quite masked the specific induration; but, this apart, it is to be noted that chancres on the skin do not as a rule present such a typical degree of induration as when they occur on the glans penis. The lecturer also drew attention to the accuracy with which this case corresponded to other cases of untreated syphilis in the length of the incubation period, almost exactly two months having elapsed between the discovery of the incipient sore and the appearance of secondary symptoms. Mr. Hutchinson held that the identity of the incubative period in numerous cases of syphilis unmodified by treatment was very weighty evidence in favour of the theory that syphilis is an exanthem.

ROYAL LONDON OPHTHALMIC HOSPITAL.

CASES UNDER THE CARE OF MR. HUTCHINSON.

Case 1.—*Severe Ulceration of Corneæ, caused by the dust given off by Podophyllin Root whilst being ground—Eruption on the Skin from the same cause.*

It appears from the statements of a patient now under Mr. Hutchinson's care at Moorfields that podophyllin dust is well known in the trade to produce "inflamed eyes" and an eruption of "scabs" on the arms and legs of the men who attend the mill in which the root is ground. The symptoms are said to pass off in a few days and leave no ill results behind as a rule, because the men wear closely-fitting masks, the eye-holes of which are fitted with glass, and the podophyllin is moreover wetted to a certain extent, in order to prevent waste in the form of dust.

The man, aged 39, came to Moorfields about October 25 with extensive superficial ulceration of each cornea, attended by intense general conjunctival congestion. The ulceration of the corneæ was central, and large in extent. In the right eye its base was densely white, and looked exactly as if lead had been used. He denied having used anything containing lead. At the next visit, however, he said he was in the habit of using "sugar of lead" to his eyes whenever they were inflamed from podophyllin, but that in the present attack he had used none of it, having gone at once to a medical man. His statements on this point, however, were rather wavering. He had had several other attacks of the same sort, but not nearly so bad as this one, and he attributed the severity of the last to the fact that his mask did not fit well when he used it the day before the inflammation of the eyes set in; he said also that for some reason the podophyllin was not wetted so much as usual at the last grinding, and that there was more dust in consequence. He showed also one or two dusky spots on the arms where there had been "scabby places" a few days before.

The day's work which gave rise to the present attack occurred about ten days before he came under care at the Hospital. No symptoms of irritation appeared while he was at the work or during that evening, but on waking next morning his eyes were inflamed. He said that the dust did not give rise to any irritation or inconvenience whatever until the day after its introduction. He was not purged by the dust.

Cases 2, 3.—*Spontaneous Suppuration of Vitreous in Eyes long previously Blinded by Corneal Ulceration—Great Inflammatory Œdema of the Soft Structures around the Eye.*

Cases of apparently spontaneous inflammation of eyes long blind from corneal disease are common enough, but it is unusual in such instances to find the vitreous full of pus and the eyelids and other soft parts very much swollen. Two such cases lately under Mr. Hutchinson's care are worth brief mention. One patient was a blind beggar, aged 40, who had lost the sight of both eyes from some hot whisky punch being thrown into them seventeen years before; he thought that a slight "glimmering of light" remained in one eye for several years, but it had long since been extinct. About a month before admission (in November, 1871) into the London Hospital he woke up with great pain and inflammation in his left eye; this continued to get worse, and for a few days before admission was attended by swelling of lids, etc. He had once before had a similar but much milder attack. At the time of operation there was great chemosis and swelling of lids; the cornea was partly, but by no means entirely, opaque. On opening the eye Mr. Hutchinson found the vitreous represented by an almost uniform mass of recent pus. The retina was in normal position, softened and infiltrated with pus. The choroid looked normal to the naked eye. The lens was in position, and perfectly transparent. An interesting question may be asked by the way: Why was this eye quite blind for years before there was any considerable disease of vitreous?—for the only apparent disease of old date was that of the cornea, which was far from enough to account for blindness. In all probability the retina had been inflamed at an earlier date—either when the cornea was first affected or during the mild attack of inflammation which occurred some time later. Such disease of the retina, followed by atrophy of some of its essential structures, especially of the layer of rods and cones, is commonly met with in eyes lost by disease apparently limited to the cornea and ciliary region.

The second case was that of a woman, aged 29, who lost her left eye during a bad attack of small-pox four years previously. She came to Moorfields in October of the present year with the lost eye pushed forwards by enormous swelling of the tissues around it, and almost buried in the œdematous conjunctiva and inflamed eyelids. The attack had lasted about ten days and been accompanied by intense pain, the patient being much weakened in consequence. She stated her belief that the eye inflamed in connexion with a bad "cold in the head," which came on just before the eye was attacked. On several former occasions such catarrhs had been accompanied by mild inflammation of the same eye. In this eye, also, the vitreous was full of recent creamy pus, the retina being still *in situ*. There was old corneal opacity. The eyeball was much glued to the surrounding parts, and they to one another by the recent effusion. Relief to her pain followed almost immediately after excision of the eye, and the orbital inflammation rapidly subsided.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

LARGE FIBROUS POLYPUS OF UTERUS—PROFUSE HÆMORRHAGE—OPERATION—RECOVERY.

(Under the care of Dr. JOHN WARD COUSINS.)

A. C., AGED 43, was admitted on June 24, 1871. She stated that her abdomen had been gradually enlarging for three years, during which time she had frequently suffered from severe pain and flooding, and lately from a watery and offensive discharge. When the pain was severe she often vomited. Her health and strength had completely given way, and for several weeks she had been almost entirely confined to her bed. She was extremely emaciated, and her skin was everywhere blanched from loss of blood; tongue pale and flabby, and pulse very weak, rapid, and feeble. The abdomen was much increased in size, and a large uterine tumour, irregularly lobular, could be distinguished through the thin abdominal walls. On examination per vaginam the os uteri was found low down in the pelvis, and through it a firm tumour could be detected. A flexible uterine sound entered the cavity freely in every direction but in front, where the tumour was firmly pressed against the os pubis. The patient objected to any

operative procedure. The hæmorrhage was controlled by cold and perfect rest, and in a few days she returned home at her own request. On September 26 I was hastily summoned to her house in consequence of severe bleeding. The os uteri was then dilated to the size of a five-shilling piece, and a portion of the tumour was projecting through it. Having emptied the bladder with a catheter, the protruding mass of the tumour was grasped with the left hand, and drawn down through the vulva, aided by external pressure on the abdomen and the straining efforts of the patient. The peduncle was four or five inches in thickness, and this was transfixed with two strong whipcord ligatures. A few hours having been allowed to elapse to insure perfect strangulation, the tumour was cut off close to the ligature. After the operation the patient was much exhausted, but the hæmorrhage entirely ceased. A catheter was retained in the bladder a few days, as the thick peduncle filled the vagina and compressed the urethra. The subsequent treatment consisted in carefully syringing the vagina with deodorising injections, and the strength was supported by nourishment and stimulants. After a few days the discharge became very fetid, and the patient suffered from diarrhœa and irritability of the stomach. On the fourteenth day the peduncle came away, affording great relief, and a rapid improvement followed. Chalybeate tonics were administered, and early in November she was quite convalescent. Her general health continues good (July, 1872).

Remarks.—The tumour was a hard solid mass weighing about 10 lbs. It consisted of several nodules firmly united together. On section it presented a whitish-grey colour, with the usual fibrous elements, and the circular arrangement of the fibres was clearly seen in the denser parts. The polypus in this case had gradually distended the uterus, and this organ, stimulated by its presence, was in the act of protruding it through the dilating cervix into the vagina. The vital power of the patient was almost exhausted by the continued recurrence of the hæmorrhage, and the operation was done at the last extremity, just in time to save her life. If, however, the os uteri had been dilated artificially, and the tumour removed, it would have been far better for the patient, and would have saved her weeks of suffering and exhaustion; but she would not consent to the operation. The diarrhœa which occurred during the sloughing and expulsion of the peduncle probably arose from the absorption of septic matter from the uterine surface, and it is an interesting question to consider—how far the feeble and empty condition of the vascular system increased the liability to this form of poisoning? The peduncle was very thick and firm, and several inches of it were left behind to separate, and this soon became a fetid, sloughing mass, increasing the danger of septic poisoning, which the most careful washing and application of deodorisers could not wholly prevent. The ligature, however, appeared to be the safest way of securing the tumour and preventing the possibility of more hæmorrhage; and it is my opinion that it is always best to secure the peduncle some little distance from the uterine structure, as the vitality of these growths is very feeble and easily destroyed, and the remainder is sure to die and to be expelled.

THE abdominal section in a case of extra-uterine fœtation was performed last Saturday at the Women's Hospital, Birmingham, by Mr. Lawson Tait. The case is recovering.

A NEW fever hospital in connexion with the Sheffield General Infirmary was opened on Friday week. The Duke of Norfolk has given munificently towards the cost, which is about £16,000.

EXTERNAL URETHROTOMY.—M. Bron states that of 24 patients on whom he has performed this operation, in 17 he did it with and in 7 without a conductor. In 8 of the 24 the catheter was left in the urethra for some days, in 13 it was kept in only from one to thirty-five minutes daily, in 1 it was not passed at all, and in 2 this point was not noted. In 9 of the 24 there were some consecutive accidents, in 13 these were of the slightest character, and in 2 nothing was noted. None of the cases were followed by death or any important complication. The number of days occupied in the treatment varied from three to seventy-nine, the mean duration having been about thirty-five days. As to the definitive result observed in 18 of the cases, the cure was found to remain complete at the end of from one to eleven years. In 10 of these cases an instrument was still passed at distant intervals, but in 7 this precaution had not been observed.—*Lyon Méd.*, October 13.

TERMS OF SUBSCRIPTION.

British Islands (*Free by post.*)	*Twelve Months*	£1 8 0
	Six „	0 14 0
The Colonies and the United States	*Twelve* „	1 10 0
„ „	*Six* „	0 15 0
India	*Twelve* „	1 15 0
„	*Six* „	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 9, 1872.

THE DRUITT TESTIMONIAL.

THE readers of the *Medical Times and Gazette* will learn with great regret that failing health has compelled Dr. Druitt to seek a warmer climate for a season. At such a juncture it will not be thought inopportune to remind them of the great debt which they and we owe to a colleague whose facile pen, ready wisdom and wit, profound knowledge of Medicine, both as a science and art, intimate acquaintance with the little world of the Profession and with the outside world of society, have stored in our pages many a valuable lesson, and left our readers many a pleasant and useful reminiscence. Some of the leading members of the Profession in London, impressed by a sense of Dr. Druitt's great services as a standard author, a leading sanitary reformer, and a contributor to the periodical literature of the Profession, have determined to start a testimonial which may be not unworthy Dr. Druitt's deserts, and may yield him in his temporary expatriation the comfort of a grateful sense of labour appreciated, and be evidence of the homage which worth and merit of no ordinary stamp command from the brotherhood of Medicine. We ask our readers to contribute to the Druitt Testimonial, because by doing so they will uphold the character which our Profession enjoys for forming a just estimate of talent and worth; because they will shed a gleam of sunshine over a change which, to a professional man, moving in the innermost circles of professional society in London, bears much of the aspect of banishment; and lastly, because by doing so they will acknowledge a debt of gratitude which they owe to one who now for thirty years has been a foremost teacher, by his writings, of sound professional learning, of high professional ethics, and of the great principles on which the health of our population depends. In the account of the meeting of the promoters of the Druitt Testimonial, which we publish in another page, will be found a sketch of his principal professional labours. We will not, therefore, reiterate them here. But we would call attention especially to the remarkable article on "Inflammation," which during a period of failing health and constant work,

Dr. Druitt has found time to contribute to the second edition of "Cooper's Surgical Dictionary," which has just made its appearance. This article, which we believe to be the fullest, most exhaustive, and most faithful account of the history of opinion as to the essence and treatment of inflammation, in our own or any other language, which does full justice to the work of British and foreign observers, both of the living and past generations; which holds the balance equally and fairly between rival schools and contending sections in pathology and therapeutics,—would alone constitute a paramount claim on the Profession. We hope that the Testimonial will be a handsome one, and that it will obtain the support of a very large number of medical men in town and country. If, indeed, all who have derived sound wisdom and practical instruction from the "Surgeon's Vade-Mecum"; who have improved their health and digestion by profiting by the practical good sense, racy humour, and large knowledge of the subject contained in the book on Wine, now just reaching a second edition; who have drawn insensibly through our own pages into their intellectual constitution the appetising, satisfying, mental pabulum which Dr. Druitt's writings offer,—if all these we say, were to give a minimum contribution to the Testimonial which it is intended to present to him, it would assume a proportion unprecedented in the annals of the Profession of Medicine.

HINTS ON EPILEPSY.—No. II.

It may be justly said that the cases of epilepsy placed by us in the second category as arising from causes such as heart and lung disease, which hinder the free aëration of the blood, ought to be reckoned with those due to toxæmia. The brain, loaded with poisonous and impure blood, which has never been disinfected by oxygenation, vents its anger, so to speak, or relieves itself of its unwonted burden, by exploding in convulsions at longer or shorter intervals. But this view is only true in a very partial sense. We must not forget that these diseases either diminish at times the blood-supply, or at others tend to local congestions, local extravasations, and exudations in the nervous centres; and thus to starved nervous tissue, to emboli, and thromboses, which again lead to apoplexies and softenings, and the like: whilst in tuberculous disease the nerve-centres, or the membranes which involve them, may themselves be the seat of disease, whilst these cachexiæ are known to be accompanied with a distaste and dyspepsia for the fatty foods so essential to the vital integrity of nerve tissue. The reader may also wonder at finding tumours passed over so lightly, and allowed to find a place now here, now there, in our classification. It is scarcely necessary to refer to our case-books for the reasons of this—our readers' memories may be consulted instead. The part played by tumours, as judged by the ordinary laws of evidence, is so uncertain and so extraordinary that, until we know more of the whole subject, the less we dogmatise the better. Certainly, if our own experience might be trusted, a tumour in the ovary is quite as likely to induce convulsions as one situated in the brain! But in any case the nature, size, and exact site of the tumour must count for much, and then at last our therapeutics are almost powerless. It is recorded of Hogg, the Ettrick Shepherd, that he was wont to cure convulsions in the lambs and sheep under his charge by passing a knitting-needle forcibly up their nostrils (probably through the ethmoid plate), and thus killing the hydatids which caused the disease—a rough treatment, which in his hands proved highly successful. But in the human subject we have not yet been quite so adventurous, although trephining has been done, and successfully, for the relief of epilepsy in certain cases. Let us "return to our muttons," leaving to operating surgeons both the credit and the execution of such rather desperate means of cure—only protesting by the way against the Turkish (or Origenal?) treatment by emasculation, which we believe to be as unscientific and as unsuccessful in the long run as the Brunonian operation of clitoridectomy.

What remedies or drugs fall under the first class, and deserve to be ranked as antidotes? Is the cause malaria? Quinine, barks of various kinds, arsenic, bromides, and the like; and in a minor degree opium, mineral acids, and many of the sulphates, besides that of beberin. Is it the poison of gout or syphilis? Colchicum, veratria, squill, digitalis, and the like for the former; and mercurials and iodide of potassium and its congeners will rise at once in the reader's mind. And, as a matter of fact, few cases of epilepsy are so curable as those depending upon syphilis. Is lead or mercury the cause? Then, again, the iodides, and perhaps the sulphates, and potassium-chlorate, with alkaline sulphides, and baths come to our aid.

Is it pursuing this view too far to point out that it is extremely probable that most of the mineral tonics—silver nitrate, zinc salts, and the like, as well as the ferruginous remedies which for many years were so fashionable for the relief or cure of epilepsy—owed, or owe, their success to their properties as antiseptics or disinfectants, by virtue of their powers of combining with albuminous matters and of resisting decomposition; or perhaps, like quinine, to their property of limiting the amœboid movements of white blood-corpuscles, or of other animal cells or cellules? Once admit this, and our difficulty in reconciling the apparently opposite qualities of a host of drugs will vanish. Creasote and carbolic acid, ammonia, alcohol, ether, and chloroform will all claim to be ranked in this category.

Under our second class, or those remedies which may aid where lung or heart disease—impeding free aëration of blood—is present, another long list of remedial measures and drugs will find a place. Change of air, of diet, and of occupation; remedies which relieve congestion—as purgatives and bleeding, diuretics and diaphoretics; and such as act upon the nerves of the heart or lungs—notably digitalis, hyoscyamus, the bromides, ethers, and chloroform; and such means as cod-liver oil, or phosphorus and its compounds,—may each and all be domiciled here.

In the third category, all the means of arresting hæmorrhages, and all the means of making fresh blood or improving the old—hæmatinics and the like, and even rest—are deservedly placed. We pass on to hint—for a word to the wise is enough—that the forceps of the dentist, the chlorodyne of Dr. Collis Brown, oil of male fern, kameela, kousso, turpentine, santonine, and all other anthelmintics, sedatives, and whatever may either remove or soothe the local peripheral irritations which disturb the nervous centres, must be placed in our fourth class. Let him who doubts try lancing of a baby's gums in a suitable case of convulsions; or the often magical effect of a warm bath in kindred cases!

Our fifth class of causes of epilepsy, as it is vague and wide enough to include all the unknown causes, should also include all those wonderful and inert specifics which succeed only in the hands of their own inventors. The tractors of a Perkins, the marvels of mesmerism, hypnotism, and a hundred things as generally useful as condurango, or the uric acid of a boa, may rest here in a happy, if not over-clean, community.

Our purpose in writing this article will be fully served if we succeed in impressing upon our own and our readers' minds the truth that every case of epilepsy, if we would cope successfully with it, must be made a study of, and be treated on its own merits; and that a mere statistical record of cures by any drug is as worthless as it must be dry and barren. In so saying, we fully admit the fact that the bromides of potassium and of the other alkalies almost invariably lessen the frequency and the violence of fits of a convulsive kind, no matter what their origin. But this is far different from a permanent cure. We look confidently to chemists and experimental physiologists for equally happy and still more successful additions to

our armoury against this dreadful symptom. But whilst welcoming these, and every other empirical aid for the relief of poor humanity, we are strong in our conviction that no permanent or enduring triumphs will be won in this department of nervous medicine till we have broken the arbitrary bounds of text-books and escaped the trammels of the coarse pathology of the post-mortem room, and, following in the steps of Hughlings-Jackson and other pioneers of the Medicine of the future, recognise the essential unity of things which appear at first sight as wide asunder as sea-sickness and uræmic convulsions, the rigors of an ague fit and the writhings of an insane epileptic, or the convulsions and delirium of the habitual bhang-consumer and those produced by what we call tubercular meningitis.

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

No. II.

The Medical Officer of Health will do well at the earliest possible opportunity to make himself familiar with the nature of the soil and climate of his district, including its special characteristics of situation. It is surprising what ignorance prevails among the educated members of the community, and even among our medical brethren, as to the nature and properties of soils in their bearings upon health and disease. But perhaps this ignorance can scarcely be wondered at, seeing that it is only of late that this subject has been studied in a scientific manner. Formerly, dampness and dryness were the chief points considered; a damp soil was to be esteemed unhealthy, and a dry one healthy. Now, the researches of Pettenkofer on subsoil water, of Buchanan and others into the influence of dampness of soil in predisposing to or inducing phthisis, and of Haviland into cancer as influenced by certain geological formations, have created a literature of the subject which the Health Officer can hardly ignore. It will be well, too, for him to inform himself of the general nature and configuration of strata as affecting the dampness of soil—to acquire, in fact, some elementary but sound knowledge of surface geology. Climate will also necessarily engage his attention; and climate in this country is often a question involving as much questions relating to soil as situation. Little is known as to the influence of chemical composition of soils as affecting health; but their elevation, conformation, mechanical structure, slope, and the character of the vegetation with which they are clothed ought to be familiar to a Health Officer.

The special characters of the air of the district will necessarily engage the attention of the Health Officer, and he will of course make himself familiar with Dr. Parkes's admirable *résumé* of what is known on the subject; and this he will supplement by an elementary knowledge of meteorology. But beyond this, and of greater importance, is a thorough acquaintance with the special causes leading to contamination and vitiation of the air in the area under his supervision, and the influence which the vitiated air exercises upon the health of the inhabitants. This implies a familiarity with the chief trades and manufactures carried on in the neighbourhood, especially if these involve chemical processes. The recent publication of Dr. Angus Smith's work on air and rain-water marks a new epoch of sanitary science, and chemical climatology bids fair to be an important branch of scientific research.

The water-supply of a district is one of the most important factors in determining its healthiness or unhealthiness. Fortunately for the Medical Officer he will on the commencement of his duties find the water-supply already determined for him; but it none the less behoves him to watch with the utmost care its influence on health. It is not difficult to detect disgustingly bad waters, but we need hardly remind him that many agreeable and apparently excellent waters are quite unfit for drinking purposes. Should doubt arise, it will be his duty to advise that a chemical analysis be made, but it can seldom be expected that he should himself perform it; and the skilled assistance of an expert should be called in. The same also with regard to change of supply: the aid of the chemist and the engineer are here necessitated. In the vast majority of cases, however, chemical analysis is not necessary in order to determine the badness or goodness of water. Let the Health Officer consider well the source from whence a water is drawn (say a well), its liability to contamination—as, for example, from proximity to a source of pollution,—and the means adopted for storage, using a little common sense and discretion, and he will have little difficulty in forming a sound judgment as to the desirability or not of using a particular water. But where large communities are supplied from an extraneous source it is always desirable to obtain once for all competent opinion as to the chemical character of the supply.

Having thus made himself familiar with the physical characters and peculiarities of the parish, union, or district entrusted to his care, the next step which the Health Officer will take will be to carefully organise the work of himself and his staff of subordinates (there will always be at least one sanitary inspector), and to arrange for the working of his district. The details of management will necessarily so vary according as the district is an urban or rural one, and also with its size, that no general rules can be laid down. Let, however, the Health Officer in all cases have the sanitary inspector or inspectors under his entire personal supervision. Even the orders of the sanitary committee, under which the Medical Officer himself works, should be conveyed to the sanitary inspectors through the Medical Officer of Health, who will in all cases be the head of the sanitary department of the local authorities; and as he will be held responsible for the proper working of that department, he must exercise due supervision, and himself check from time to time the work of his inferior officers.

It will be well to regulate the book-keeping by the clerical assistance afforded. In a large rural or in an urban district, some amount of clerical aid may be expected from the local authority but if this is not done the sanitary inspector should keep the books, or at all events some of them, under the direction and supervision of the Health Officer. The following sketch of the daily routine of sanitary work in a large metropolitan parish will perhaps afford more assistance to a commencing Medical Officer of Health than any amount of general directions:—At 9 a.m. the subordinate officers arrive at the office. They consist of a clerk, a messenger (who is also a copying clerk), the sanitary inspectors, to each of whom a district is assigned, and a disinfector. Shortly after the Medical Officer arrives, reads his letters, confers with the clerk, gives directions as to the correspondence of the day, receives verbal reports from the inspectors as to the previous day's work, and makes appointments for these officers to meet him at particular places during the course of the day should his presence be deemed necessary in particular cases. In a few minutes a large amount of routine work can thus be got through, whilst reports for committees, special correspondence, and the examination of the books of the department can be despatched—say, twice or thrice a week, at any convenient time. Between 9 and 10 a.m. each inspector writes out a brief diary of his previous day's work for the information of the Medical Officer, and instructs the disinfector as to houses where disinfection is required. At ten the sanitary inspectors depart on their daily rounds, having previously informed themselves as to any new complaints requiring their attention. After their departure the clerk extracts and summarises their diaries, and enters the results in the proper books. The books actually in use are—(1.) The Medical Officer's diary, in which he briefly enters the dates of visits made, with any particulars he thinks fit. (2.) A book for receiving the complaints of ratepayers and others. (3.) A record of houses in which infectious disease

has appeared. (4.) The diaries of the several sanitary inspectors. (5.) A book recording the progress of works, which exhibits at a glance the visits made, and the works executed, at any particular house. From this the clerk extracts and presents weekly to the Medical Officer—(6.) A list of works in arrear. (7.) A report book, in which the Health Officer reports to the sanitary committee all ordinary cases of nuisances uncompleted, together with his recommendations. Further, the sanitary inspectors are provided with forms of notice of nuisances, arranged in books, with duplicates, after the fashion of a cheque-book. These arrangements may seem complicated. In practice, however, they are found to be simple and effective. Where little or no clerical assistance is furnished, they may be much simplified, and the books reduced in number.

THE WEEK.

TOPICS OF THE DAY.

Professor Corfield has been elected Medical Officer of Health to the parish of St. George, Hanover-square. The other selected candidates were Dr. Bianchi, Dr. Reginald Thompson, Dr. Roberts, Dr. Seaton, and Dr. Stocker. Dr. Corfield's appointment will make a vacancy in the Officership of Health to the parish of St. Mary, Islington. As we announced last week, Mr. Haviland and Dr. Tidy will again contest that appointment.

The ceremonial of opening the City of London Library and Museum on Tuesday last has been so fully described in our non-medical contemporaries, that we may be spared attempting an account. It will be, however, within our province to draw attention to the fact that to a member of our own Profession—Dr. Sedgwick Saunders, F.S.A., the chairman of the committee which has been entrusted with the superintendence of the new building, and the formation and arrangement of the library and museum—much of the success of this great work is due. To the catalogue of the works of art exhibited at the opening Dr. Saunders has contributed a historical introduction, in which he traces the fortunes of the "lybrarye atte Guyldehalle" spoken of by Whittington, and to which the hero of our story-books was a generous benefactor. This introduction contains a good deal of well-told information as to the infancy of English literature. In reading it we have come upon a panegyric on books from the writings of Richard de Bury, a Bishop of Durham in Henry IV.'s time, which we do not remember to have met before, and which is so quaint and neat that we are tempted to quote it here:—Books (says the old Bishop) are the masters who instruct us without rods, without hard words and anger, without clothes and money. If you approach them they are not asleep; if investigating, you interrogate them, they conceal nothing; if you mistake them they never grumble; if you are ignorant they cannot laugh at you." In another quotation given by Dr. Saunders from Higden's "Polychromion," we notice "the great plague"—by which, we presume, was meant the black death—named as an epoch at which the Norman-French became disused in schools, and our native English was reintroduced. Those of our profession who were fortunate enough to be present at the ceremony on Tuesday would observe, amongst the sculptured heads of eminent men representing various sciences and arts which adorn the spandrils of the arcade in the library, those of Harvey and Sydenham, Linnæus and Cuvier, Ray and Gerard. We congratulate Dr. Saunders on the completion of the splendid work in which he has taken so great an interest, and the Corporation of London on having provided a worthy home for literature and science within the precincts of their venerable municipal hall.

The amended Bill for the Registration of Births and Deaths, which passed the House of Lords last session, will in all probability be introduced early in the approaching session into the House of Commons. The Bill in its present form is incomplete, and if it is to be made of real value it will require considerable amendment. The question of the registration of still-births is one which, in spite of the opposition of the Registrar-General, must sooner or later be fully discussed. A suggestion was some time ago, we believe, made by Mr. Lowndes, of Liverpool, that a committee should be appointed to consider this matter. We are not aware that Mr. Lowndes' suggestion has ever been adopted, but we think that the Obstetrical Society could not, at the present juncture, do a greater public service than by appointing such a committee to fully discuss the possibility and value of still-birth registration, and by their bringing the result of its deliberations, should it be in favour of the proposal, prominently before the Government and Parliament. We repeat, the question is one of very considerable and growing importance.

The Mayor, Aldermen, and Councillors of the important borough of Halifax have delegated the trust reposed in them under the Public Health Act to a Sanitary Committee. One of the principal duties of this Committee was undoubtedly that of selecting, from such candidates as might apply for the post, the most suitable and thoroughly qualified person to fill the office of Medical Officer of Health for the borough. We are informed that several men with high medical qualifications offered themselves to fill the vacant post. We do not for one moment presume to criticise the personal qualifications of the gentleman selected, of which we know nothing, but in the interests of the public and the profession we claim some right to examine the professional qualifications of practitioners who are appointed to public medical offices. In a memorial to the Mayor and other officers of the Corporation of Halifax, which has been sanctioned at a meeting of the profession, and which is signed by twenty-six medical men, it is alleged that the selected candidate possesses no medical diploma, and that he is a person whose connexion and association in practice with a homœopathic chemist have been advertised. The memorialists urge that the gentleman in question has cut himself off from the co-operation of his professional brethren, and will not command their confidence. Moreover, they maintain that, not possessing a medical diploma, he cannot legally treat cases in the Borough Hospital. They urge upon the Mayor and Corporation the propriety of reconsidering their appointment. If the allegations contained in the memorial be a true statement of the facts, we think that the Corporation of Halifax must listen to the representations of the memorialists, or that, failing this, the Local Government Board should interfere. If it be not allowable to hold a Poor-law medical appointment with a surgical qualification alone, surely it cannot be permitted that the possessor of a surgical diploma only should fill the no less important office of Medical Officer of Health, the duties of which seem much nearer akin to those of the physician than of the surgeon.

The case of Best *v.* Staff, which was some time ago decided by Mr. Justice Quain and a jury, has been brought before the judges of the Queen's Bench during the past week. But the judges have determined that the verdict shall be undisturbed. The case, it will be remembered, was one in which the owner of a lodging-house at Eastbourne brought an action against a gentleman and his wife, who brought their children during convalescence from scarlatina into the lodgings without giving the landlord any intimation of the danger which his family were incurring. Two of the lodging-house-keeper's children took the fever and died. In the first trial the jury awarded substantial damages; and, as we have said, the verdict is now re-affirmed.

The female hippopotamus at the Zoological Gardens brought forth her third cub on November 5. Young "Guy Fawkes" seems more likely to survive than its ill-starred elder brethren. The little animal, which weighs about a hundredweight, is said to suck well.

There will be a vacancy for a Demonstrator of Anatomy in the Charing-cross School of Medicine. A salary of £150 per annum is, we believe, attached to the office.

COST OF SANITARY ADMINISTRATION.

Now that the Public Health Act 1872 is in force, and the cost of sanitary administration is coming under the notice of local authorities, it is interesting and instructive to note the cost of the sanitary staffs in our large metropolitan parishes. The Vestry of St. Pancras has recently issued its statement of rates for the half-year ending Lady-day, 1873, in which we find under the head of "General Rate" the following estimate:—Sanitary purposes, officers' salaries (*i.e.*, the salaries of the whole of the officers of the Vestry), and poundage, printing, stationery, and general expenses—three-farthings in the pound. Of this certainly not more than one-third is really devoted to sanitary purposes, and a rate of one-halfpenny per annum would cover these. In other words, a merchant renting a house of say £75 a year would contribute the alarming sum of about half-a-crown a year towards sanitary purposes. It is true that St. Pancras has the reputation of paying its officers, especially its Medical Officer of Health, almost worse than any other metropolitan parish or district. Nevertheless, with the above facts, it is idle to talk of the extravagance of sanitary administration. St. Pancras has a population of 224,000 inhabitants.

THE PROVINCIAL MEDICAL SCHOOLS.

The annual return of the number of gentlemen pursuing their professional studies at the undermentioned institutions has just been forwarded to Dr. Ogle, the Government Inspector, from which it will be seen that there is an increase of the number of students in the provincial as well as the metropolitan schools:—

	1870.	1871.	1872.
Manchester Royal School of Medicine	98	111	124
Liverpool Infirmary School of Medicine	58	54	81
Birmingham Royal School of Medicine and Surgery	76	60	59
Leeds School of Medicine	46	45	40
Bristol Old Park Medical School	30	36	33
Cambridge University School	—	27	30
Newcastle-upon-Tyne College of Medicine	35	25	29
Sheffield Medical Institution	14	10	11
Totals	357	368	407

This shows a satisfactory increase, notwithstanding the diminution in the number of entries at some of the above schools.

THE ESPRIT DE CORPS.

On the recent promotion of Staff-Surgeon W. T. Wilson, of H.M.S. *Iron Duke*, to the rank of Acting Deputy Inspector-General of Hospitals, his brother officers, as a mark of their esteem, manned the galley which conveyed him to the *Juno, en route* from Nagasaki to Hong-Kong. We should be glad to hear of this example being followed in similar cases. It must be highly gratifying to Dr. Wilson to leave behind with his *confrères* a name which cannot fail to be remembered with goodwill by those with whom he has been long and honourably associated. Members of our profession in the public services should regard the encomiums of their brother officers as the highest tribute they can receive. We heartily congratulate Dr. Wilson on the demonstration which was made to his honour.

MR. JOHN ADAMS.

The Profession and his many friends will learn with great regret that the state of health of Mr. Adams is such as to cause some uneasiness. We understand he has sent in his resignation as a member of the Court of Examiners of the Royal College of Surgeons, to which office he was elected in 1868.

AN IMPORTANT DUTY OF HEALTH OFFICERS.

The attention of the Salford Town Council was called last week to the operations of speculating builders in the borough. It was alleged that houses quite unfit for human habitation were being run up in various quarters, and the Health Committee were urged to exercise their full powers to suppress the evil. We think the authorities have used a wise discretion in their attempt to arrest an evil of great magnitude, and are entitled to the thanks of their constituents for the recommendation they have made. Unhealthy dwellings are a source of great moral and physical evil, and the time must come when this question will assume proportions to which it is justly entitled.

DRUNKENNESS AND LEGISLATION.

Colonel Bruce, in his report to the Kirkdale Quarter Sessions on the effect of the Licensing Act, says "that there has actually been an increase in the number of apprehended drunkards since the new Act has been in operation;" and he adds, "I think it is to be attributable chiefly to the fact of a little increased action having been taken under the Licensing Act, and a certain feeling amongst some people who are determined to get drunk." It is evident that legislation will never effectually control the vicious habit of drunkenness. The causes of this vice are too deep to be reached by Acts of Parliament. All experience has shown that it is to the improvement of the mental and moral training of the masses we must look for a remedy.

CHOLERA.

Cholera is advancing westwards, favoured by the unseasonably mild weather both in the north and the middle of Europe. In Buda on the 31st ult. 32 fresh cases (or since the outbreak 126 cases in all) have taken place, 29 of which proved fatal; 3 deaths from cholera are reported from Pesth, 1 from Prague, and on the 4th inst. 1 death took place in Vienna. In Poland the epidemic goes on increasing in the larger towns. From Warsaw and Lemberg from 25 to 30 cases are reported to take place daily, the disease assuming a more disastrous character in the densely crowded, narrow, and unclean Jewish quarters. In the latter place 24 deaths occurred amongst the Jews out of 40 cases, and in the rest of the town only 22 deaths out of 76. In Dantzig as many as 5 cases out of 6 ended fatally. The epidemic is said to have been brought there by Polish sailors.

CHAIR OF MEDICINE AT THE ROYAL COLLEGE OF SURGEONS, IRELAND.

This chair is now vacant through the resignation of Dr. Charles Benson, who had so long and ably discharged the duties connected with it. We learn that several candidates have already entered the field, and that the selection of a professor will take place early in December. Among the candidates are Dr. Samuel Gordon, Dr. James Little, Dr. Henry Kennedy, and Dr. Arthur Wynne Foot. The emoluments are about £150 per annum, and there is little doubt that the contest will be close and severe.

HEALTH OFFICER FOR BRADFORD.

A medical officer is to be appointed for Bradford at a salary of £500 a year. He will be required to give the whole of his time to the duties of the office. We think that under the circumstances of the case the salary for such an important town as Bradford anything but liberal, and we doubt if an efficient officer can be obtained.

A WELL-MERITED HONOUR.

The University of Oxford propose to confer the degree of Master of Arts by decree on Dr. William Odling, the new Waynflete Professor of Chemistry.

ARMED OPPOSITION TO VACCINATION.

THE correspondent of the *Morning Post*, writing from St. Petersburg on the 1st inst., says, "I re-open my letter to report a serious riot at Khodjeut (Turkestan), in which no fewer than 10,000 men took part, the cause of offence being the compulsory vaccination of the common people. One of the surgeons who had been specially active was so roughly handled that he died on the following day, and the disturbance was not quelled without considerable bloodshed."

MIDLAND INSTITUTE, BIRMINGHAM.

AN anonymous friend has just given to the Council of the Midland Institute the large sum of £2500, to be expended in scholarships for the encouragement of the study of practical physiology, more especially that branch of it which is concerned in the amelioration of the sanitary condition of the poor. This noble gift is prompted by remarks which were made by Canon Kingsley in a lecture he gave at the Midland Institute.

FROM ABROAD.—POST-MORTEM APPEARANCES IN HÆMORRHAGIC VARIOLA—CASE OF PROLONGED SLEEP—THE PARISIAN SCIENTIFIC LABORATORIES.

AT a recent meeting of the Berlin Physiological Society (*Berliner Wochenschrift*, No. 42), Dr. Ponfick read a paper upon the "Anatomical Changes in the Internal Organs in Hæmorrhagic and Pustular Variola," founded upon the post-mortem examinations made at the Charité. From these it results that the hæmorrhagic form exhibits characteristic changes in those organs, which are constantly and entirely absent in the pustular form; so that from the mere condition of the internal organs in a given case, the form of the disease that has prevailed can be determined. Indeed, it is only in the hæmorrhagic form that pathognomonic signs are discoverable, the pustular form merely exhibiting appearances in common with several other acute "infective diseases."

Among these characteristic signs, the hæmorrhagic, in the most different organs and tissues of the body, occupy the first place. These are of high clinical importance, as they usually cause death within the first six days, while the eruption has only the appearance as yet of a hæmorrhagic exanthem; whereas when the pustular form proves fatal, it does so generally at a much later period. The most constant seat of the hæmorrhage, after the external surface, is the mucous membrane of the air-passages, especially of the nose, the parenchyma of the lung becoming afterwards affected, so that carbuncular-like collections of blood up to the size of a small apple are often met with. Next almost constantly comes the lining of the œsophagus and stomach, and of the colon throughout its whole length, and of the rectum, whereas the ileum is exceptionally, and always only slightly, affected. Further in order are the calyces and pelvis of the kidney, the upper portion of the ureters and the bladder. Organs less constantly affected are the uterus, the tubes, the vagina, and the ovary, and lastly the brain and its membranes. Besides the above there are found numerous small effusions of blood into the different serous and fibrous membranes of the entire body, as well as in the widely dispersed adipose tissue. With the hæmorrhagic infiltration of the mucous membranes, a diphtheritic process often soon becomes connected, affecting especially the most swollen parts, and exerting a most pernicious influence on the larynx and pharynx—so that, if the death be not produced by the hæmorrhages, it soon ensues from malignant throat affection.

Another distinctive sign is derived from the different condition of the large glands of the abdomen and of the muscular tissue of the heart. While the glands in the pustular form are found tumefied, in the hæmorrhagic form we find, on the one hand, that there is no swelling (or, at most, only very slight), and, on the other, there may be a firm, and even indurated, condition of the parts. This is especially observable in the spleen, which feels most unusually compact, and on a section being made is found smooth and shining. The colour, too, is peculiar, the pulp of the organ being of a dirty dark red, having the follicles either confounded with it, and also of a dirty red, but of a brighter shade, or they are very much increased in size and of an almost pure white colour, standing out prominently from the surrounding parts. The liver has small and usually very distinct acini, its tissue at the surface of the lobule often having a slight icteric tinge. The larger biliary passages and the gall-bladder contain a dark viscid bile, contrasting with the greyish-yellow, thin, often almost purely serous fluid in the pustular form. The kidneys are dense and often hyperæmic, and the heart is dense and of a brownish-red colour; whereas in the pustular form the parenchyma of both organs is distinguished by a dirty white appearance and its lax and flabby consistency. In the hæmorrhagic form the microscope shows that there is an absence of the albuminous fatty changes in the muscular fibres which are found in different degrees in the pustular form, as also in typhoid and septic fevers.

In the presence of such great differences in the necroscopic appearances in these two forms, it may be well asked whether they are only varieties of one and the same species of disease, or whether they should not be considered as essentially different in their nature, and that the more because in their clinical course they so strongly differ from each other. It is remarkable that in the late epidemic at Berlin it was young and robust individuals who almost always formed the subjects of this hæmorrhagic form—a fact for which no sufficient explanation has yet been offered.

M. Marduel related to the Lyons Medical Society a remarkable case of prolonged sleep, the full particulars of which are given in the *Lyon Médical* for October 27.

Revillon, a foot-soldier, 25 years of age, was brought into the Lyons Military Hospital in a state of deep sleep on March 21, 1872, having all the appearance of a man in good health in a sound sleep. His pulse was 84°, and his breathing regular. The surface was so insensible that pins thrust into various muscles and tickling the feet did not produce the least reflex movement. Sprinkling the face with cold water, or a sudden noise, caused some contraction of the muscles of the face, and ammonia applied to the nose induced some change of position of the head without arousing the patient. He from time to time changed the position in which he slept, and the limbs did not retain the postures in which they were placed. Whenever the sleeper was disturbed, whether by uncovering him, trying to open his eyes, or merely feeling his pulse, first his upper extremities, and then the lower, became seized with a tetanic rigidity, which, generalising itself over all the voluntary muscles, and extending to the diaphragm, lasted for some seconds, and was then followed by relaxation, the limbs resuming the semi-flexed position. While the rigidity lasted it was so great that the patient might have been lifted up "all of a piece."

On July 26, 1870, soon after having had a struggle with a comrade, he fell into a sleep which lasted for seventy-one hours. Made prisoner and taken into Germany, he had several such attacks of somnolence. In November he slept for three days, and in March, 1871, for five days; and between then and March 21, 1872, he had three other attacks, each lasting for two or three days. Next day after his admission electricity was freely applied in various ways, with the effect of inducing more or less convulsive action. However, he woke up just as a man would who had been hastily aroused, and, refusing all food, soon relapsed into a sleep which continued for seventy-four hours. Between the 24th and 27th he seemed quite well, eating and drinking, going about, and sleeping—all naturally. On the 28th an attack of somnolence was warded off by exercise

and coffee, but on the 30th, in spite of all his efforts, he again fell into a sleep, which lasted nearly twenty-four hours. On this occasion the tetanic convulsions came on spontaneously, and there was some epistaxis, as there had been for some days before. For an hour he kept awake, and laughed and joked with his companions; but at the end of that time, in spite of his and their efforts, he went off again, and slept for several hours. He slept also between April 12 and 15 during fifty-eight hours, the pupils being observed to be moderately dilated and nearly insensible to light; but the most curious feature of the case was the existence of a kind of general hyperæsthesia—it sufficing to touch even lightly the surface to immediately induce general contraction or a tetanic state, during which the patient might have been raised by the feet and the nape. The respiration was normal, as was the temperature, this during many examinations made in the axilla oscillating between 37° and 37·5° C. There was no attack during April, but the sleep came on again on May 2, and lasted for seventy-eight hours and a half. From the 14th, also, he slept for seventy hours.

M. Marduel refers, in conclusion, to 134 cases of *maladie du sommeil* observed by M. Guérin occurring among the negroes employed at Martinique, as also to the remarkable case of protracted sleep reported in this journal by Dr. Ward Cousins (April 18, 1863, and July 29, 1865).

A year or two prior to the breaking-out of the late war a great impulse had been given to the practical study of science in France by the reports brought home by M. Lorain and other visitors to Germany, which succeeded in convincing their incredulous and awakened countrymen that in that country science was marching at a rate quite unknown in their own. Among other causes of this there stood out the profuse liberality with which even petty governments provided institutes and laboratories and other appliances for investigation. And this it was at once seen might and ought to be imitated, as without such help all effectual competition would be out of the question. The admirable system of university teaching prevalent in Germany, the important position, both social and scientific, held by the professorial body, and the stimulus for never-ceasing exertion held out by the plan of "calls" from minor to major universities, thereby awarding prizes for good work done or great ability proved (all the more valued because adjudged by those most competent and most interested in arriving at a sound decision),—these matters, although not unobserved or unadmired by those who had seen them in operation, were of course much less easy of imitation. However, it was something to have aroused any attention whatever to the claims of science for a portion of the funds so lavishly squandered on most unworthy objects; and although the sums set aside for such purpose were but small, they have not been without producing good results. In a recent number of the *Revue Scientifique* we find a sketch of the present condition of the means of teaching available in the Sections of the Natural and Physico-Chemical Sciences of the *Ecole des Hautes Etudes* of Paris.

Anatomical and Physiological Zoology is studied at the Muséum d'Histoire Naturelle in the laboratory of M. Milne-Edwards, accommodating twenty-one pupils. In the Muséum also is the laboratory for Comparative Anatomy just opened and directed by M. Paul Gervais. There are several laboratories for the study of Physiology. Foremost among these is that of M. Claude Bernard at the Muséum, where so much good work has been done and is still doing. M. Marey has another, principally employed for the experimental investigation of the mechanical phenomena of the animal economy. At the Sorbonne is M. Paul Bert's laboratory for teaching Experimental Physiology, but this is admitted to be but ill provided for. M. Robin, assisted by M. Pouchet, has also a laboratory for instructing students in the comparative study of the tissues in the zoological scale, but it is but poorly attended. Normal and Pathological Histology and Pathological Physiology are taught at two laboratories—one at the Ecole de Médecine, by M. Vulpian; and the other, attached to the Collége de France, by M. Ranvier. Under M. Broca's energetic superintendence there is a laboratory for Anthropology, at which instruction is given to all who seek it, and several valuable investigations have been carried on. Botany is taught in laboratories conducted by M. Duchartre at the Sorbonne, MM. Decaisne and Brongniart at the Muséum, and at the Faculty of Medicine by M. Baillon. For Geology there is M. Hébert's laboratory at the Sorbonne; and that of Physics, directed by M. Desains, at the Faculté des Sciences, is devoted to prepare candidates for examination, the number of these in 1871-72 having been 67. M. Jamin's laboratory for investigations, upon which large sums were expended under the Empire, and of which such high expectations were entertained, has proved a failure, the number of pupils having amounted only to 14 since 1866. Chemistry is well provided for in the laboratories of M. Fremy at the Muséum and M. Schutzenberger at the Faculté des Sciences. At the Ecole Normale is M. Sainte-Claire Deville's laboratory, which is one of research in the widest acceptation of the term, and attended by earnest workers; and at the same place a new laboratory for Physiological Chemistry has been erected for M. Pasteur, where he is now pursuing his researches on fermentation. At the Collége de France is M. Balard's Chemical laboratory; and at the Ecole de Pharmacie M. Berthelot has his laboratory for Organic Chemistry. Finally, the laboratory of Chemistry at the Faculty of Medicine pursues, under the direction of M. Wurtz, a very active scientific career.

The writer of the article we have quoted states that these establishments suffer severely from the utter inefficiency of the sums that have been allotted to them.

DISEASE AND MORTALITY AT HOME AND ABROAD.

Dr. Barclay reported to the Chelsea Vestry, last week, that during the fortnight ending the 5th inst. the deaths were only 45, the average being 60.——During last week three persons suffering from small-pox were removed from St. Marylebone parish to the Homerton Hospital.——At Wesham, a village near Preston, there is at present an outbreak of typhoid fever, which in two cases has ended fatally.——Small-pox is on the increase at Altofts, Wakefield; fourteen cases are reported in the neighbourhood of Silkstone-row.——There were five fresh cases of small-pox in Leeds last week, against three the week before. ——In the North Bierley district, Bradford, small-pox is very prevalent.——The Medical Officer reported to the Wexford Board of Guardians, last week, that he had admitted during the week into the hospital a woman affected with cholera, and that she died forty-three hours after her admission. He further stated he had admitted a woman and her children who were suffering from small-pox.——The *Bombay Gazette* of the 14th ultimo states—"It is computed that between two-thirds and three-fourths of the population of Madras city have had the dengue."——The sanitary state of Paris is unsatisfactory; typhoid fever, erysipelas, and catarrhs are very prevalent and fatal.——In London last week 1306 deaths were registered, showing no less than 230 below the average numbers; of these 16 were caused by small-pox, against 17 and 6 in the two previous weeks.——A telegram, dated Calcutta, November 5, in the *Times*' second edition on that day, stated, "Since the first outbreak of cholera this year to October 25, there have been 828 cases and 529 deaths among European soldiers, their wives and children, in Bengal."——From the first outbreak at Peshawur to the 29th of October the cases of European soldiers were 57, women 8, and children 19; deaths, soldiers 45, women 6, children 15. Captain Armstrong Judge was one of the fatal cases. The disease still lingers, but its intensity has decreased.——In Oldham no less than 310 deaths have occurred from scarlet fever since the 3rd of August last.—— Small-pox is still fatally prevalent in Portsmouth.

DR. DRUITT.

On Thursday, October 31, several influential members of the Profession met at Mr. Haynes Walton's with a view to initiate a movement for the recognition of the public and professional labours of Dr. Druitt, formerly Medical Officer of Health of St. George's, Hanover-square, late President of the Metropolitan Association of Medical Officers of Health, and author of the "Surgeon's Vade-Mecum." Dr. Druitt has been for a long time in failing health, and is now compelled to leave this country for a period of a year or more, in order to seek a warmer climate.

There were present on the occasion—Mr. Prescott Hewett (in the chair), Sir James Paget, Drs. Quain, Beale, Wm. Farr, Forbes Winslow, Greenhalgh, Meadows, Ballard; Messrs. Savory, Henry Lee, Spencer Wells, Henry Smith, Christopher Heath, Ernest Hart, W. Adams, Haynes Walton, Arthur Norton.

Letters were referred to from Sir Wm. Gull, Sir Thomas Watson, Sir Wm. Fergusson; Drs. Arthur Farre, Barnes, Webb, J. Wakley, Semple, Cholmeley, Laycock (Edinburgh); Messrs. Quain, Lane, Thomas Bryant, Jonathan Hutchinson, E. Newton, requesting to be associated with the movement.

Mr. Norton explained the object of the meeting.

Mr. Walton remarked that no one had worked more arduously for the Profession and for the public than Dr. Druitt, and few men were more favourably known. His earliest professional reputation was acquired from his elementary surgical work, the "Vade-Mecum," which had been a text-book for students for about thirty years, and is still a favourite among the handbooks of Surgery. In connexion with the *Medical Times and Gazette* he had laboured to advance the science of Medicine and Surgery, and himself had contributed many valuable papers on practical subjects. His latest literary production was an exhaustive article on inflammation in the new edition of Cooper's "Surgery." For ten years he had been President of the Metropolitan Association of Medical Officers of Health, and for several years the Medical Officer of Health for St. George's, Hanover-square. Dr. Druitt had taken a prominent part in the issue of reports connected with the office of health which had proved invaluable sanitary records, and he had on several occasions given most important evidence before the Royal Sanitary Commission. In 1866 he had visited Amiens, where the cholera was then raging, for the purpose of gathering facts with a view to organise means to prevent the spread of that disease, which was then threatening to invade this country. Almost solely by Dr. Druitt's investigations in the West-end of London it was proved that the death-rate amongst the inhabitants depended not so much upon the locality as upon the diet, habits, and mode of living of the several classes. Mr. Walton concluded with a regret that Dr. Druitt was now obliged to resign all appointments, and to retire from literary work.

The following resolutions were carried unanimously:—

Proposed by Sir James Paget, seconded by Mr. Henry Smith,—

"That Dr. Druitt's services to the public and the Profession as a Medical Officer of Health, as a medical journalist, and as an author on professional subjects, are such as to deserve public recognition; that the present is a fit time for testifying a friendly sympathy with him in his illness, and appreciation of his services, and that a subscription list be opened for this purpose."

Proposed by Dr. William Farr, seconded by Mr. Spencer Wells,—

"That, considering the nature and extent of the public services rendered by Dr. Druitt, the subscription list be opened to others than the members of the medical profession."

A general committee was formed, comprising the names above mentioned, with power to add to their number. Mr. Haynes Walton, 1, Brook-street, Hanover-square, was requested to act as treasurer; and Mr. Arthur T. Norton, 6, Wimpole-street, Cavendish-square, as honorary secretary. Subscriptions may be sent to the treasurer or secretary, or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-place, Regent-street, W. Amounts received will be acknowledged in one or more of the medical papers.

REVIEWS.

Chemistry: General, Medical, and Pharmaceutical. Including the Chemistry of the British Pharmacopœia. By John Attfield, Ph.D., F.C.S., etc. Fourth edition. London: John Van Voorst. 1872. Pp. 694.

In his preface the author tells us that his aim has been to teach the general truths of chemistry to medical and pharmaceutical pupils. That such a work was wanted is proved by the fact that within five years an aggregate of more than 10,000 copies of it have been sold in this country and the United States. The mistake in the teaching of chemistry to medical students in our schools is, that it is not taught with direct reference to the requirements of their profession. A mass of facts and details is set before the student which he knows will not be of the smallest use to him in the sick-room or in the physiological or pharmaceutical laboratory. A study undoubtedly difficult in itself is thus made uninviting by presenting no promise of utility. This is not the case with the chemistry in Dr. Attfield's work. Whilst offering for all useful purposes a sufficient insight into the groundwork and theory of the science, it gives fully such details as are likely to be of use in the practice of medicine and pharmacy, without, however, omitting entirely other portions of chemical knowledge. The book is *par excellence* a student's book. On every section questions and exercises are supplied which cannot be but most useful to the learner who will take the trouble to find the answers to them. The directions for the performing of experiments are clear and practical. As the author himself acknowledges in his preface, a few woodcuts of apparatus would be a valuable addition to the book; but without these there is nothing that the student cannot follow for himself in the laboratory. On looking through the toxicological part of the book, we notice that Dr. Attfield recommends Reinsch's process as his chief analytical method in the examination for mercury, arsenic, and antimony. We think, after the errors which this method has led to in the case of arsenic, an outline of the method of Fresenius and Von Babo might with advantage have been added; but this is merely a fault of omission. On the whole we can commend Dr. Attfield's manual to students preparing for examinations in chemistry at medical boards.

On the Treatment of Diseases of the Skin; with an Analysis of Eleven Thousand Consecutive Cases. By Dr. McCall Anderson. London: Macmillan and Co. 1872. Pp. 180.

Dr. McCall Anderson's analysis of the 11,000 cases of disease of the skin observed in hospital and in private practice is of value, not indeed as proving the actual relative frequency of skin diseases amongst the population of Glasgow, but as showing the relative frequency of skin affections which are sufficiently important and troublesome to induce the patient to procure the advice of a doctor. Dr. Anderson divides skin affections into the two groups of functional and organic diseases. Under the head of functional diseases he includes those in which the secreting and hair-producing functions are at fault—*e.g.*, seborrhœa, hyperidrosis, alopecia, fragilitas crinum, etc. With these we find associated vitiligo, a disease which we thought was generally allowed now to be of organic character. Of organic affections the two which are most rife amongst the hospital patients of Glasgow are scabies and eczema: by a curious coincidence the number of each in 10,000 cases was 2527—together more than half the total number of cases; whilst so common an affection as acne vulgaris counted only 288, and psoriasis was 725. Syphilitic disease of the skin, infantile and adult, numbers only 517 cases, or about one case in twenty. We should like to see 10,000 cases of skin disease taken in a London hospital and compared with these. We suspect the results would be very different. Probably there would be less scabies, and more syphilis. The therapeutics of skin disease are perhaps the most unsatisfactory division of the at present unsatisfactory art of therapeutics. Dr. McCall Anderson's section on treatment is less loaded with incomprehensible and barbarous formulæ than the works of some of his contemporaries, and his directions generally commend themselves to common sense. His advocacy on purely empirical grounds of the local application of acetate of soda in the strength of eight grains to the ounce in the treatment of lupus, and of the employment of impermeable dressings—*e.g.*, vulcanised india-rubber gloves—in the treatment of some chronic affections of exposed parts, such as psoriasis palmaris and eczema rimosum, are hints amongst many others in the book worth following.

Health and Comfort in House-Building; or, Ventilation with Warm Air by Self-Acting Suction Power. By J. Drysdale, M.D., and J. W. Hayward, M.D. London: E. and F. N. Spon. 1872. Pp. 114.

The authors start with the principle that it is not enough for ventilation in this country that ingress of fresh air and egress of foul air should be provided. For a large part of the year in our climate the fresh outer air is cold, and this affords the first objection to all ordinary plans of ventilation. Air must be warmed before it is admitted, or else people will instinctively shut it out. Another objection to ordinary plans of ventilation is, that the openings intended for the outlet of foul air fail to accomplish their purpose. The desiderata in ventilation, therefore, are the admission and warming of fresh air, and the due exit of foul air. The plan proposed by Captain Galton, and improved by General Morin, answers for a single room, but not for a whole house; and the authors maintain that "no plan of ventilation by fire-suction applicable only to single rooms can possibly supersede the necessity of a general plan for the whole house, because it can act only for single rooms, and of course only when there is a fire burning in them." For the mode in which they propose to carry their plan for the whole house into execution we must refer our readers to their book. It will be sufficient to say that the fresh air is admitted in the basement, and is warmed by a hot-water apparatus. The whole house is to be ventilated through the kitchen chimney by means of a syphon shaft, and a foul-air chamber communicates with each room by a separate pipe. In the second chapter they give descriptions of two houses built upon the principles they advocate. Those of our profession who are building houses themselves, or whose advice is asked by others on the matter, will find their account in reading Drs. Drysdale and Hayward's work.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, October 21.

The Wallace Fountain—The Hertford British Hospital—The Asile Sainte Anne—The Salpétrière—Mania for Gymnastics—Improved Railway Travelling.

Your eulogistic editorial on the Hertford British Hospital and its illustrious founder induces me to make mention of other benevolent acts of the great benefactor whose very name has become a household word, which may be heard in every family circle in Paris. In a former letter I informed you of Sir Richard Wallace's intention to have drinking-fountains erected at his own expense in the most populous quarters of this city. These are now in working order, and, although the Parisians seemed at first to be shy of them, they evidently begin to appreciate them, as it is not only the passers-by who resort to them to quench their thirst, but the poor people who live in their neighbourhood avail themselves of the water for household purposes. It is pleasing to hear the remarks made by those who crowd around these fountains—some to admire them, and others to drink of the limpid and harmless liquid (which the people here call "du Wallace") that flows from them. I more than once saw *cochers* and cartmen stop at these fountains and drink of the refreshing cup, which is given freely, instead of going to the *cabaret*, as is their wont, to partake of the pernicious stuff there vended. But the good works of Sir Richard Wallace do not stop here. With the instincts of a Christian and true English gentleman, he has, since the opening of the shooting season, sent the greater part of the produce of his chase to the different hospitals in Paris, there to gladden the hearts of their suffering inmates.

On a recent visit to the Hertford British Hospital above referred to, I was struck with the internal aspect of the wards, which contrasted most favourably with the French institutions of the kind, and made one feel that he was in an English hospital. Everything is carried out after the English fashion. The staff are all English, and the two honoured physicians attached to it are ably seconded by Mrs. Helen Smith (the lady superintendent) and Mr. Baillie Cormack (the Resident Clinical Assistant). Sir John Cormack tells me that the patients are treated entirely on the English system, which has something more positive about it than the tampering or so-called "expectant" treatment of the French. He, however, adopts what is good of the latter, and puts it into practice whenever occasion offers. For instance, in a case of cystic tumour in the breast, Sir John Cormack did not hesitate to employ Dieulafoy's capillary trocar. The cyst was emptied by means of this instrument, and afterwards injected with tincture of iodine to complete the cure. In a case of dropsy, Sir John used the *vin diurétique* of Trousseau; and as all your readers may not be acquainted with this mixture, I hereby submit the following formula as representing its composition:—Take of white wine containing 10 per cent. of alcohol, 4 kilogrammes; proof spirit, 500 grammes; the dried leaves of digitalis, 60 grammes; squills, 30 grammes; the fruit of the juniper, 300 grammes; dry acetate of potash, 200 grammes. Macerate the digitalis, juniper, and squills for fifteen days in the white wine and proof spirits, shaking the mixture occasionally. Then, emptying the whole on a towel or piece of linen, it is to be expressed, and to the liquid thus poured out add the acetate of potash, and strain. Dose: A tablespoonful three times a day. This mixture is used in all the hospitals in Paris.

One of the most melancholy sights that one can witness is certainly a madhouse. I lately visited one in Paris, and never shall forget the impression made on my mind to behold such a number of lunatics together as is to be seen in the Asile Sainte Anne. This institution, which is classed among the hospices (which means asylum), is not to be confounded with another "Asile" of the same name in the Avenue du Roule at Neuilly, which latter is intended for aged females only. The hospice under notice is situated in the south of Paris, not far from the Observatory. It has been only about five years in existence, and is built in pavilions, which freely admit light and air. It covers several acres of ground, which is beautifully laid out in gardens, groves, and green fields, and nothing of its exterior gives an idea of the character of the institution. It contains 600 beds, all of which are almost always occupied, and equally divided among both sexes. It is intended for only acute cases of mania, and the patients are arranged according to the degree of quiet or excitement in which they are found. The more peaceful have halls at their disposal, where they can read or play at different games, and where concerts are frequently given for their entertainment. Those furiously insane, or those who are dangerous or simply troublesome, are shut up in rooms where they can without any inconvenience exercise their limbs, and even their voice, as freely as they please, and the strait-jacket is but rarely employed. At certain hours of the day they are let out for recreation either in the parks or closed galleries, according to the state of the weather, the female patients being, of course, separated from the male. How different is this treatment to what it used to be not many years ago when mad people were punished as criminals, whereas now they are looked upon as patients and treated as such. Through the kindness of one of the physicians attached to the establishment I was enabled to have a good view of them; and a most heartrending sight it was! According to the latest statistics insanity is steadily on the increase in France, and this is ascribed to extreme ambitious pursuits and the consequent disappointments, and to the intemperate and over-excited mode of living which pervades all classes of society at the present time.

Akin to this institution are the hospices Salpétrière and Bicêtre, the former for indigent old women affected with incurable maladies as well as for insane and epileptic females of all ages, while the hospice of Bicêtre is intended for men of the same class. Both these asylums are so well known as not to require any description here. I may, however, refer to a touching ceremony that lately took place at the Salpétrière. As at the sister institution, a section of the Salpétrière is set apart for the younger lunatics, idiots, or epileptics, and is under the direction and medical charge of Dr. Delasiauve. It contains a school where the unfortunate youths who are considered susceptible of a certain degree of culture are admitted, and annual prizes are awarded to the most deserving. This ceremony has recently taken place for the present year, the pupils having been previously examined in gymnastic and phonomimic exercises. Several of the pupils went through theatrical pieces, while others recited fables they had previously got off by heart, and the whole was wound up by music and comic songs composed by a young blind *virtuoso* named Dequatremare, a lad of remarkable talent, and lately appointed Professor to the Institution. Many are the remarkable and unheard-of cures that have taken place in this class of cases both in the Salpétrière and Bicêtre Asylums, and the mental culture of these sad specimens of degraded humanity has been such as to enable some of them to assume a social position,

and to render themselves useful not only to themselves but to their friends and to society at large.

There is at present in France a mania for gymnastics, and ministerial circulars have been issued to the effect that every public school and college should have its gymnasium. A competitive display of gymnastic exercises is to take place on November 7, at the exhibition being held at the Palais de l'Industrie, to which members of both sexes will be admitted. I often think that these exercises are much abused, particularly as regards children, under the mistaken notion that they strengthen the constitution. Gymnastic exercises can be useful only on the condition that the subjects are well fed, to repair the wear and tear of the body that must necessarily ensue after such hard work, of which these exercises are only another form; and this (proper food) is just the great desideratum in all French schools. Children and the aged are not fit subjects for these exercises, as they are in general too violent for them; and there are many other conditions which contra-indicate their utility, but which I cannot enter into here.

A great reform is about to take place in railway travelling in France, and the sooner it is carried into effect the better. Hitherto the third-class carriages were not provided with the means for keeping the passengers warm, as this was looked upon as a luxury to which only the rich who can pay are entitled; but some philanthropic Republicans having shown that warming a carriage in winter and freely ventilating it in summer was not a luxury, but a necessity, the railway authorities have been prevailed upon to attend to these little comforts, and to place the third-class passengers, in this respect at least, on the same footing as the more favoured ones. A new system of warming the railway carriages is to be adopted this winter, which consists of substituting gas for oil for lighting the carriages. A foot-pan placed on the floor of each compartment is to communicate with a main tube which will convey the gas to all the carriages, and thus the three classes will be lighted and warmed at the same time.

The reopening of the School of Medicine—that is, the administrative part of it—took place on the 15th inst., but the sessional lectures will not begin before the first week of November.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

Edinburgh, November 4.

Opening of the Winter Session at the University: The Principal's Address — The Extramural School: Dr. Angus Macdonald's Address; The Natural Endowments required by Surgeons and Physicians.

The winter session of the University of Edinburgh was opened on Friday last, with an address from the Principal, Sir A. Grant, Bart.

Out of the many topics which he discussed, I shall advert to only one or two that are of interest to the medical world.

The learned Principal commenced his address by paying a graceful tribute to the memory of the late Sir David Baxter, Bart., to whose munificence while he lived the University owed so much, and by whose death it has become so great a gainer. During his lifetime Sir David expended no less a sum than £16,000 on the University of Edinburgh; and now that he is gone it is found that he has bestowed by legacy £40,000 to forward the interests of the same institution, £20,000 of which is to be applied to the extension of the buildings of the University. In discussing the best modes of applying this fund, Sir Alexander Grant admitted that the most urgent present necessity of the University of Edinburgh was the provision of extended buildings, and especially of improved medical class-rooms. "Since the present college was built," he said, "the method of teaching medical science has quite changed its character. Each student is now called upon to go through an amount of work, whether in laboratories or dissecting-rooms, which fifty years ago was not dreamt of. No one can doubt the advantages of this change, but yet the University was not properly prepared for it, and hence has arisen the necessity for rebuilding the class-rooms of our medical schools. . . . . In this question Sir David Baxter has long taken a very great interest, and it was chiefly under his advice and encouragement that we ventured on a plan, soon to be brought before the public, for establishing a medical school in buildings suited to the advanced state of modern science, under the walls of the new Infirmary." Sir Alexander dwelt with satisfaction on the memorable fact, almost unprecedented in the history of the University, that during the past year Professor Christison had completed the fiftieth year of his Professorship. The jubilee had been celebrated with acclamation. A sword had been presented by the University Volunteer Corps to their veteran and yet agile captain; and men had come from distant parts of the United Kingdom to testify their appreciation and admiration of the scientific eminence and noble, manly character of their old teacher. "And the hero of the day," he said, "combined so much youthful energy with the dignity proper to the occasion, that all present felt convinced that it would fall to the lot of a future generation to celebrate the seventy-fifth, if not the hundredth, anniversary of his election as professor."

Her Majesty the Queen had also most appropriately chosen this year to mark her sense of Professor Christison's eminent scientific services by bestowing upon him an hereditary title.

The Principal noted with satisfaction the increasing number of students at the University. This increase had been at the rate of 70 or 80 per annum. Within the last four years it amounted to 300. The addition which took place last year he analysed as follows—47 more Medicals, 42 more Arts students, and 8 more Law students, balanced by 11 fewer students in Theology. This increase in numbers, he pointed out, was rather owing to the continued attendance of former students than to the increased number of first-year men. There were only 21 more *new* men than in the previous year. There was a slight increase in the first entrances for Medicine.

The proportion of the foreign element among the medical first-year men was, he thought, very striking. Out of 202 of these only 71 were natives of Scotland, 76 were natives of England or Wales, 6 of Ireland; 27 were born in India, Mauritius, or the Cape, 6 in the West Indies, and 9 in various other countries, including one instance of a birth on board ship. The list indicated that considerably more than half of the medical freshmen are not only not actually natives of Scotland, but are not connected by family or otherwise with the country. This would not be the case were it not that the University still sustained its high reputation for teaching.

Amongst the foundations established during the past year were mentioned that of the "Syme Surgical Fellowship," of £100 per annum, subscribed by the friends and admirers of the great professor of clinical surgery; also that of the "Goodsir Memorial Prize," of £60 per annum, subscribed in honour of the late Professor John Goodsir. The Principal, Sir A. Grant, announced that a public-spirited citizen, who desired to be anonymous, had presented the College of Edinburgh with a clock, which is to be electrically regulated in connexion with the time-ball on the Calton Hill, and which should impart the utmost punctuality and precision to the academical arrangements. The conduct of the students during the Principal's address, which was listened to with marked attention, was good.

The winter session of the Extramural School of Medicine was opened on Friday with an address by Dr. Angus Macdonald. He had the pleasing duty to perform of welcoming two additional lecturers—viz., Dr. John Duncan as lecturer on Systematic Surgery, and Dr. Claud Muirhead as lecturer on the Practice of Medicine. He then went on to show that if the profession of Medicine was not to be sought with a view to acquiring fortunes, it was not without its own advantages and rewards. And he had scarcely ever met with a medical man who regretted that he had become a doctor. While adverting to some points connected with strictly professional work, Dr. Macdonald said—"In the first place there was reason to believe that a great deal of nonsense passed current in general opinion as to the possession of certain occult intuitional qualities of touch and observation, of mechanical and other endowments, being absolutely necessary in order to form a good surgeon or physician. Bearing on this matter, he could never forget the statement with which the late Professor Syme was wont to demonstrate the erroneousness of such opinions in regard to the domain of Surgery, and which was to this effect—that it required much more mechanical ability to make a chair than was ever required of the most distinguished surgeon in the practice of his profession. Mr. Syme insisted upon the knowing exactly what was wanted, and the anatomy of the points concerned, as being the chief requisite, and put the mere mechanical part in the background. Now, as none of them would refuse to credit themselves with that modicum of mechanical talent required of every joiner's apprentice, and indicated by Mr. Syme as the maximum wanted, none of them need, on the

score of distrusting their mechanical turn, despair of being capable of becoming one day a first-class surgeon. In the domain of Medicine one was still less dependent on intuitional and mechanical endowments. Take, for example, auscultation. All the stuff that passed current among students as to the need of a musical ear in an auscultator was the sheerest moonshine. Anyone not deaf, and possessed of the necessary amount of patience and perseverance, was as fit to become an accomplished auscultator as the most accomplished musician. But again, though very few indeed need despair on account of natural inaptitude for the profession, it could not be too strongly put forward that no one need expect to succeed, however talented he might be, who did not patiently and persistently strive to educate all his senses and train himself to habits of the closest observation."

IRELAND.

DUBLIN, November 5.

THE INTRODUCTORY LECTURES.

THE address delivered first in order of time this year was that at the Royal College of Surgeons by Dr. Edmond Davy, Professor of Medical Jurisprudence. Of this a notice has already appeared in your columns.

On October 31 Mr. Robert Cryan inaugurated the session at St. Vincent's Hospital, Stephen's-green, with a very able discourse on the object of the profession of Medicine, the method and studies necessary to obtain that object, and the means of successfully applying that method and those studies. The chair was taken by the Right Hon. Lord O'Hagan, Lord Chancellor of Ireland, and the audience included Mr. Porter (Surgeon to the Queen), Sir William Wilde, Sir William Carroll, Dr. Hayden, Mr. Wharton, and others. In a passage characterised by a somewhat bold imagery, Mr. Cryan showed that he had not forgotten the descent of Æsculapius from Apollo:

"If during your studies you must have an idol, then, I would presume to say, let the goddess of Clinical Medicine be the object of your idolatry. (Cheers). I am glad, my young friends, to learn by those cheers that you admire this goddess, for let me hasten to assure you that she is no faded beauty, with pallid cheek and lustreless brow, that woos you to her embrace. It is, indeed, true that she numbers many, very many, years, yet, paradoxical though it may seem, she is not, nor ever will be, old; for, like progressive science herself, she enjoys the charmed gift of perpetual youth. Hence it is that even now on you, her true votaries, she is smiling down in all the smoothness and the sheen of youthful beauty—with eye as bright and bewitching, with silvery voice as soft, as rich, as sweetly convincing as when, more than 2000 years ago, at Cos, she wooed and won Hippocrates."

The true method of studying Medicine was by accurate and repeated observation in the hospital wards. "If," the lecturer went on to say, "you do not possess the invaluable habit of careful and correct observation, as the fruit of a liberal preliminary and university education, or if you do not now acquire it here by diligent study, you will be unable to collect or register facts or reliable data to base your reasonings upon. Therefore your conclusions, and the rules of practice founded on them, will necessarily be unsound and erroneous, and you never can become safe and successful practitioners of the healing art. Be, then, observers. Learn, in the wards of the hospital, in the out-patients' rooms, and in the pathological theatre, to observe for yourselves disease—its progress, treatment, and results, and to use with skill your eyes, ears, and fingers; for to know disease and injuries they must be not only seen and heard, but often handled too. Endeavour to acquire manipulative skill and delicacy of touch—that '*tactus eruditus*' so invaluable to both surgeon and physician. Educate all your sense-organs, for while very many evidences of disease are revealed to us by the eye or ear, and some few by the sense of smell, if not by that of taste, yet there are other morbid signs, which—like those embossed letters by which the blind are taught to read—are to be recognised and discriminated only by the sense of touch. And when you have thus trained the unaided or naked organs of sense, do not rest satisfied, but avail yourself of every fitting opportunity to acquire skill and dexterity in the use of all those beautiful instrumental aids to the sense-organs—those 'arms of precision,' as they have been well called—in the invention or improvement of which our science has been so rich and successful during the last decade or two, and which have shed such a flood of light on both the diagnosis or discrimination and treatment of diseases of the eye larynx, or vocal organ, brain, kidney, and heart, as well as on fevers and other general morbid states. By that beautiful optical instrument, the ophthalmoscope, for which we are indebted to the inventive genius of Helmholtz, in 1851, we are enabled not only to see the interior of the eye, but actually to judge of the state of the circulation of the brain itself, both in health and disease."

Mr. Cryan concluded a practical and interesting address with the eloquent words of Graves—"The hero and the despot may extend a sovereignty over distant regions, may exert an unlimited control over millions of vassals, may dispense honours and rewards, or may inflict punishment and death; they may, like Alexander, grieve at the narrow limits of a conquered world, and sigh for other scenes of glory; but they cannot chase away pain. They cannot bid the burning thirst to cease, or give back repose to the sleepless; they cannot impart feeling or motion to the paralysed, or sight to the blind; and above all they cannot imitate that almost God-like function of the healing art—by which man is enabled to recall to his fellow-man reason long banished, and restore to society the hapless victim of insanity."

The first lecture of the session of the School of Physic in Ireland was delivered in the anatomical theatre, Trinity College, on Friday, November 1, by Dr. William Moore, Professor of Medicine. Although not a formal "Introductory," it was well attended by visitors and students. The following day Dr. Macdowel, the newly re-elected Professor of Anatomy and Chirurgery, gave the opening lecture of his winter course. He was very warmly greeted. On Monday, the 4th inst., Dr. Sinclair, King's Professor of Midwifery in the School of Physic, lectured in the anatomical theatre on the subject of Sir P. Dun's Maternity, before a large professional and student audience.

The 120th session of the Meath Hospital and County Dublin Infirmary was inaugurated with a public address by Dr. Philip Crampton Smyley, Surgeon to the Hospital, on Monday, the 4th inst.; and on the same day Mr. Coppinger, Assistant-Surgeon, delivered an opening lecture at the Mater Misericordiæ Hospital. Of these I must reserve a more detailed account for a future occasion.

On Tuesday last, the 5th inst., Dr. Lyons gave the inaugural address of the Medical Faculty of the Catholic University of Ireland in the lecture theatre, Cecilia-street. He chose as his subject the education question in Ireland, more especially in relation to the recognition by the State of the Catholic University.

GENERAL CORRESPONDENCE.

OVARIOTOMY IN SWEDEN.

LETTER FROM MR. SPENCER WELLS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just received a letter from Stockholm informing me that Dr. Sven Sköldberg of that city died, at the age of 33, on October 22, after a long illness caused by disease of the heart.

In my work on diseases of the ovaries, which you reviewed so favourably last week, I say (page 312), "In the north of Europe Dr. Sköldberg, of Stockholm, deserves the credit of promulgating, by his example and writings, the knowledge of the operation in Sweden. He published a treatise in 1867, after his return from a long visit to England, which, singularly enough, contains a more complete comparison of the relative mortality of ovariotomy in different London hospitals than can be found in any English work. . . . Dr. Sköldberg visited England again this year, and informed me that he had performed 29 operations, with a result of 24 recoveries and 5 deaths. This success has naturally had a great influence in Sweden."

Dr. Sköldberg's widow, when writing to inform me of his death, says that before his last visit to England "he had performed 28 operations, with 4 deaths and 24 recoveries. Since his return from England he had 2 more cases, who also recovered. He had thus at his death performed 30 operations, with a result of 26 recoveries and 4 deaths.

Fully sympathising with Madame Sköldberg in her anxiety that "now, after the death of my beloved husband, the success of his unwearied endeavours to alleviate the sufferings of his fellow-creatures should be known," I at once ask you to make known these facts to the Profession here. Many of our brethren here and in Edinburgh who knew Dr. Sköldberg, and entertained for him a great and affectionate regard, will condole with his

family and friends on the loss which they have sustained by the early death of an able, enthusiastic surgeon, and kind, warm-hearted man, and will join in the hope that his work has not been in vain. "The good men do lives after them."

I am, &c., T. Spencer Wells.

Upper Grosvenor-street, November 6.

EXTRACTION OF CATARACT.

Letter from Dr. Charles Bell Taylor.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you kindly allow me to make a few remarks as an addendum to my paper on cataract extraction by peripheral section of the iris leaving the pupil free. Since that paper was read I have operated upon thirteen other cases, making in all twenty-three; of these two suffered from iritis followed by closed pupil; the rest made good recoveries, although in three the artificial pupil, owing to straining of the patient, was larger than I could have wished it. After the experience I have had of this operation, I am inclined to think that it is followed by less irritation than any other method; indeed, in some cases of double cataract where I performed Graefe's operation upon one eye and peripheral section on the other, the latter has invariably progressed the more favourably. This I attribute to the fact that there is no stretching of the pupillary aperture during the escape of the lens, no dragging of the iris during the excision of the small portion it is necessary to remove, and no hæmorrhage to obscure the subsequent steps of the operation, or form irritating clots after its completion. No doubt the same end might be accomplished by simple dialysis of the iris without excising any portion. The accompanying woodcut is from a sketch of an average case in which I extracted by this method, using the upper section. The incision, however, may be made either at the side or below if more convenient, and the deformity in the most successful cases is so slight, even in this exposed situation, that it is scarcely possible to detect any deformity whatever.

I am, &c.,

Charles Bell Taylor, M.D.,

Surgeon to the Nottingham and Midland Eye Infirmary.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

Friday, October 25.

J. Cooper Forster, Esq., Vice-President, in the Chair.

Mr. Warrington Haward exhibited a case of Caries of the Knee-joint treated by the local application of sulphuric acid. A boy, aged 8, had suffered for eighteen months from progressive disease of the knee-joint, which, in spite of treatment, led to a condition thus described:—"He was much emaciated, pale, and very weak; took food ill, and was in much pain from frequent starting of the joint; there was considerable fever, and he had a wearied and anxious expression. The right knee-joint was much swollen, and discharged, from openings on each side, a large quantity of foul pus; matter had also burrowed in the neighbourhood, and sinuses discharged both above and below the joint. He was placed under ether, and the joint examined with the finger. The ligaments were found quite dislodged, allowing free lateral movement; the cartilage gone over a great part of both articular surfaces; and the joint ends, with numerous carious patches, were surrounded by the thickened and suppurating synovial membrane. The ends of the tibia and femur were not expanded, and the disease was limited to the joint." Sulphuric acid was freely applied, after the manner introduced by Mr. Pollock, to the carious joint-surfaces, and, of course, necessarily to the synovial membrane. The result of this was the separation of parchment-like sloughs from the bone, the rapid diminution of suppuration and pain, the healing of the sinuses, and a corresponding improvement in health. In two months the sinuses were nearly all healed, and in six months there was anchylosis of the bones. The boy is now in excellent health, and walks about actively with a firm and useful limb. This is the first case in which this treatment has been applied to a large joint; but one was mentioned in which Mr. Pollock had thus treated the wrist-joints. It was pointed out that the cases to which this treatment was especially applicable were those which have their origin in chronic synovitis, and which go on to ulceration of the cartilages and superficial bone-caries, in which the acid acts beneficially, not only upon the bone, but by destroying the thickened and suppurating synovial membrane.

Mr. J. Croft had used a similar application in two cases,—once to cranial bones, another time to the tarsal. In the former case the frontal and parietal bones were syphilitic, and the parts were mopped with sulphuric acid, strength one to four, every other day. In a month the parts were healed. In the next case a woman was sent for amputation of the foot. The sores were repeatedly injected with this solution, and the patient did well. There was some smarting and tingling at each application.

Mr. G. Lawson said other substances had been used in the same way. Dr. Fitzpatrick had employed Vienna paste, and removed large pieces of bone by it. Hydrochloric acid had also been used.

Mr. Berkeley Hill had used Ricord's paste, which was Nordhausen acid and charcoal, to exposed bone. That came away, and the wound did well.

Mr. De Morgan had used the potassæ c. calce, especially in one case; in a short time the patient was well. He was now using nitric acid.

Mr. Haward said sulphuric acid was specially selected as acting more especially on dead bone. It gave little pain; Vienna paste gave more.

In answer to a request from Dr. Glover, Dr. L. Clarke, Dr. H. Jackson, and Mr. Kesteven were appointed a committee to examine the brain from his patient, whose case was reported as aphasia.

OBITUARY.

JOHN DAVIES, M.D.

Death has, at short warning, carried off one of the oldest and worthiest of Hertford's notabilities. Dr. Davies, the senior physician of the town, died on Saturday, the 26th ult. He was seized on Friday morning with a fit of epilepsy, and a series of fits, more or less violent, ensued, during the greater part of which the Doctor was unconscious, and so was spared much physical suffering, until exhausted nature gave way, and he died at nine o'clock on Saturday morning. The deceased, John Davies Edwards, was born November 9, 1796, at Llanbadarnfawr, near Aberystwith, North Wales. He was the son of Mr. John Edwards, a respectable farmer, living on the banks of the river Rheidol, and was educated at a grammar school in the neighbourhood, on leaving which he was articled to Mr. W. Evans, surgeon, Aberystwith, and at the end of his apprenticeship he entered as a student at St. Bartholomew's Hospital, London, in 1819, and subsequently engaged himself as assistant to Mr. W. Thomas, a medical practitioner at Bishop's Statfield, whose sister he married. A few years afterwards he settled down in practice for himself in Somers Town, London. He had been commonly called John Davies by all at school, and so subsequently on entering his profession he dropped the name of Edwards, retaining that of Davies, by which he had been called at school and afterwards. His residence in Somers Town was but short. He entered into a partnership, and the business was in Tottenham Court-road; but this was not a pleasant engagement, and soon terminated, and, the state of Dr. Davies's health necessitating a removal into the country, he went to Hertford about forty years ago, and there he remained until his death, employing his extensive learning and his high talents for the benefit of his fellow-creatures. His professional skill soon attracted a number of patients, and his advice was eagerly sought and highly valued by his professional brethren in urgent cases. He was a Member of the Royal College of Surgeons, a Fellow of the Royal Medical and Chirurgical Society, and a Director of the Philomathic Institution. He was a lecturer on Physiology and Natural Philosophy, and was for some years principal editor of the London *Medical and Surgical Journal*. He translated a "Manual of Materia Medica and Pharmacy" from

the French of Edwards and Vavasour in 1831; published "Selections on Pathology and Surgery," 1842; "Use of Iodine Locally Applied," 1843; "Exposition of the Laws which relate to the Medical Profession," 1844; and was a contributor to the *Lancet*, *Medical Gazette*, and other journals, on physiology, surgery, and practical medicine. Dr. Davies held several local appointments. He was Physician-Extraordinary to the Hertford General Infirmary. For many years he was Surgeon to the Herts Militia, and Surgeon to the County Prison and House of Correction, Medical Visitor to the Hadham Lunatic Asylum, Surgeon to the Herts Reformatory, and for several years Inspector of Recruits. Dr. Davies was a member of the old Corporation of Hertford, and was Mayor of Hertford during the transition year of 1835, when the new Municipal Act came into force. He was an Alderman in the new Corporation, and was Mayor for the second time on November 9, 1841, the day the Prince of Wales was born. He left the Corporation above twenty years ago, and for more than that period was a Justice of the Peace. He passed a very industrious and most useful life. His charities and assistance to the poor by giving the aid of his valuable advice and services were boundless, and he worked to the last. He occupied a prominent position in Hertford for many years. He was most highly esteemed amongst his patients for his ability and skill, by his friends for his straightforward, sterling honesty and simplicity of character, and by his political associates for the sturdiness with which he maintained his principles. His death will be deeply deplored and his memory long cherished. He was M.D. Aberd., 1850; M.D. Erlan., 1847; M.R.C.P. Lond., 1859; Ext.L., 1842; M.R.C.S., 1819.

LEGAL INTELLIGENCE.

MURDER COMMITTED UNDER THE INFLUENCE OF DELIRIUM TREMENS.—PRISONER IRRESPONSIBLE.

At the Central Criminal Court, on October 30, before Mr. Justice Keating, William James Taylor, 38, was charged with the double murder of Susannah Hebden and Frances Hebden, 4 years old, the daughter of the deceased Susannah. The charge of murdering Susannah Hebden was, however, the case proceeded with.

The prisoner had lived with the deceased woman for six years, in Webb-street, Bermondsey. They frequently quarrelled, the prisoner being jealous of the deceased. On the night of Saturday, June 29, or early on the following day, the prisoner made a determined attempt at self-destruction by cutting his throat. On that night a noise was heard in the room occupied by the prisoner and the deceased, and shortly afterwards the prisoner went into the street, spoke to a constable, and pointed to a terrible wound in his throat. The constable returned with him to his lodgings, where the deceased woman and her two children, the deceased Frances and Moses Hebden, were found to have received fearful injuries. The woman and her child Frances died in about twenty minutes after the arrival of the constable; the other child, Moses, ultimately recovered. The question was whether the prisoner was of sound mind at the time he committed the act.

Walter Mush, the constable, deposed to the above facts, and stated that in addition to the severe wound in his throat, there was another severe wound at the back of the prisoner's head.

Dr. Colahan, a surgeon practising in the neighbourhood, stated the nature of the injuries received by the deceased. The skull of the prisoner himself appeared to have been fractured, and for a considerable time his life was in danger.

Moses Hebden, the surviving child, was then examined, and stated that deceased was his mother, and she had been living with the prisoner for six years. On the Saturday night in question he went home about nine o'clock, and gave the prisoner his wages, and then sat down at the foot of the bed and went to sleep. At that time his mother, the prisoner, and the little girl Frances were together in the room. He knew nothing more till he was awoke by hearing a noise in the room, and upon feeling about he found his mother's head, and blood was running down her side. He said to the prisoner, "You have killed my mother"; and the prisoner replied, "I know I have, and you see how it was done." The moment he said this, witness felt something like a flash of lightning across his eyes, and became insensible, and knew nothing of what occurred further. When he recovered his consciousness, he found himself in bed with his head very bad.

Mr. Cooper Forster, Surgeon of Guy's Hospital, was called to speak to the condition of the prisoner. He was of opinion that when he saw him at the hospital he was perfectly sane and rational. The injury at the back of his head was a most serious one, and he was certain it could not have been caused by a fall, or have been self-inflicted. It was such an injury as might have been inflicted by the iron bolt produced. He had no doubt, from what had been stated, that the prisoner had been suffering from an attack of delirium tremens.

Evidence was then adduced that on the Wednesday previous the prisoner had stabbed the deceased woman with a fork in the breast, and the case for the prosecution was then closed.

The defence was that the prisoner was at the time of the commission of the act suffering from an attack of delirium tremens, and this was quite consistent with his subsequent rational appearance; that no motive could be assigned for the commission of such wholesale slaughter—his merely occasional domestic quarrels with the woman who lived with him as his wife would not supply the motive; and that at the time he was unconscious of the nature of the act he was doing.

Mr. Justice Keating agreed that this was a reasonable solution to submit to the jury, and after only about two minutes' deliberation, the jury returned a verdict of "Not guilty," on the ground of insanity. The prisoner was ordered to be detained during her Majesty's pleasure.

NEW INVENTIONS.

THE GOLDEN GRAPE COGNAC.

Although the so-called supporting system of treating acute diseases, which reached its highest development in the wards of King's College Hospital under the late Dr. Todd, has failed to hold its ground for the same length of time, and with the same grasp on professional opinion, as the depletory system which preceded it, yet if 100 medical men were asked what is the best and most generally useful stimulant to a failing circulation and nervous energy depressed by blood-poison or by local disease, more than nine-tenths would answer "Brandy." The acknowledged abuse of brandy has in no degree availed to banish its use—the strongest argument for its intrinsic value. Of so useful a medicine it is most important that a good and pure quality should be used in the sick-room. We have received a specimen of the brandy sold under the name of the "Golden Grape Cognac" by Mr. Benson, of Fenchurch-buildings, Fenchurch-street, which appears to us to combine the best qualities of brandy. It is singularly devoid of that burning hot flavour which is found in inferior descriptions of the spirit. Whilst it is of great strength, it leaves an agreeably soft impression on the palate, and its flavour is that of true Cognac, and not that of the vile imitations which so often disgust the patient with his remedy long before his condition warrants its omission.

MEDICAL NEWS.

Royal College of Physicians of London.—The following gentlemen were duly admitted Fellows of the College on October 31, 1872:—

Cayley, William, M.D. Lond., 58, Welbeck-street.
Madden, William Herries, M.D. Edin., Torquay.
Murray, William, M.D. Durham, Newcastle-on-Tyne.
Tetley, James, M.D. Edin., Torquay.

The following gentlemen were duly admitted Members of the College on the same day:—

Bruce, John Mitchell, M.B. Lond., 8, Gray's-inn-place.
Sparks, Edward Isaac, M.B. Oxford, Crewkerne, Somersetshire.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Court of Examiners, on the 5th instant, and when eligible will be admitted to the Pass Examination:—

Adcock, Harold, student of Guy's Hospital.
Bedolfe, P. Davenport, of St. Thomas's Hospital.
Booth, John B., of Guy's Hospital.
Brown, Walter, of Guy's Hospital.
Carey, Adrian, of Guy's Hospital.
Clarke, G. M. K., of the Charing-cross Hospital.
Copeland, William L., of the Montreal School.
Davis, Edwin H., of St. Thomas's Hospital.
Eddowes, Alfred, of the Edinburgh School.
Hamp, John W., of the Birmingham School.

Harvey, Henry F., of University College.
Hawkins, William, of St. Thomas's Hospital.
Henderson, William, of the Edinburgh School.
Herbert, E. A. H., of Guy's Hospital.
Jackson, Ernest C., of St. Thomas's Hospital.
Jenkins, John H., of the Bristol School.
Low, Charles A., of the London Hospital.
Maccall, Thomas, of the Edinburgh School.
Marlatt, Charles W., of the Toronto School.
Maudsley, Joseph, of Guy's Hospital.
McHardy, Malcolm M., of St. George's Hospital.
Newton, William T., of St. Bartholomew's Hospital.
Parrott, Joseph, of St. Thomas's Hospital.
Parkes, Alfred, of the Birmingham School.
St. John, Leonard, of the Montreal School.
Todd, William H., of the London Hospital.
Wilson, Charles W., of the Newcastle School.
Young, Edward William, of St. George's Hospital.
Young, Ralph, of the Newcastle School.

Nine candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen were admitted Members of the College, viz. :—

Brady, John Charles, L.R.C.P. Edin., Lady Somerset-road, N.W.
Lubbock, Montagu, L.R.C.P. Lond., Foulis-terrace, Brompton.
Thornton, William Pugin, L.S.A., Devonshire-street, Portland-place.

At this meeting of the Court, Mr. John Birkett, the recently-elected Examiner, took his seat.

The Pass Examination for the diploma of Membership takes place this day (Friday).

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 31, 1872 :—

Coates, William Harrison, Henley-on-Thames.
Smith, John Frank Shersley, Greenwich.

As an Assistant in Compounding and Dispensing Medicine :—

Hunt, Harry Richard, Westmoreland-road, Walworth.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Day, Edmund Overman, Guy's Hospital.
Draper, Matthew Ryder, London Hospital.
Reid, Matthew, Guy's Hospital.

APOTHECARIES' HALL, DUBLIN.—At the Professional Examinations held in October, the Licence to practise Medicine and Pharmacy was granted to the following gentlemen, viz. :—

Clancy, Walter William.
Davis, Richard.
Magill, Robert.
O'Kelly, Richard.
Pughe, John Eliot Howard.
Sisk, John O'Neill.
Sparrow, Robert Launcelot.
Tolerton, William R.
Young, Thomas Frederick.

The following gentlemen passed the Preliminary Examination in Arts, viz. :—

Brown, David McMahon.
Byrne, Mervyn Nicholas.
Myles, Henry George.
O'Meara, William Henry.
O'Neill, Edmond.
Rice, Spring.
Roche, Michael James.

As Assistants in Compounding and Dispensing Medicines :—

Harley, William H.
Sealey, Winthrop B.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BLACK, D. CAMPBELL, M.D., L.R.C.S.E.—Extra Physician to the Dispensary of the Royal Infirmary, Glasgow.

BUTLER, F. T., M.A., M.D., T.C.D.—Assistant Medical Officer to the Borough Lunatic Asylum, Newcastle-on-Tyne.

CUMMING, FREDERICK, M.D. Edin., L.F.P.S. Glasg.—Medical Officer of District No. 3 of Hastings Union.

FERRIER, D., M.D. Edin., M.R.C.P. Lond.—Junior Physician to the West London Hospital, *vice* J. C. Thorowgood, M.D., M.R.C.P. Lond., appointed Physician.

FISH, J. C., M.D. Camb., M.R.C.P. Lond.—Junior Physician to the West London Hospital, *vice* F. Simms, M.B., M.R.C.P. Lond., resigned.

HAYDON, NATHANIEL THOMAS JOHN, L.R.C.P., M.R.C.S.E., and L.S.A. Lond.—Medical Officer for the Workhouse and for Medical District No. 4 of the Newton Abbot Union.

JEAFFRESON, C. S., M.R.C.S. Eng., L.S.A.—House-Surgeon to the Newcastle Eye Infirmary, *vice* J. B. Fife, F.R.C.S., L.S.A., resigned.

ROSTEN, W. M., M.R.C.S. Eng.—Resident-Surgeon to the Birmingham General Dispensary.

THOROWGOOD, J. C., M.D., M.R.C.P. Lond.—Physician to the West London Hospital, *vice* Henry Maudsley, M.D., F.R.C.P. Lond., resigned.

WARD, J., M.R.C.S. Eng.—Resident-Surgeon to the Birmingham General Dispensary.

MILITARY APPOINTMENTS.

WAR OFFICE—MEDICAL DEPARTMENT.—Staff Assistant-Surgeon James Good to be Staff Surgeon, *vice* Staff Surgeon-Major Gordon Kenmure Hardie, M.D., who retires upon half-pay; Assistant-Surgeon William Tobin, from the 24th Foot, to be Staff Assistant-Surgeon, *vice* John R. Dickson, deceased; Staff Assistant-Surgeon Maurice Tracey retires upon temporary half-pay.

BREVET.—The undermentioned officer, who has retired upon full pay, to have a step of honorary rank as follows :—To be Deputy Inspector-General of Hospitals: Surgeon-Major William Collum, Bombay Establishment.

BIRTHS.

BARRIE.—On October 31, at Elmbank, Dumfries, the wife of Andrew D. Barrie, M.B. and C.M., L.R.C.S.E., of a son.

NIVEN.—On November 2, at Cromwell House, Selhurst-park, Surrey, the wife of W. Niven, M.D., H.M.'s Indian Army, of a daughter.

OGILVY.—On October 10, at Simla, East Indies, the wife of Dr. Ogilvy, Staff Surgeon, Secretary to the Inspector-General of Hospitals, of a daughter, who has been named Elizabeth Blancre.

RIDGE.—On November 3, at Milton House, High-street, Clapham, the wife of J. James Ridge, M.D., B.A., of a son.

MARRIAGES.

ARMOUR—DODS.—On October 24, at Whitelow, Haddington, Andrew Armour, M.D., C.M., of Crook, to Jessie, third daughter of the late John Dods, Esq., Meiklerig, East Lothian.

BUCKELL—DUKE.—On October 31, at All Saints', Chichester, Leonard Buckell, M.D., of the North Pallaut, Chichester, to Mary Augusta, widow of Charles Duke, Esq., late of Appledram, and only child of the late Robert Sykes Ashton, Esq., of Gibraltar.

DAY—COOPER.—On October 30, at St. John's Church, Croydon, Thomas Francis Day, only son of the late W. M. H. Day, M.B., of Clifton, to Edith Brodie, youngest daughter of the late Rev. Charles Brodie Cooper, M.A., Rector of Hammoon, Dorset.

HENDERSON—FERGUSON.—On October 30, at Coney-park, Bridge of Allan, George Henderson, M.D., Surgeon H.M. Bengal Medical Service, to Mary Elizabeth, younger daughter of the Rev. John Ferguson, Senior Minister of the Free Church, Bridge of Allan.

KEEN—ROSE.—On October 31, at Holy Trinity, Paddington, William Keen, L.R.C.P., M.R.C.S., of 2, Royal-avenue, Chelsea, to Emily Ann, only child of the late Benjamin Thomas Rose, Esq., of Calcutta, and step-daughter of C. S. Francis, Esq., of 14, Blomfield-road, Maida-hill.

ROBERTS.—BOLTON.—On October 29, at All Saints', Marylebone, Stewart Blacker Roberts, M.D., F.R.C.S., of South Norwood, Surrey, to Alicia Evelyn, widow of Major Augustus W. Bolton, Bengal Staff Corps, and youngest daughter of the late Colonel John Bolton, of H.M. 75th Regiment.

ROBERTSON—STOW.—On October 30, at the parish church, Whitby, James Davison Robertson, M.D., of Penrith, Cumberland, to Agnes Mary, eldest daughter of William Fenwick Stow, Esq., of St. Hilda's-terrace, Whitby.

SANDILAND—CLEAVE.—On October 30, at St. Saviour's, Haverstock-hill, Arthur Henry Sandiland, M.R.C.S., to Mary Cleave.

WYATT—BUCKELL.—On October 31, at All Saints', Chichester, Oliver Newman, third son of Edward Wyatt, Esq., of Chichester, to Margaret Hannah Best, daughter of Leonard Buckell, M.D., Chichester.

DEATHS.

ASPRAY, ANN, widow of the late Charles Aspray, surgeon, and only daughter of the late J. H. Talbot, Esq., Olney, Bucks, at 4, Devonshire-street, Portland-place, W., on October 29.

BOULTON, ROBERT GODFREY, eldest son of B. J. Boulton, M.D., of Hornecastle, at Garnsgate Hall, Long Sutton, in the 35th year of his age.

BUTLER, ELIZABETH WHITE, the beloved wife of John Butler, M.D., F.R.S., at Windsor Villa, Plymouth, of bronchitis, on October 24, aged 74.

DUDGEON, MARY MCLEAN, third daughter of John Dudgeon, M.D., at Peking, China, of typhoid fever, on August 23, aged 4 years and 10 months.

DUNDAS, ELIZA MARY, widow of Robert Dundas, M.D., of 14, Gloucester-place, Hyde-park, W., and daughter of the late J. B. Scott, Esq., barrister-at-law, on October 27.

HICKMAN, R. MURHALL, M.R.C.S. Eng., L.S.A., of Newport, Salop, suddenly, from the effects of an accident, on October 29, aged 29.

HUSSEY, LUCY ANNIE HASSELL, wife of E. L. Hussey, F.R.C.S. Eng., M.R.C.P. Edin., and eldest daughter of the Rev. H. W. Gleed Armstrong, M.A., Vicar of Bierton, Bucks, at St. Aldate's, Oxford, on November 1.

MCLAUGHLIN, ELIZA ANNE, the beloved wife of G. E. McLaughlin, M.R.C.S. Eng., L.S.A., at Preston Lodge, Jeffrey's-road, Clapham, on November 21, in the 59th year of her age.

MILLER, COLIN MATHESON, only son of Staff Surgeon C. M. Milne Miller, at North Camp, Aldershot, on October 30, aged 2 years and 4 months.

SARGENT, SARAH, widow of George Sargent, Esq., surgeon, of Huddersfield, at 69, St. Paul's-road, Highbury, N., on November 2, aged 72.

STODART, CLIFFORD, youngest son of the late Edward Stodart, of Hendon, Middlesex, on board the *Duke of Sutherland*, bound for Sydney, on May 15, in his 23rd year.

WARING, MARY CECILIA, widow of the late Richard Waring, M.D., at 13, The Grove, Boltons, S.W., on November 1, aged 72.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ALNWICK INFIRMARY.—House-Surgeon. Applications, with testimonials, to J. A. Weson, Esq., Honorary Secretary, on or before November 18.

AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION, DERBY.—Medical Officer. Candidates must be Members of one of the Royal

Colleges of Surgeons of the United Kingdom, and registered in accordance with Act of Parliament. Applications, with testimonials, to the Secretary, Mr. J. Bullivant, 59, Abbey-street, Derby, on or before November 23.

Birmingham Hospital for Women.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

Central London Ophthalmic Hospital, Gray's-inn-road.—Assistant-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons. Applications, with testimonials, to the Secretary, on or before November 12.

Charing-cross Hospital Medical School.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

City of London Hospital for Diseases of the Chest, Victoria park, E.—Assistant-Physician. Applications, with testimonials, to the Treasurer, on or before November 16. Further information may be obtained from the Medical Officers or the Secretary at the Office, 24, Finsbury-circus, E.C.

Doncaster General Infirmary.—House-Surgeon. Applications, with testimonials, to the Honorary Secretary.

Durham County Asylum, Sedgefield, Ferryhill.—Assistant Medical Officer for the Female Department. Applications, with testimonials, to be sent without delay to Dr. Smith, Medical Superintendent.

Evelina Hospital for Children, Southwark-bridge-road, S.E.—House-Surgeon; also Registrar. Applications, with testimonials, to the Committee of Management, on or before November 13.

Friendly Societies' Medical Institute, Northampton. — Medical Officer. Candidates must be Members of the Royal College of Surgeons of England, and registered in accordance with Act of Parliament. Applications, with testimonials, to the Secretary, on or before November 19.

General Infirmary, Northampton.—House-Surgeon. Candidates must be Members of the Royal College of Surgeons of England and Licentiates of the Apothecaries' Company. Applications, with testimonials, to the Secretary, on or before November 19.

Hartley Wintney Union.—Medical Officer for the District of Farnborough. Candidates must be registered, and possess the qualifications required by the Consolidated Orders of the Local Government Board. Applications, with testimonials, to William Brooks, Clerk to the Guardians, at the Office of the Union, Odiham, Hants, on or before November 14.

Metropolitan Free Hospital, Devonshire-square, City.—Honorary Assistant-Physician. Candidates must be Members of the Royal College of Physicians of England, or pledged to become such within twelve months. Applications, with testimonials, to the Committee of Management, on or before November 9.

National Hospital for Diseases of the Heart.—Consulting and Junior Physician. Applications to W. F. Portlock-Dodson, Honorary Secretary.

St. Thomas's Hospital, S.E.—Medical and Surgical Registrars. Applications, with testimonials, to R. G. Whitfield, Esq., Medical Secretary, on or before November 30.

Seamen's Hospital, Greenwich.—House-Surgeon. Applications, with testimonials, to Kemball Cook, Esq., House-Governor and Secretary, on or before November 12.

Sheffield Public Hospital and Dispensary.—Assistant House-Surgeon. Candidates must be Members of one of the Colleges of Surgeons of the United Kingdom, and also Licentiates of the Apothecaries' Hall of London, or graduates in Medicine of any University in England, Scotland, or Ireland. Applications, with testimonials, to Dr. J. C. Hall, Honorary Secretary, on or before November 9.

Tiverton Infirmary and Dispensary.—House-Surgeon and Dispenser. Applications, with testimonials, to the Honorary Secretary, Tiverton.

UNION AND PAROCHIAL MEDICAL SERVICE.

APPOINTMENTS.

Banbury Union.—Clarence L. H. Pemberton., M.R.C.S. Eng., L.S.A., to the Cropredy District.

Beverley Union.—John Hartley, M.R.C.S. Eng., L.R.C.P. Edin., L.S.A., to the First District.

Crediton Union.—John Deans, M.R.C.S. Eng., L.S.A., to the Coldridge District.

Havant Union.—Thomas P. Stephens, L.F.P.&S. Glasg., L.R.C.P. Edin., to the Third District.

St. Austell Union.—William Richard Goodfellow, M.R.C.S. Eng., L.S.A., to the Second District; Richard F. Stephens, M.R.C.S. Eng., L.S.A., to the Seventh District.

We are sorry to hear that Dr. Benson's retirement from the Professorship of Medicine at the Royal College of Surgeons, Ireland, has been caused by failing sight. He is to receive a purse of 100 guineas, and he bears with him the goodwill of all the Profession.

On Thursday, the 31st ult., the Mayor of Liverpool gave a banquet at the Town-hall to the honorary medical officers of the Liverpool charities.

Dr. Henry Sibthorpe has presented to the King and Queen's College of Physicians in Ireland an antique bust of Boerhaave in black Wedgwood ware.

The present Medical Officers of the Ellesmere Union have been appointed the medical officers to the sanitary authority in their several districts.

A butcher at Morrey, Staffordshire, has been committed for two months, without the option of a fine, for taking into Birmingham a quantity of beef unfit for food.

A contemporary, with no little justice, asserts in an article on medical students that a "London University" degree may be obtained by men who are far from being skilful doctors. The University has so overlaid the education of the graduates with non-medical instruction, that instead of securing sound clinical knowledge it has only put a premium on the worst kind of grinding.

Mr. Edward Bicknell has been publicly presented with an illuminated address and a handsome silver tea-service, on the teapot belonging to which is inscribed, "Presented to Edward Bicknell, M.R.C.S., on his retiring from the office of Surgeon to the Coventry Provident Dispensary."

At the meeting of the Council of the Charity Organisation on Monday, the question of improved dwellings for the poor of the metropolis occupied the attention of the Council. A committee was appointed to take the subject into consideration, with a view to remedy the present unsatisfactory state of things. No more desirable work could be undertaken by a philanthropic association.

The *Madras Mail* reports a shocking occurrence at Allahabad. A native officer of the Magistrates' Court had bought some medicines at an auction of the effects of a medical gentleman lately deceased. Among his purchases was a bottle of strychnine, which he probably confounded with morphia, for he proceeded to vaunt its properties as resembling those of opium among a number of his acquaintances assembled outside the cutcherry. A number of these who were opium-eaters petitioned for a sample, and some was then and there swallowed by six persons—five men and one woman. Of these three were actually lying dead in front of the cutcherry within twenty minutes. The three others were recovered by the use of the stomach-pump applied by the Civil Surgeon, who at once hurried to the spot.

Anatomical Examination.—The following were the questions on anatomy and physiology submitted to the candidates at the primary examination for the diploma of Membership of the College of Surgeons on the 2nd inst., viz.:—1. Mention in their order, from without inwards to the peritoneum, the parts found in the space bounded above by the twelfth rib; below, by the opposite portion of the crest of the ilium. 2. Describe the structure and functions of serous membranes. 3. Describe the axilla, its shape, boundaries, and contents, in their relative position. 4. Describe as fully as you can the phenomena presented by the circulation of the blood as may be seen in some transparent part under the microscope. 5. If a needle were carried directly backwards from the centre of the cornea through the axis of the eye, in what order would the parts be pierced? 6. How are the acts of inspiration and expiration accomplished? Describe the changes produced in the air by respiration.

The Baby-farming Act.—On Monday the Metropolitan Board of Works issued a public notice to "persons having charge of infants." They being the local authority for the metropolis (except the City of London and its liberties) constituted by the "Act for the Better Protection of Infant Life," persons requiring to be registered may obtain forms of certificates as to character and ability to maintain children, at their office. The certificates, which must be produced pursuant to the statute before registration, are to be signed, according to the directions on them, by "a minister of the Established Church, or of a registered place of worship," and also by "two rated householders." The form of certificate is, that the applicant "is a person of good character, and able to maintain infants received for hire or reward, for the purpose of nursing or maintaining such infants apart from their parents in a registered house, pursuant to the 'Infant Life Protection Act, 1872.'" When the good character and ability to maintain infants of the applicants are ascertained, then the Board of Works will send one or more of their inspectors to the houses of the applicants, to see if their sanitary condition is all that could be desired for the health of the infants at nurse.

Small-pox and Vaccination in Milan during 1871.—The Milan Committee of the Italian Medical Association reports that during 1871 there were performed in the province of Milan 32,949 *vaccinations;* of this number 30,742 were practised with humanised lymph with the following results—successful in 29,096, spurious in 238, negative in 141, and unverified in 1267. The 2207 vaccinations performed with animal lymph gave 1956 successful results, nine spurious, 46 negative, and 196 unverified. There were 41,301 *revaccinations* performed. In 22,964 of these humanised lymph was used, furnishing 7261 successful, 4317 spurious, 4302 negative, and 7084

unverified. In the 18,337 revaccinations with animal lymph the results were—successful in 5423, spurious in 643, negative in 5267, and unverified in 6904. The number of cases of *small-pox* was 16,515, the disease proving fatal in 2711 cases. Of these 274 were not vaccinated, of which number 138 died; 16,241 had been vaccinated, and of these 2573 died.—*Annali di Medicina*, October.

TESTIMONIAL TO A SURGEON.—A silver tea-tray and £410 have been presented to Dr. T. Hughes, of Mold, by his friends, on the occasion of his leaving Mold, where he has been in practice for upwards of forty years.

—HOUSE OF INDUSTRY HOSPITALS, DUBLIN.—On the 31st ult. the Board of Governors appointed Dr. William Thomson as House-Surgeon for two years, at a salary of £50 a year, with furnished apartments, light, and fuel.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN OCTOBER, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	...	...	...	...	...	...
West Middlesex .	16·67	0·031	0·147	0·000	13·14	3·3
Southwark & Vauxhall . . .	17·83	0·067	0·161	0·003	14·0	3·8
Chelsea . . .	...	...	...	...	...	...
Lambeth . . .	17·07	0·060	0·147	0·002	13·8	3·6
Other Companies.						
Kent . . .	27·27	0·018	0·245	0·000	20·3	5·2
New River . .	18·17	0·021	0·101	0·001	14·0	3·4
East London . .	17·30	0·028	0·167	0·002	13·6	3·6

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Southwark and Vauxhall, and the Lambeth Companies.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 114,696,589 gallons; and the number of houses supplied was 498,574. This is at the rate of 34·6 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 24 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

The returns of the Grand Junction and Chelsea Companies have not been received.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. Cribb's letter reached us too late for insertion this week.

Mr. Teevan's paper was received.

Dr. A. S. Jayakar, Muscat, Arabia.—Enclosure received (per Messrs. Grindley and Co., Bombay), with thanks.

Alcoholist.—Yes. Alcohol and brandy are now largely manufactured in Russia from mosses. The quality is said to be exceedingly good.

A Rejected Candidate.—We must express our strong disapproval of the "demonstration" which was made the other evening. In a liberal profession like that of Medicine, facts and argument will always eventually succeed to remedy an evil.

Bishop's Stortford.—We shall be obliged by the statistics being forwarded to us. We agree with our correspondent—the Local Board "ought to be compelled" to carry out the late rescinded resolution.

Z., Wisbeach.—1. He may ask for registration, but assuredly he will not get it. 2. It depends on whether he has been struck off the roll of the College of Surgeons. Write to Mr. Trimmer. He has no *locus standi* in any court, and cannot sue for advice or medicine. You must simply bide your time.

Aylesbury.—We are not convinced by Mr. Henley's arguments. We are not speaking now of the particular case of the Aylesbury Union, where there may be modifying circumstances which may require to be considered. But we reiterate strongly our opinion that we believe it will be best for the Profession and the country at large that the Poor-law Medical Officers should unite with their duties those of Medical Officer of Health. It will be their own fault and the fault of the Local Government Board if they perform the duties for "small emoluments added to their salaries."

P. C.—Your inquiry shall have attention.

D. C.—Dr. Robert James published in 1743 a medicinal dictionary in three volumes.

Antiquary.—Ammonius, an ancient surgeon, born at Alexandria, was surnamed "the Lithotomist." His skill and dexterity consisted in breaking the stone and extracting it when too large to pass through the incision into the bladder.

A Candidate.—Dr. Alexander Monro's (*primus*) "Treatise on the Anatomy of the Bones" passed through eight editions during his life; and at Paris a folio translation of it, with splendid engravings, was produced by the Demonstrator to the Royal Academy of Sculpture and Painting. Dr. Monro died on July 10, 1767.

Quested.—No.

"Let every man enjoy his whim.
What's he to me, or I to him?"—*Churchill.*

Paul.—Hydrocephalus was known to some of the older writers, but it was first accurately described by Dr. Whytt, who published, in 1768, his "Observations on Dropsy of the Brain," and gave an excellent account of the symptoms and progress of the affection. Since his time it has been considered as a distinct malady by many authors in this and other countries.

ERRATIC.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The inexorable force of destiny compelling a sale at an alarming sacrifice of furniture, carriage, horses—in fact sticks generally,—necessitates also the weeding of the library down to a few authors such as Aitkin, Churchill, Druitt, Heath, Marshall, Parkes, and Ringer. Whilst these names are on the pen I am truly sorry to read in another journal of Dr. Druitt's illness, and most cordially join with thousands of others in the earnest hope that hearty and strong he will return home again. Let me add that, beyond the honour of being within an ace plucked by him at Apothecaries' Hall, my personal acquaintance is extremely slight; but every doctor knows the "Manual of Surgery," which has made the author's name—if not his fortune (not necessarily). I am going abroad, too, which accounts for present arrangements, after many years' expensive home service. There are others in the same boat who have dined and wish to pay. Knowing all about sunstroke, paralysis, malaria, cholera, and dysentery, coupled with the loose screws, "*Ii morituri te salutant.*" By the pound the butterman has kindly paid for a mass of literature, whilst shoals of notes have been consigned to the flames. "O that mine enemy would write a book!" runs a scriptural quotation worn thread-bare, yet often adopted by savage reviewers. I should like to perpetrate a book if a *rara avis*, a generous publisher, would stand shot and chance the risk. Failing this, as the old fortune-teller in the Roman History offered her works, so I offer the journal some selections from these notes and extracts previously alluded to. At the last meeting of the Obstetrical Society Dr. Playfair referred to Dr. Hamilton, who, a dab at the forceps, had 731 consecutive labours without a death of mother or child. Dr. Milne, of Edinburgh, points out the extreme value which long ago he attributed to the forceps. There was also an admirable article in the *Lancet* the week before on this subject. How different matters were as detailed by Dr. West in 1847—namely, Dr. Hoffman at Würzburg applied the forceps twenty times in 637 labours, Dr. Ramsbotham once in 729. The deaths were 35 in one case to 6 in the other per cent. In one instance Hoffman tore asunder all the joints of the pelvis, lacerated the urethra and vagina, followed by death in eighteen days; in a second the extraction of a putrid child involved death in twenty-nine hours; in a third similar case death in four days from puerperal fever; in a fourth the long forceps applied to a hydrocephalic head, and traction made, the blades unlocked, had to be withdrawn, and craniotomy performed, involving vaginal laceration and death in twenty-four hours. It is a bad habit to neglect one's task to pluck flowers by the way. On the search to find out all about malaria, concerning which Dr. Maclean, C.B., in his valuable, instructive, at the same time attractive lectures, so ably dispels the "chill" theory, a paper by Sir James Paget on another subject catches the eye. The carcer of 1000 medical students was traced fifteen years with the following results:—Twenty-three achieved distinguished success, 66 considerable (including 3 dentists), 507 fair (including 7 dentists), 124 very limited, 56 failed entirely, 96 left the profession, 87 died within twelve years of commencing practice, and 41 died during pupilage. Seven came from other professions; out of these five changed their minds and did not practise. Of those who died a large proportion succumbed to fever contracted in hospital or in practice, to phthisis, and to the anxious, endless day aud night mind and body wear and tear. Five destroyed themselves, and one was hanged. Now just a word about army doctors, all of whom owe a great debt of gratitude to Dr. Gordon, C.B., who has written the services of Balingall, Bancroft, Bell, Brocklesby, Cleghorn, Clowes, Fellowes, Gale, Girdlestone, Guthrie, Home, Hamilton, Hunter, Jackson, Larrey, Sir James McGrigor, Ambrose Paré, Sir John Pringle, and others too numerous to mention. To-day, turning to the army-list, you will read endless narratives proving that medical men have nobly gained the Bath, the Victoria Cross, the Iron Cross, in addition to medals for service, and that precious medal given by the Humane Society. Mind you, these honours have been *wrung*, for others also have deserved them. On the table lies that magnificent triumph of Mr. Spencer Wells (by the way, a naval surgeon), the record of 500 operations with a mortality of only 25·4 per cent.—that is to say, 373 women, instead of being in their graves or miserable invalids wishing for death, have been restored to health, the chief ingredient constituting happiness. In New Zealand, Mr. Spencer Wells states that an army surgeon was the pioneer of ovariotomy; likewise in India medical officers have performed this operation repeatedly with success. A colleague, reckoning up, found he had performed lithotomy seventy-five times with seven deaths, and had a coal-scuttle full of calculi. Gradually the teaching at Netley is being felt, the seed sown bearing fruit valuable to the profession generally. By the young lads full of zeal, who, in all parts of the world—resembling St. George of old—bravely and scientifically fight the dragon of pestilence under the blazing sun, the arts of Medicine and Surgery are advanced. The Royal Society and the Colleges of Physicians and Surgeons should remember these things—the old proverb "Palmam ferat qui meruit"—instead of showering all their honours upon those who stay at home. Also, why not select a few active young surgeons, recommended by Pro-

fessor Parkes, to be Medical Officers of Health; give them full pay and £200 additional, which would render them (although eligible) independent of private practice supposing rows occurred and the revolver needed. Note a most interesting case of amputation at the shoulder-joint of a woman, aged 30, seven months pregnant, all turning out well barring a dead child. Also, in the Hindu system of medicine, quote—"Man is like a coachman driving his own carriage; if this be well made, and if he continues to drive cautiously, it will go a long time; but if he drives it upon bad roads the wheels will get injured, and the carriage will be soon worn out."

I am, &c., AN ARMY DOCTOR.

COMMUNICATIONS have been received from—

Mr. POOLE; Mr. CHATTO; Mr. W. W. WAGSTAFFE; Dr. EDGAR SHEPPARD; Mr. HAYNES WALTON; Dr. COCKLE; Mr. T. SPENCER WELLS; Dr. F. R. HOGG; Mr. NETTLESHIP; Dr. WM. SEDGWICK SAUNDERS; Dr. ALEX. B. MACDOWALL; Mr. C. S. JEAFFRESON; A RETIRED PRESIDENCY SURGEON OF BENGAL; Rev. DAVID EDWARDS; Dr. G. SCOTT; Dr. CHARLES BELL TAYLOR; Captain COGHILL; Dr. NEILD; Mr. BARRINGER; Dr. FAYRER; Mr. TEEVAN; Dr. ARMOUR; Mr. J. A. MENZIES; Mr. LEWIS; Dr. H. T. JONES; Mr. T. ALEXANDER; Z., Wisbeach; Dr. J. DUDGEON; Mr. METCALFE JOHNSON; Mr. BENSON; Mr. J. E. COOMBS; Mr. H. CRIBB; Dr. HYSLOP.

BOOKS RECEIVED—

Cooper's Surgical Dictionary, 2 vols.—On Conia and its use in Subcutaneous Injection, by J. Wilkie Burman, M.D.—The Causation of Sleep, by James Cappie, M.D.—Memorandum on the Cholera Epidemic of 1872 in Northern India, by J. L. Bryden, M.D.—The Expressions of the Emotions in Man and Animals, by Charles Darwin, M.A., F.R.S.—Catalogue of Works of Art, etc., exhibited at the opening of the New Library and Museum of the Corporation of London, November, 1872—Observations on Some Points connected with Lateral Lithotomy, by Assistant-Surgeon F. P. Staples, Army Medical Staff—Report on the Hospital for the Insane, Gladesville, New South Wales, for the year 1871—The Chemist's and Druggist's Diary for 1873—Urinary and Renal Diseases, by William Roberts, M.D.—On Relapsing or Famine Fever, by R. T. Lyons, Assistant-Surgeon Bengal Army—Account of the Fevers observed in the Advanced Depôt or General Hospital at Kasalong, of the Chittagong Column, Looshai Expeditionary Force, by R. T. Lyons, Assistant-Surgeon Bengal Medical Service—The Teeth: Notes on their Pathology, by Oakley Coles, L.D.S.R.C.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Food, Water, and Air, November—Indian Medical Gazette—Glasgow Herald—The Scotsman—Science Gossip—Monthly Microscopical Journal—Nature—Lincoln Gazette—Herts Gazette—Philadelphia Medical Times, October 19—Australian Medical Journal, July and August—Edinburgh Medical Journal, November—Practitioner—Ocean Highways, November—Bucks Advertiser and Aylesbury News—Medical Press and Circular—Pharmaceutical Journal.

APPOINTMENTS FOR THE WEEK.

November 9. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

11. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Richardson, "On the Treatment *in extremis* of Fibrinous Deposits on the Right Side of the Heart." Dr. Routh, "On certain Forms of Mental Decay, and the Treatment."

12. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Lockhart Clarke, "On Progressive Muscular Atrophy, accompanied by Muscular Rigidity and Contraction of Joints." And other Papers.

13. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Meeting.

14. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

15. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 2, 1872.

BIRTHS.

Births of Boys, 1205; Girls, 1086; Total, 2291.
Average of 10 corresponding weeks, 1862-71, 2113·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	677	629	1306
Average of the ten years 1862-71	712·8	683·9	1396·7
Average corrected to increased population	...	...	1536
Deaths of people aged 80 and upwards.	...	...	32

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	1	3	5	...	4	...	5	...	2
North ...	751668	3	...	5	...	6	...	6	3	2
Central ...	333887	...	2	...	1	3	...	1	...	—
East	638928	4	4	4	1	5	3	...	1	7
South... ...	966132	6	3	7	...	10	1	2	2	7
Total	3251804	14	12	21	2	28	4	14	6	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·507 in.
Mean temperature	49·7°
Highest point of thermometer	58·8°
Lowest point of thermometer	40·6°
Mean dew-point temperature	46·8°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·94 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 2, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Nov. 2.	Deaths Registered during the week ending Nov. 2.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·1	2291	1306	58·8	40·6	49·7	9·83	0·94	2·39
Portsmouth ...	115455	12·1	71	45	58·4	38·4	49·3	9·61	2·20	5·59
Norwich	81105	10·9	42	30	57·0	38·0	46·8	8·22	0·54	1·37
Bristol	186428	39·8	110	59	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	51	33	55·0	38·4	47·0	8·33	0·40	1·02
Birmingham ...	350164	44·7	291	156	56·2	39·2	48·2	9·00	0·61	1·55
Leicester	99143	31·0	93	41	57·0	37·7	46·6	8·11	0·77	1·96
Nottingham ...	88225	44·2	49	37	57·4	36·4	47·7	8·72	0·50	1·27
Liverpool	499897	97·9	396	249	57·2	42·0	48·3	9·05	0·71	1·80
Manchester ...	352759	78·6	277	152	57·0	40·0	47·5	8·61	0·96	2·44
Salford	127923	24·7	106	71	58·5	38·2	46·8	8·22	0·89	2·26
Oldham	84004	20·2	54	47	...	...	...	...	...	...
Bradford	151720	23·0	108	69	56·7	43·0	49·3	9·61	0·75	1·90
Leeds	266564	12·4	174	149	57·0	40·0	47·7	8·72	0·48	1·22
Sheffield	247847	10·9	253	114	55·5	40·5	47·4	8·55	0·57	1·45
Hull	124976	35·1	88	52	54·0	34·0	45·8	7·66	0·25	0·63
Sunderland ...	100665	30·4	103	50	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	137	66	55·0	38·0	45·2	7·33	0·40	1·02
Edinburgh	205146	46·3	135	101	54·0	37·7	45·6	7·55	2·60	5·08
Glasgow	489136	94·8	409	252	53·7	39·7	46·5	8·05	2·00	5·08
Dublin	310565	31·9	125	84	58·8	38·0	47·8	8·78	0·86	2·18
Total of 21 Towns in United Kingd'm	7393052	34·0	5363	3163	58·8	34·0	47·4	8·55	0·88	2·23

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·51 in. The highest was 29·91 in. on Tuesday morning, and the lowest 29·14 in. on Saturday afternoon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

Sold in Half-pound Packets.

Wholesale, MENIER, Southwark-st., & Worcester-st., Borough, S.E.

Retail by all respectable Houses.

BRITON
MEDICAL AND GENERAL LIFE ASSOCIATION.

CHIEF OFFICE—429, STRAND, LONDON.

Trustees.

General Sir J. E. DUPUIS, K.C.B. | Sir W. FERGUSSON, Bart., F.R.S. | R. PARTRIDGE, Esq., F.R.S. | W. TYLER SMITH, M.D.
Sir JAMES DUKE, Bart. | | FRANCIS WEBB, Esq. | MILLIS COVENTRY, Esq.

Actuary and Secretary—JOHN MESSENT, F.I.A., F.S.S. **Assistant-Secretary—WILLIAM BEAMAN.**

Every practical system of Life Assurance business transacted at moderate rates. The Association issues "Special Settlement Policies" under the provisions of the "Married Women's Property Act, 1870," whereby a sum of money may be secured to the Wife, or Wife and Family, of the Assured Member without the risk of such provision becoming subject to the claims of creditors.

New Premiums for the year 1871	£20,191 7 9
Total Income from Premiums, Interest, and other miscellaneous receipts	245,824 18 8

The next Valuation, with a view to the declaration of a further Bonus, will be made at the close of the present year.

Detailed Reports, Prospectuses, and every information may be obtained on application, personally, or by letter addressed to the Actuary and Secretary of the Company, at its Chief Offices, 429, Strand.

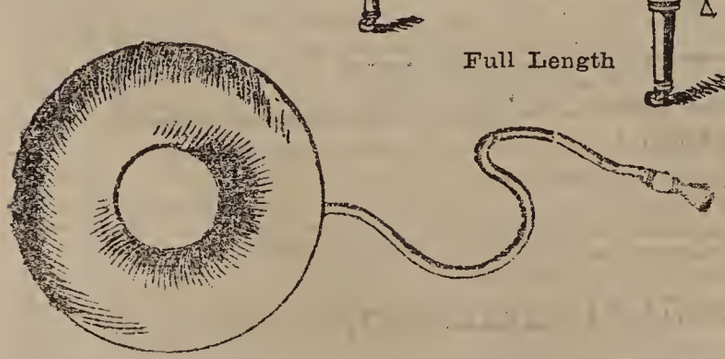
Special advantages allowed to Members of the Medical Profession upon effecting or introducing Assurances.

HOOPER'S
WATER MATTRESSES,
OR IMPROVED HYDROSTATIC BEDS, AND
WATER CUSHIONS,
FOR AN ORDINARY BEDSTEAD OR COUCH.

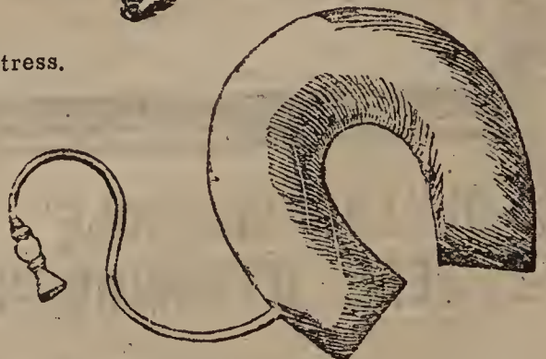
TO THE QUEEN,
ALSO
THE PRINCE AND
PRINCESS OF WALES.

Full Length Water Mattress.

USED IN
H.M. ARMY AND NAVY
AND THE
INDIAN PRESIDENCIES.



Circular Cushion, for sitting on.



Crescent Cushion, for the Sacrum.

7, PALL-MALL EAST, and at 55, GROSVENOR-ST., LONDON.

☞ *An Illustrated Price-list free by post.*

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D.,
Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

Lecture III.

(*Continued from page* 482.)

We now proceed to the consideration of that common form of disease known as acute mania. Although termed "acute," it does not begin in the rapid manner of maniacal delirium, without any, or but few and short premonitory symptoms, nor does it ordinarily run so brief a course. In very many cases, however, the initiatory symptoms are not noticed in relation to a disease about to develope itself, but they are retrospectively noticed and referred to after the disease has forced itself into unmistakable prominence. The friends of a patient can then, upon pressure and cross-examination, go back a long way, and recover circumstances and conditions, unheeded at the time, which have now acquired a very marked significance. And so it will happen, and it constantly does happen, that an attack of insanity, at first stated and believed to be of a few days', turns out to be of many weeks' duration.

There is no doubt that the history and narrative of a good typical case of any malady whatsoever is the best mode of displaying in their entirety those various phenomena which are known to present themselves with more or less prominence and exactness. Such an illustration my repertory was enabled to furnish of what is known as "acute maniacal delirium." I have another, equally at your disposal, of the derangement which is now under consideration.

I was asked one day to see a gentleman who, residing at Manchester, and being a stockbroker there, was staying with his brother for a few days in my neighbourhood. This brother had himself called upon me, and proceeding with him at once to his residence, I gathered *en route* the following history :—

A. B., married, 36 years of age; successful in business, happy in his domestic relations, a free liver, but not actually intemperate. "He has been staying with me (said the brother) at my house for about a week, with his wife, for change of air and relaxation from business. He has lately had a great deal to worry him, and his speculations have been of a larger and more hazardous kind than usual,—so much so as to alarm his friends, by whom he has always been regarded as singularly shrewd and cautious. The wife, ten days ago, not thinking him very well, sent for his local medical attendant, and he advised removal from home for a few weeks. Accordingly, he came here to visit us. He certainly is in a very strange, unnatural condition, so restless that he won't remain still even for a moment. He talks rambling, incoherent nonsense all day, and last night he was singing so loud in his bedroom from the time he entered it till six o'clock this morning that we none of us closed our eyes. During the last two days he has become mischievous: he picks the flowers and shrubs in the garden, and throws them about; he is constantly removing the furniture in the rooms from place to place; he dances about and jumps over the chairs; and at mealtimes he bolts his food ravenously and fiercely. He is getting untidy in his person, and yesterday he tied some bits of coloured worsted in his whiskers, which gave him great satisfaction. He is also obscene in his language and conduct; and last night, while we were in the drawing-room with his and my wife, and a gentleman who was visiting us, he suddenly exposed his person. I was so angry that I at once struck him and knocked him down, at which he burst out laughing. He is getting worse daily, and it is impossible we can do anything with him." This was the brother's narrative.

On arriving at the house, I saw this gentleman in the garden with his wife, his sister-in-law, and a male servant who was there for the purpose of repressing his mischievous propensities. His hilarity and his intellectual disturbance were at once manifested by his coming forward and claiming me as an old schoolmate, and calling me a "jolly good fellow." His incoherence and garrulity were extreme. He told me his opinions, his plans, his intentions, about everything and everybody. He meant to leave Manchester and come to London as the only adequate field for a man of his brains and enterprise. He should very soon make a fortune. He was going to the Crystal Palace that afternoon, to Hampton Court to-morrow, and to Brighton the next day. Indeed, he should buy a house at Brighton; a "marine villa" was indispensable. Entering the house, I now extracted from the wife her account of matters.

It was this: About six weeks ago she thought her husband appeared somewhat depressed for a few days, but she took no notice of it, for she thought the worry of an anxious business might sufficiently and satisfactorily explain it. This brief depression was succeeded by an elevation of his natural spirits, which had gone on increasing up to the present time. He became more restless, eager, and impetuous in what he did; took more wine than usual, was irregular in his hours of returning home; his habitually even temper became ruffled and more hasty; he took less notice of his children, and though not unkind or indifferent to *her*, he was less warm in the manifestation of his affections. The home ties seemed to be trivialities, and not worth attending to. All his desire was to be away from home, and he spoke of business as requiring his attention in different parts of England. At night he did not sleep, but paced his room; he spoke of wild projects—enlarging his house, erecting a billiard-room, etc. Some of his friends on the Stock Exchange now became alarmed about him, and communicated their opinion to the wife. They said he had been speculating recklessly, and without the least regard to the precautions which ordinarily regulated his business transactions. They were sure he had lost money lately, and was living beyond his means—spending and giving away indiscriminately. As a matter of kindness they came to report these things to her. She consulted her medical adviser, with the result before mentioned.

And now for the state of things which I found existing. A. B. looked wild and excited, and his eyes were clear and brilliant; he was exceedingly talkative and incoherent, rambling from one subject to another, and he was evidently rife for any fun or mischief. His person was untidy: his necktie was all on one side, his hat and clothes were unbrushed, he had not shaved for several days; he kept spitting as he talked; he would not be still for a moment; his breath was foul, his tongue and his teeth were alike coated. I told him I was a doctor, that his friends thought he was not very well, and had asked me to see him. He laughed at this idea, said he wanted no humbugging doctors, and that he was going to London by the next train.

Now, I saw at once that this gentleman was becoming very unmanageable, and he would be likely to get violent if all his wishes were not complied with. He had been ill, remember, for close upon two months, and now he was taxing his friends far beyond their capacities to meet his wants, for he was not to be trusted alone for a single moment. So, pointing out to them the nature of his malady, and the certainty that matters would now rapidly get worse, I obtained their ready consent that he should be placed in a private asylum, where I am in the habit of sending patients who are not to be managed at home. I returned to my residence, filled up in the usual mode one of the blank forms of admission to this private asylum, telegraphed to the resident medical officer to send a carriage and two attendants at four o'clock to the house where I had visited this gentleman, instructed his friends to send for a local practitioner to see him at once and fill up the second certificate on the admission-paper, and so placed all things *en train* for protection and security. At four o'clock precisely he was sent for, and removed under misrepresentation as to his destiny. It is quite lawful, and it is a very venial offence under such circumstances, to tell your patient that you are going to Covent-garden Theatre, or the Bank of England for some money, or to any more inviting place than a lunatic asylum. Now, the course which the disease ran in this case was as follows:—On the very night of his removal he became violent, noisy, and destructive, tearing his bedding and hammering at the door of his chamber,—so much so that it became necessary to give him strong quilted rugs in lieu of sheets and blankets, and place him in a padded room. Subsequently he became dirty in his habits, urinating on the floor, smearing himself with his own fæces. This is a very common as well as a filthy practice, sad to reflect upon as indicating the depth to which the cleanly and refined may be lowered by the devastation of disease. For the "dignity of human nature" is temporarily substituted its nastiness and degradation. After several weeks this gentleman improved, and seemed to be on the highway to complete recovery; but he had a relapse, and became as bad as ever, and this occurred three times before the convalescence pushed itself into a less unstable condition, and resulted in complete restoration to health and liberty at the expiration of seven months.

The promising features about this instructive typical case were—that there was no hereditary taint of insanity, that the

cause was clearly excessive mental strain in business, and that the delusions, though marked, were neither uniform in character nor persistent. The delusions which give an unfavourable aspect to a case are of a different kind: they are immovable and fixed, relating to the same point and subject—they indicate an undoubted lesion of one or more of the ideational centres. The younger your patient, other things being equal, the better your chance of pulling him through; and you will be guided in your prognosis by the circumstance of the attack being primary or otherwise.

After a delusional persistence of twelve or fifteen months, you may begin to think unpromisingly of the case. The maniacal storm has so impaired the intelligence as to make it pretty certain that it can never resume its sway. Henceforth the intellectual life is negative—fitful and uncertain, perhaps, but altogether negative. I have seen a case recover after seven years, but such cases are rare and exceptional; ordinarily, after two years they run into that condition which embraces such a large class of our asylum inmates—chronic mania, with alternating periods of excitement or depression; or the depression may be the leading feature, and confirmed melancholic dulness the result; or acute mania may lapse without intermediate stages into confirmed consecutive dementia. Death, you will say truly, is far preferable to this sad state of things; and indeed it is.

It is better, I take it, after giving you a description of a good typical case, to point out at once the most desirable treatment. In that which I have just narrated the first thing was to obtain sleep. As a rule, it is very desirable to get the bowels thoroughly cleansed by castor oil, or a black draught, or calomel and colocynth pills. When there is great and abnormal heat of skin, with intense excitement, you may (especially in warm weather) resort to a wet sheet; patients sometimes enjoy it greatly. You may also use a warm bath at bedtime, pouring cold water on the head at the same time. I have long ceased to give opium at night; digitalis where the pulse is quick and bounding, or under the opposite conditions chloral, are far preferable. I have told you before of the power of this latter drug as a hypnotic, and its freedom from unpleasant sequences. It does not produce, as opium so often does, dry and parched tongue, with headache and constipated bowels, and occasional nausea. If it leaves behind it on the following day (as it sometimes does) a sense of drowsiness, you must not repeat the dose till bedtime again, and even not then unless wakefulness and restlessness have reasserted themselves. Certainly, when chloral first came out I had several cases in which, having given large doses (from forty-five to sixty grains), I induced symptoms which greatly alarmed me, and nearly proved fatal. As I said before, when your patient has a quick and bounding pulse, you will find two drachms of tincture of digitalis more serviceable than chloral. It is not so certain in its action, and in the general run of cases it requires repetition. But, remember that some persons are very intolerant of this drug, and are easily nauseated by it. I do not regard the bromide of potassium as a hypnotic in single doses. It is more suited to the excitement of chronic and epileptic mania, and must be persevered with three times daily to produce a real effect. In tartarised antimony—an old remedy once much in vogue—I have no faith, nor in prussic acid, nor in Indian hemp; but the latter drug, in combination with chloral, is sometimes efficacious. With these remedies at night, you must induce your patients to take some light and nourishing food. A little brandy and sago, or beef-tea with arrowroot and eggs beaten into it—these are much-to-be-desired adjuvants. An empty stomach invites sleeplessness as much as an overcrowded one invites the nightmare. Eschew the two extremes: the happy medium is the thing required. Frequently there is a great disposition to tear the bedding and strip off every article of clothing, tying it up in fantastic knots. Under such conditions you must fasten a strong canvas shirt on to your patient by a lock and strap at the back of the neck. There are objections to this, for I have seen a patient half-strangle himself in his efforts to pull the shirt over his head. In cold weather, when there is this determined stripping and destructive propensity, you may often advantageously keep the patient all night in a strong canvas suit which laces up behind. In the summer time it does not so much matter; for which of us is not at times during the summer nights in a state of nudity from choice? Strong rugs must take the place of ordinary clothing, which is sure to be torn up as so much paper. From observations made with the thermometer, there is reason to think that very commonly under maniacal excitement this tendency to denudation arises from a dermal hyperæsthesia, which renders the surface of the body intolerant of clothing. Patients have informed me after their recovery of the satisfaction which they felt and remembered in having got rid of every article which encumbered them and interfered with their complete freedom. But you must lay aside the lessons which are to be learned from such facts. It will be your duty, in conformity with public opinion, which is always so just and temperate, to act in disregard of these experiences. It is not prudent to defy her, for, whether right or wrong, she has a majority at her back, and will beat you. In continuation of the subject of treatment, let me add that the bowels must be kept regular; the supply of food must be abundant and nourishing, for there is great waste of tissue going on during these periods of excitement. It is instructive to notice how often in chronic cases the weight of the body rises and falls with the measure of excitement. The more passive the condition, the greater the obesity. Exercise must be regularly attended to; much superfluous energy may be got rid of by judicious athleticism. Cold bathing—shower-baths in the summer—an occasional pack under exceptional excitement—are health-giving and restorative. The Turkish bath is not adapted to cases of mania as to those of melancholia. Sudorification is sometimes very difficult of attainment, and the hot chamber irritates without opening the pores of the skin. Besides, there is the risk of a patient injuring himself, becoming violent, and getting in contact with the hot surroundings. A vapour bath would be much better for mania than a hot-air bath.

These are the means by which we endeavour to combat acute mania, and look expectantly for recovery. It is pleasant beyond all description to hail the dawn of a long occulted reason, to welcome back the first silver streaks of returning day. It is encouraging to see the afflicted resume their interest in the things about them, inquire after friends, occupy themselves rationally, desire to make themselves generally useful, express a wonder as to what has been going on about them, and a suspicion that their fancies were *but* fancies, for the absurdity of which they are unable to account. The best evidence of improvement is when, having had delusions, your patient now admits that they *were* delusions; or, having been beset by hallucinations, he now hears no more voices and sees no more figures by his bedside at night. All the functions of body and mind are now healthfully progressing. At this period the Turkish bath will be of great service, and rapidly expedite the cure.

I propose now to speak to you of a certain class of persons to be met with, both in public and private practice, who, without presenting any acute symptoms either of exaltation or depression, may be fitly termed maniacal. We are consulted about them by their friends for strangeness of ideas and conduct. They have delusions, about which they talk pretty freely; and sometimes these delusions are of a kind which may lead them into trouble if some restraint is not put upon their actions. This state of things may have been gradually coming on for a considerable period. Sleep now becomes impaired, appetite fails, regularity of habits is interrupted. Change of air and scene, withdrawal from every exciting cause of disturbance, in the companionship of a judicious friend, with general attention to health, a few Turkish baths, and a few doses of chloral at night, will generally in a few weeks restore these cases. We term these patients, I repeat, maniacal; their intelligential centres are disturbed, their affective disposition being for the most part unimpaired. It is often necessary, especially among the lower classes, to move those who are thus deranged to an asylum. They do not like this; they resent it, threaten legal proceedings, and are disposed to give a good deal of trouble. But they often recover quickly after this imposed retirement of a few weeks' duration. In some cases there is a premonition which amounts almost to a brief stage of dementia. I have frequently admitted patients, commonly young men, who have appeared for a few days to be completely vacant—dazed, as it were, by the light of the "garish day,"—stunned, it may be, by the noise and bustle and everlasting spin of this fast six-mile-cannon age. In a few days they wake up from their temporary torpor; they may then have delusions; wonder why they are detained, and where they are, and manifest great impatience for their discharge. These cases commonly do well, and are by no means of long duration. Their appearance, at first, would not lead you to suppose they would so soon recover.

Not unfrequently there is one fixed idea in the mind, founded upon a false impression. This is what authors have termed "monomania." As a rule, what is designated monomania is not so, strictly and philologically. It is doubtful, indeed, whether there is *ever only one point* upon which the

mind is unsound. For instance, a man may tell you he is Jesus Christ; and this is the subject upon which he harps, it being ever uppermost in his thoughts. But on pressure you will generally find there is something else in the background. Be this as it may, however, it is hardly correct to say that the man is only mad upon one point, and sane upon all others. Dr. Maudsley has well alluded to this matter—"In vain do men pretend that the mind of the monomaniac is sound, apart from his delusion; not only is the diseased idea a part of the mind, and the mind, therefore, no more sound than the body is sound when a man has a serious disease of some vital organ, but the exquisitely delicate and complex mechanism of mental action is radically deranged; the morbid idea could not else have been engendered and persist. The mind is not unsound upon one point, but an unsound mind expresses itself in a particular morbid action. Moreover, when the delusion is once produced, there is no power of drawing a sanitary cordon round it, and thus, by putting it in quarantine, as it were, preserving all other mental processes from infection; on the contrary, the morbid centre reacts injuriously on the neighbouring centres, and there is no guarantee that at any moment the most desperate consequences may not ensue."

When patients whose derangement commences in this gradual way do not improve after some months of care and treatment, the prognosis concerning them is unfavourable. Their delusions become more marked; they get more eccentric in their ways and general bearing, and nosologically attach themselves to that large class of chronic lunatics with whom our asylums are so thickly peopled, and who evidence moral as well as intellectual insanity. Less sensible of the requirements of order and decorum and the general proprieties of life, they do strange things, and wonder that the term strangeness is used by anyone to designate their proceedings. A real idea of their conduct and character is perhaps best expressed by the word *bizarreries*. Their dress is peculiar: gay and ill-assorted colours usurp the place of that sombreness of garb which previously satisfied them; in the matter of hats and the decorations thereof they are singularly ingenious and amusing. These antics and fantastic arrangements of the external man are but the measure of inner oddities and entanglements which go to make up the objective and subjective madman. Much that these subjects do they can well avoid doing if they make the effort; but, like others, who have only temptations to do wrong, and no particular aspiration to do right, they find it hard to keep the driving-wheel of their moral locomotive on the rail—they get jolted, or rather they jolt themselves, off it; and they rather enjoy the disturbance and embarrassment which the jolting process entails upon others. These anomalous creatures must be kept under moral control; you must not let them see that you regard them in any sense as irresponsible agents. You must of course make allowances for them; but you must give them no encouragement, or they will be sly enough and clever enough to take advantage of it, and give you an infinity of unnecessary trouble.

It is of great importance in the management of this large class of (as, indeed, of all) lunatics to discover their individualities of character, their weaknesses, their strength, their proclivities. More than half the secret of success in the superintendentship of an asylum lies in the possession of this faculty, and in the due exercise and application of it. If you attempt to talk to one lunatic as you might to another you will find yourself in difficulties. To all you must be kind; but your kindness in many cases must be blended with a cautiousness and a firmness which will make manifest to the patient that you are not to be imposed upon or trifled with. Others do not need this: they live in an atmosphere of subdued gentleness, being of gentle natures, and you must treat them accordingly. Many of the confirmed chronic lunatics in our asylums are constantly fretting for removal to another, where they hope to better themselves by a greater defiance of authority, and by the exhibition of greater tact towards their superiors than they are conscious of having displayed in their present abode. They want to try their cunning upon a new superintendent. I am very careful in my dealings with these gentlemen. I have had patients brought to Colney Hatch who have been grievously disappointed after a few days' residence to find that they have not bettered themselves—that they have got out of the frying-pan into the fire.

When once insanity—be it mania, or melancholia, or acute dementia—assumes a fairly recurrent type, it is almost invariably hopeless, and I believe those authors are correct who state that speedy recoveries (so termed) are very frequently of a temporary and evanescent character; in other words, a person suffering under a primary attack of acute mania or melancholia is more likely to *remain* well if he is some little time in shaking off the enemy than if he succeeds in doing so (or perhaps it would be more correct to say, if it is thought he has succeeded in doing so) with greater rapidity. I have evidence of the truth of this, which seems to be at variance with the law obtaining in other diseases.

The intervals between maniacal and melancholic attacks may vary in duration from months to years, but when once fairly established the periodicity remains pretty well defined. Those who have the longer healthy intervals resume their places in the outside world after each attack; but I doubt if the eye of an acute and experienced alienist physician would not at all times, if thrown much upon them, detect some abnormality of thought or action which would suggest to him an uneasy and insane temperament. The pathology of this continuous but unevenly sustained disease is very interesting to consider; the symptoms, I take it, being conditioned by a local hyperæmia of varying intensity and duration, the causes of which it yet remains to discover.

To that variety of derangement where melancholia alternates with mania, the French have given the name "*folie circulaire*" or "*à double forme.*" As an illustration of the established periodicity of maniacal excitement, I may mention that I have a patient who regularly every seven weeks becomes talkative, noisy, destructive, and occasionally dangerous. The attack lasts for about a week, and is always ushered in by a foul tongue and constipated bowels. The fellow knows as well as possible what is going to happen (for he is fortified by an experience of eight years), and he asks for opening medicine and insists upon going into seclusion. For a couple of nights he will chatter incessantly; on the third or fourth day he will bury himself under the bed-clothes and speak to no one, though he may be seen shaking with a suppressed laugh or hysterical cry. At the end of eight days he is himself, and he returns to his occupation on the farm grounds of the Asylum, where his work is equal to that of any paid labourer.

Dr. Sankey thinks that in many cases of secondary insanity the morbid processes which involved the first attack have never totally ceased. Smouldering, but undetected, they have really remained, so that the secondary attack is not a fresh pathological condition but simply a renewal of the first.

About 40 per cent. of the occurring cases in England and Wales are said to be secondary—that is, other than primary; but my own statistics (confessedly unreliable) at Colney Hatch do not give more than 20 per cent. These cases of recurrent insanity are frequently associated with impulsive acts of great violence, such as window-breaking, destruction of clothes and bedding, aggressive attacks upon others and upon self. They constitute a large portion of our insane population, and invite great care and vigilance.

ORIGINAL COMMUNICATIONS.

A SHORT HISTORY OF THE

INTRODUCTION OF YELLOW FEVER INTO THE PORT OF MONTE VIDEO IN 1857,

AND OF ITS REAPPEARANCE IN 1872;

ALSO A FEW REMARKS REFUTING THE OPINIONS THAT THE FEVER IS LIMITED TO TEMPERATURES AND THE SEA COAST.

By J. H. SCRIVENER, M.D.

(*Continued from page* 513.)

We cannot explain the producing cause of yellow fever, for it eludes our powers of conception. Some authors believe that it is a chemical compound capable of combination in different degrees with other kindred elements; others that it is matter in a fluid elastic form floating in the atmosphere; and others, again, that it is the product of a temporary local derangement in the bowels of the earth, subversive of the conditions for the formation of a healthy atmosphere. On these topics I shall make no suggestions, but repeat what Dr. Williamson has said of cholera, which is equally applicable to yellow fever:—"We must humbly confess that, with all our scientific knowledge, we are unable to grapple at times successfully with those laws which may be specially called into existence by the Creator for some specific end. That hitherto mysterious agent of His power, the cholera, has seemingly contributed to baffle the might of the subtlest mind to unfold its true nature or explain its cause; and still, from

what we know of the laws which regulate organised life—in fact, of everything which proceeds from the hands of the Almighty—we may rest assured of this, that with the simplest (and to our minds often insignificant) means He invariably effects great and astonishing results. What, for instance, more marvellous to be told, as we know for certainty, that the entire animal and vegetable kingdom has all its mighty superstructure and varied form reared upon the basement of a simple cell? We may therefore reasonably enough be permitted to indulge the hope that the day may not be distant when the discovery of some simple and plain operation of nature may shed a ray of light upon much that has been hitherto veiled in obscurity, so as to enable us satisfactorily to solve difficulties and intelligently to explain the laws which regulate diseases, with the view of for the future preventing them."

It has been observed that yellow fever presents itself as an epidemic under certain conditions of the atmosphere, and we may presume that such is a fact, for it appears apparent in the thermometrical and barometrical observations made during the prevalence of the disease. Still, it is mysterious that this fever should have appeared in one part of a town whilst the other parts of the town were free from it, as was remarked in Monte Video and Buenos Ayres in 1857-58; then, again, that it should have gradually advanced from the coast of the Pacific to the mountains of the Andes; that it should have visited a variety of climates of different temperatures, and should have been perhaps equally fatal in all of them. We may reasonably suppose, in view of these facts, that amid this diversity of climate and temperature there must have been some localities where those inexplicable conditions in the atmosphere to which we have referred did not exist to account for its presence, and which appears to have been the case in the recent epidemic in Monte Video.

Epidemic influence, whatever may be its nature, often commences unexpectedly, and does not advance in direct line; we have watched the course of yellow fever and cholera in widely distinct countries, and have observed that they would sometimes follow a direct, sometimes a winding course, sometimes remain stationary at a town or village and carry off thousands of victims; that they would occasionally be arrested in their progress by causes unknown to us, and then march onwards with rapid stages; that they would pervade a country extensively, pass by or over particular spots, and then return to them as if they had been forgotten. This was the case with cholera in the province of Buenos Ayres in 1867, and in those of Peru during the prevalence of yellow fever in 1854-56.

It is asserted by some writers on epidemics that a certain temperature is required for the development of yellow fever and the disappearance of that disease. But we cannot coincide with this opinion; on the contrary, we shall endeavour to prove the inaccuracy of this assertion. We learn from Dr. La Roche's work on "Yellow Fever" (page 592), that a temperature of 60° Fahr. is required for the development of that fever, and that it never prevails as an epidemic when the temperature of the summer falls below 63°; and naval medical authorities state that the crews of her Majesty's ships on the West Indian and North American coasts were cured, and the spread of the disease checked, by the removal of the vessels to a temperature of 60° Fahr.

On referring to the medical reports on yellow fever in the highlands of Peru we find very different statements to those we have quoted. We learn from Dr. Tejada, who was sent by the Peruvian Government to report on yellow fever as it appeared in Cuzco, that he, as well as other physicians, found that the temperature of that city in summer rarely, if ever, reached 65° Fahr. in the shade; and we may observe that it was there that the fever made more victims in proportion to the population than in any other town on the coast—for, according to official reports, one-half of the population, consisting of 40,000 inhabitants, was carried off by the disease.

In a report of the Cuzco epidemic by Dr. Tejada, addressed to Dr. Garviso, and published in the *Resena Historica* on July 12, 1855, we find the following statement:—"There is no doubt whatever that the epidemic which reigned in Cuzco and different parts in that department was accompanied with the same series of symptoms which characterises the true yellow fever, as I have officially informed the Prefectural authorities in my note of October 6, 1855."

This was also the opinion of physicians in all the highland towns, and we learn from those in the mining town of the Cerro of Pasco that the epidemic still retained much of its essential character during the dry months of July, August, and September, with a mean temperature of 44° Fahr. by day. This town contained about 18,000 inhabitants at the outbreak of the fever, which overran all the neighbouring districts chiefly inhabited by the poorer classes. The Rev. Don M. Savia gives us a very melancholy account of the ravages caused by the yellow fever: he states that in the parish of Chacayan in the department of Junin there is a village called Atapilca whose population consisted of 100 families of about five to six individuals in each of them, who lived in crowded, dark, and miserable huts, so that during the fever they were reduced to the necessity of breathing the foul air of their own bodies. Of all these wretched inmates not more than thirty survived the ravages of the fever. The reverend gentleman also states that out of 5000 parishioners whom he confessed he buried 1300.

The districts in the province of Junin are excessively cold; notwithstanding we learn that the yellow fever carried off thousands of the young and able-bodied of both sexes.

It has been asserted that yellow fever never makes its appearance at a distance from the coast, nor in the mountains. Dr. Charles Belot, in his work "La Fievre Jaune à la Havane," published in 1865, says, in page 71—"Une distinction importante à etablir entre la fièvre jaune et la rémittente bilieuse est celle-ci: la fièvre jaune existe au bord de la mer, dans les terrains marécageux.—elle ne trouve jamais au sommet des montagnes, ni dans l'interieur des terres ou des lieux éloignés des plages; la fièvre bilieuse rémittente se présente, au contraire, partout avec la même force. La fièvre jaune à une veritable prédilection pour une certaine époque de l'année, la saison des grandes chaleurs. La fièvre bilieuse rémittente n'a pas de saison speciale; elle parait au moment où l'on s'y attend le moins, complique la marche des maladies et constitue la période typhoide de ces affections."

We have heard that the physicians of New Orleans entertain the same opinion that yellow fever is never seen except on the coast and in low marshy localities; and we have seen no works on that disease, with the exception of the reports of the physicians in Peru, which express a different opinion to that statement.

To refute the statements in question it is sufficient to name the heights of two of the towns of Peru where yellow fever has extensively prevailed. Cuzco is situated at an elevation of 11,000 feet above the Pacific, according to Don. M. E. De Rivero, and in lat. 13° 30′ S. It is a Transandine country, where the summer temperature in the shade is stated to be 12° or 13° of Réaumur, and the winter temperature from 7° to 8° of the same. The Cerro of Pasco is a high mining town, and capital of the rich department of Junin. It is situated, according to Dr. Smith, under the ridge of the eastern Cordillera, at an elevation of 14,000 feet above the Pacific, in lat. 10° 30′ S. We have already stated its temperature.

The peculiarities of these regions in respect to the epidemic have been stated by Dr. Smith in his paper on the yellow fever of the Peruvian Andes. He says that "the seasons on coast and mountains are antagonists; and when the weather is thick and vapoury on the seaboard, it is bright and sunny on the Andes; that the difference of temperature in the sun and shade on the jagged and glacial ridges of the Cordillera is very remarkable, for, according as a person happens to be placed in the one or the other of these positions, he is subjected to scorching heat or chilling cold." We have observed these facts in Potosi and in other Andine towns at elevations of 13,000 feet above the Pacific, where a person will experience the four seasons of the year on the same day all the year round, because the early morn is excessively cold, the forenoon is mild and agreeable, between the hours of two and four the sun is scorching hot, and the night, like the morning, is excessively cold. The natives in these regions consider their climate as a perpetual winter, which they divide into two seasons—the wet and the dry. The sky is pure azure, and the atmosphere bright and clear. The solar heat preponderates in these elevated heights, which seldom bear the wintry aspect of the European Alps, because the snow that falls in the afternoon or night is dissolved on the following morning. The distance from one degree of temperature to another, as Dr. Smith observes, is not ruled by geographical lines, but by elevation; for, from the valley beneath, glowing in tropical vegetation, to the Indian village on the cold pastoral heights that immediately overlook the waving cornfields, or banana and orange groves, is but a bird's flight of a few moments.

We learn that these rapid transitions in the Andine climates produced modifications more or less sthenic or asthenic in the epidemic as it marched onwards from one village, town, or valley to another; but whatever characteristic symptom of the primary generic cause, as manifested at the outbreak of the disease, was lost or counteracted by circumstances in the colder, seems to have been again recovered in the warmer

climate; and that upon the whole its vitality was never exhausted at any season.

We think that we have established from the facts mentioned in this paper that yellow fever does not require a certain temperature for its development and disappearance, nor those dependent on certain atmospherical conditions; that in Peru it is not only to be met with on the sea-shore, but is found to have caused equal ravages in climates of different temperatures—in mountains as well as in level districts; that no barrier has hitherto stopped its course, no human efforts arrested its progress, from the shores of the Pacific to the mountains of the Andes.

The following meteorological observations were made by Dr. Brunel during the three months' epidemic of yellow fever in Monte Video, in 1857:—

March, 1857.

Days.	Thermometer. Degs. C.	Barometer.	Winds.	Weather.
1	24	0·760	N.	Fine.
2	24	·760	S.	Fine.
3	26	·760	N.E.	Fine.
4	27	·760	N.W.	Fine.
5	29	·759	N.	Fine.
6	26	·758	N.W.S.	Fine.
7	22·50	·763	S.E.	Cloudy.
8	20	·758	N.	Cloudy.
9	24	·763	S.W.	Fine.
10	24	·767	N.W.	Fine.
11	27	·769	E.	Fine.
12	25	·767	E.S.E.	Rainy.
13	26	·760	E.	Cloudy.
14	25	·759	S.W.	Fine.
15	21	·767	S.S.E.	Fine.
16	23	·765	N.E.	Cloudy.
17	24·50	·763	N.E.	Cloudy.
18	24	·763	N.E.	Cloudy.
19	23·50	·759	W.	Fine.
20	22	·760	S.E.	Rainy.
21	21	·769	E.S.E.	Fine.
22	22·50	·769	E.	Fine.
23	24	·767	N.E.	Cloudy.
24	25	·763	N.E.	Fine.
25	25·50	·761	E.S.E.	Very fine.
26	21	·769	S.	Fine.
27	21	·761	E.S.E.	Fine.
28	24	·763	N.W.	Fine.
29	25	·762	N.W.	Fine.
30	30	·760	S.S.W.	Fine.
31	26	·763	N.N.W.	Fine.

April, 1857.

Days.	Thermometer. Degs. C.	Barometer.	Winds.	Weather.
1	24	0·760	S.S.E.	Rainy.
2	16	·769	S.S.E.	Fine.
3	15·50	·771	S.S.E.	Fine, cloudy.
4	17	·768	S.S.E.	Fine.
5	21	·766	S.S.E.	Fine.
6	19	·766	S.E.	Fine.
7	21·50	·765	E.S.E.	Cloudy.
8	20	·769	E.	Fine.
9	21	·768	S.E.	Fine.
10	24	·768	S.E.	Cloudy.
11	24	·768	E.N.E.	Cloudy.
12	21·50	·770	N.	Cloudy.
13	24	·770	N.N.E.	Fine.
14	24	·771	N.E.	Fine.
15	25·50	·771	N.N.E.	Fine.
16	23	·772	N.N.E.	Fine.
17	25	·770	N.N.E.	Fine.
18	31	·764	N.	Fine.
19	23	·765	N.	Fine.
20	28	·765	N.N.W.	Fine.
21	24	·761	S.	Fine.
22	13	·760	W.	Fine.
23	12	·767	S.S.W.	Fine.
24	16	·769	W.N.W.	Fine.
25	16	·766	W.	Fine.
26	15	·764	S.W.	Fine.
27	15·50	·766	N.N.E.	Fine.
28	16	·767	E.	Fine.
29	20·50	·768	N.	Fine.
30	19	·766	N.	Fine.

May, 1857.

Days.	Thermometer. Deg. C.	Barometer.	Winds.	Weather.
1	22	0·750	E.	Cloudy.
2	17·50	·752	S.E.	Cloudy.
3	14	·757	S.	Rainy.
4	13·50	·763	S.W.	Cloudy.
5	13	·763	S.W.	Cloudy, rain.
6	14	·769	W.	Cloudy, rain.
7	12	·767	W.N.W.	Cloudy.
8	11	·769	W.N.W.	Cloudy.
9	12	·766	S.W.	Cloudy.
10	14	·767	N.W.	Fine.
11	13·50	·767	N.W.	Fine.
12	15	·760	N.W.	Fine.
13	21	·763	N.N.W.	Fine.
14	15	·760	N.W.	Fine.
15	20	·765	W.N.W.	Cloudy.
16	15	·760	N.W.	Fine.
17	21	·760	W.N.W.	Fine.
18	24	·759	N.W.	Rainy.
19	24	·760	W.N.W.	Fine.
20	27	·763	N.	Rainy.
21	26	·763	W.N.W.	Fine.
22	23	·764	N.W.	Cloudy, rain.
23	20	·764	N.W.	Cloudy.
24	17	·761	N.W.	Cloudy.
25	19	·762	N.W.	Cloudy, rain.
26	15	·756	W.N.W.	Cloudy.
27	12	·759	W.	Cloudy.
28	14	·765	W.S.W.	Cloudy, rain.
29	16	·761	N.W.	Fine.
30	16	·762	N.W.	Fine.
31	15·50	·763	N.W.	Fine.

EMPLOYMENT OF WOMEN IN WHITE-LEAD MANUFACTORIES.

By BEVAN LEWIS, L.R.C.P. Lond., M.R.C.S., etc.

In these days of sanitary reform, when the exertions of an active Legislature are well directed towards the eradication of all sources of contagious, epidemic, and preventable disease, it becomes the duty of every enlightened physician to denounce all employments which tend to undermine the mental or corporeal vigour of the rising generation, and at the same time firmly to insist upon the absolute necessity of adopting every expedient for lessening the mischief so incurred. It is unquestionably our distinct duty and our distinguished privilege to expose every defect in the sanitary regulations of manufacturing establishments, as also of towns and villages, where the mutual welfare of the population *en masse* depends upon the strictest enforcement of hygienic principles; equally important is the hygiene of domestic life where the individual is more closely concerned. By strenuously opposing the introduction of certain customs antagonistic to the health and well-being of those concerned, and by placing the veto of professional disapproval on such injudicious pursuits, the physician deals with questions of vast political import, and, with the co-operation of his professional brethren, aids in the advancement of State Medicine to a nobler and firmer basis. It is by strict enforcement of the hygienic principles of domestic life, and the legislative prohibition of all those practices now so flagrant and so pregnant with the germs of disease and death—it is thus alone that the *summum bonum* of a wisely-directed legislation can be obtained—viz., the health and well-being of the nation.

Influenced by such considerations, I have been induced to call the attention of your readers to the pernicious practice of employing young females in the establishments for the manufacture of white-lead.

Lead poisoning has nowadays become so prevalent an affection, that no one would deny the necessity of observing the strictest precautions amongst those habitually exposed to its action. There really were some mitigating circumstances in the cases of lead poisoning amongst the cider-loving inhabitants of Devonshire, and those who were so partial to the *vin gâtée* of Poictou; the deceptive draught afforded at least a temporary satisfaction, and where "ignorance is bliss," etc.; yet it really seems atrocious that strong, healthy young girls, heedless of the danger and ignorant of the consequences of thus infringing Nature's laws, should be allowed

to continue the course with so little protection against the effects of the poison. In alluding to the condition of our female workers, I do not intend touching upon the well-known symptoms of colica pictonum or the subsequent paralysis which may occur, but more especially would I point out the fact that the girls chiefly employed enter upon these duties at an early age—frequently at 12 to 15. The result is, that long before they get the colic, the normal functions of the body become greatly deranged; the powerful astringent action of the lead in most cases entirely prevents the appearance of the menstrual discharges, in all cases greatly retards their advent, and in older subjects, where these conditions have been previously established, suppressio mensium and all its attendant evils occur. So extreme is the anæmia-chlorosis, and so rapidly does it supervene, that I feel bound to assert that the amenorrhœal state is not the only factor in producing the impoverished blood. Independent of the anæmic condition due to the arrest of ovarian and uterine functions, I believe there is simultaneously a progressive leucocythæmia from a specific action of lead upon the spleen and other organs of sanguification. My belief is further upheld by the fact that the men, equally with the girls, acquire the waxy, deathlike cast of countenance so characteristic of arrest in the development of red blood-corpuscles and the rapid production of the colourless elements. The girls and men here employed are familiarly dubbed the "white-lead ghosts." Great ignorance upon the subject prevails amongst the workers; I was actually told by a young girl a few days back, who was looking on a case of lead colic quite enviously, that she wished she could get it herself! On questioning her, I found that she laboured under the strange delusion that, like measles and scarlatina, the first attack usually shields one from a repetition.

The white bloodless gum shows, along its edge, the blue line terribly vivid from the contrast; in no cases have I observed it so remarkably striking as in these poor anæmic girls. A blue mottling or staining of the nails I have occasionally observed, and in all the power of the flexors as well as extensors of the forearm is greatly diminished. The deposit of lead around the teeth interferes greatly with their nutrition, so that our patients are great martyrs to caries and odontalgia in their worst forms. The hysterical state is, as might be supposed, extremely frequent, and its paroxyms are particularly violent. Chorea and epileptiform convulsions are alarmingly prevalent; and, as I write the above, I hear of the fatal termination of a case, which, commencing with the usual evidences of depraved blood, passed on into severe epileptiform convulsions, for some days coexistent with the most obstinate colic. It is usually affirmed that the poison will first cause the colic, and, if still persisted in, will become deposited in the muscles, afterwards affect the nerves, and, last of all, disturb the nervous centres; but in these unfortunate girls the order is not so observed, for the deranged menstrual functions, together with the morbid condition of the blood, bring on at a very early period the most severe forms of cerebral irritation. Those who have witnessed the agonies of a violent case of lead colic, combined with the tortures of hysteria and chorea, and remembering that recovery means in these subjects a protracted convalescence of months, and often of years, will surely regard the advantages of employing females in this capacity as bought with a terrible price.

Are the means adopted for preventing these evils adequate to the purpose? This is a question of great import. A review of the means by which the poison enters the system, and of the means adopted for preventing this occurrence, will afford your readers opportunity of forming their independent opinions on the subject. In the white-lead works to which I more particularly refer a number of females are employed, whose duties consist in loading and unloading the stacks, with the vessels containing the lead and acetic acid. Each layer of pots is covered by a stratum of tan, and, the fumes of the acid passing up through the perforated metallic plates, decompose it into the white carbonate. It is on turning out the contents of these pots that the peculiar noxious effects of the poison manifest themselves. The process of unloading these stacks occupies often three weeks, and during the whole of this period the work is done by the girls, who are occupied for nine hours a day. It is but a judicious policy to change the females so employed, and let them take these duties in turns. Such was the case, until recently, here; now, unfortunately, a change in the under-manager has placed the workers under the direct control of one who denounces the idea of lead poisoning as absurd, and compels his victims to submit to such ignorant supervision, with no change in their occupation for weeks and months at a time. The consequence is, that they are constantly inhaling an atmosphere of the poison, the skin receives a perfect coating of the powder, and a large quantity is deposited on the mucous membranes of the tongue, mouth, and nostrils. The heat of the apartment causes free diaphoresis, rendering the skin in a most favourable state for diluting and absorbing the lead, whilst the thirst occasioned is alleviated by huge draughts of water, thereby washing into the stomach all the deposit in the mouth. Thus the whole extent of the pulmonary, gastro-intestinal mucous membranes, and surface of the skin is exposed to its influence. Many are sufficiently careless and uncleanly as to take their meals with unwashed hands. It is sufficiently obvious that no conditions could be more favourable for the reception of lead into their system; and such being the case, what measures are adopted for counteracting these effects?

In some instances the managers of these establishments provide the workmen with respirators which effectually preserve them from inhaling the minute particles floating in the atmosphere; but in most cases these respirators are thrown aside and neglected, and in some works they have never been adopted. The workers are always directed to wash their hands before meals, and in the works here a bell is rung five minutes before meal-time for this purpose. I am, however, aware that even this simple expedient is neglected by many workmen. The only other precaution observed, and one upon which I believe the managers chiefly rely, is the employment of sulphuric acid as a drink amongst the workpeople. A Winchester bottle is kept constantly filled at these works with a mixture of sulphuric acid and treacle. It is recommended that this be taken frequently by the people in the course of the week, so that the poison absorbed may be rendered inert by conversion into the insoluble sulphate. The beneficial action of this drink can be well attested to. It is a sad confession to make, but nevertheless true, that only a minority of the men and scarcely any of the females will take it regularly. Thus, it will be seen that even the few precautions taken are almost wholly neglected, and we are again taught the old lesson that, as in the opposition with which vaccination and other good measures met, so in nearly all species of sanitary reform the subjects whom we would benefit are the chief obstacles in our way. We require compulsory measures to be adopted, rendering a non-adherence to these sanitary rules incompatible with the employment of these workmen on the premises, and above all things their supervision by an intelligent under-manager, who shall direct them under hygienic principles, and change their occupation when requisite for their welfare.

Burry Port.

ON THE VALUE OF A PURELY MILK DIET

IN SOME FORMS OF

DROPSY AND GENERAL ANASARCA;

AND IN ELEPHANTIASIS ARABUM.

By V. RICHARDS, M.R.C.S. Eng.,
Civil Medical Officer of Balasore.

The value of milk as a curative agent appears to be but little known, or, if known, but little appreciated. My object, therefore, in laying the following cases before the Profession is to invite attention to this invaluable remedy. We have in this article of diet a therapeutic agent not less efficacious than any contained in the Pharmacopœia. It has been used with the greatest possible benefit in ascites and general anasarca by the late Dr. Fawcus and by Dr. Payne, of Calcutta. It must not be supposed that milk is in itself a remedial agent, unless to the total exclusion of every other kind of food. The diet must consist entirely of milk, and no other food whatsoever must be permitted to pass the lips. The ordeal is, of course, of a most trying nature; but the beneficial results are so surely and speedily made manifest that the greatest possible effort is exerted by the patient to overcome the intense craving for solid food which must of necessity arise. Notwithstanding all the difficulty, I have seldom seen a patient deny himself the chance of recovery when once the beneficial results of the treatment began to appear. There may, however, be an almost insurmountable difficulty amongst private patients, who are not so entirely under the control of the medical man as their (in this instance, at least) more fortunate fellow-sufferers who are in less independent circumstances. It will probably be remarked that my experience, and that of the gentlemen I have quoted above, is confined exclusively to natives; nevertheless this fact does not preclude the possibility of the same happy results

being attained in England amongst Englishmen. As a fact, too, the treatment has been advocated by a Russian physician. So strikingly successful is the treatment, that I do not hesitate to affirm that there is not a single medical man who would not give it a trial after once witnessing its almost miraculous effects. More especially beneficial is the treatment in those cases in which general anasarca depends upon anæmia; but it is almost a never-failing remedy in ascites depending or consequent upon an enlarged spleen. I have, indeed, found it curative, in so far as the ascites and general anasarca are concerned, in cases resulting from hypertrophy of the liver. Whether the treatment would be of any avail in hydrothorax I am not prepared to say, but if such a case came under my treatment I should certainly give it a trial. Speedy removal of the fluid effused into a serous cavity is of vital importance when the organic disease which gives rise to it is of a serious or even fatal character, since the former either directly or indirectly increases the original organic mischief. Life, therefore, is prolonged at any rate by the removal of the fluid. It is true we may remove the fluid by means of paracentesis; but this treatment is seldom permanently beneficial unless repeated frequently. And it is, moreover, not only inapplicable to some cases, but is attended with positive danger in others. I could give examples of the successful issue of the treatment I now advocate in cases of ascites and general anasarca, but the late Dr. Fawcus has demonstrated a sufficient number of cases(a) to prove the efficacy of the treatment, and I am now more particularly concerned with the treatment of elephantiasis Arabum. That a purely milk diet, *combined with other treatment*, is of the greatest possible value in elephantiasis Arabum I hope to show. I am most sanguine that this disease, hitherto considered incurable,—for even tying the femoral artery Dr. Fayrer found unsuccessful—is entirely under our control. It will, perhaps, be said that my conclusions are premature, and the force of such an assertion I am fully prepared to admit; nevertheless, I write from conviction, and I believe anyone who contemplates the facts I now adduce will credit the treatment with possessing at least a wonderful influence over this "incurable" disease. Whether the results obtained will be permanent or not yet remains to be seen, but I have great hopes that, with careful after-treatment, they will be. I give the three following cases of elephantiasis Arabum:—

Case 1.—Gâhi P., a male prisoner, aged 58 years, of the Brahman (priest) caste, was admitted into the gaol hospital on September 14, suffering from elephantiasis Arabum. He stated that he had suffered from the disease for the last twenty-five years, and has had fever regularly twice a month; but owing to his having contracted the habit of opium-eating(b) (4½ grains per diem) for the past three years, fever has been less intense, and the size of the legs has remained stationary. No relatives, to his knowledge, have suffered from the disease. He has been treated in hospital for fever previously. Both legs very much affected, but the right more than the left. On admission the measurement of the right leg was as follows:—Across the instep, 15·1 inches; calf, 12·8 inches. Ordered quinine 7 grains three times a-day; three quarts of milk daily; neither any other food nor water to be allowed to pass the lips. The legs to be rubbed night and morning with the following—Tinct. iod. ℥ij., oil ℥j., and afterwards to be well bandaged.

September 16.—Finds three quarts of milk insufficient; great craving for rice. Four quarts, and if necessary five, to be given.

19th.—Takes five quarts of milk daily. There is a marked difference in the size and appearance of the legs (the left decreases in size in the same degree as the right). The legs are now flabby, whereas they were previously hard and tense. Finds no difficulty now about taking only milk, and says he can continue the treatment as long as he is required to.

22nd (eight days after admission).—Legs quite soft and flabby. Measurement around the instep and calf of the leg equally 11 inches—a difference in eight days of 1·8 in the calf (from which the disease has almost entirely disappeared), and 4·1 inches across the instep. States that he finds the feet much lighter, and feels in every respect better. To have ten grains of quinine three times a day. Legs to be kept carefully bandaged.

Case 2.—Arjan J., a prisoner, aged 45 years, of the Kandiâ caste, was admitted into hospital on September 14, 1872, suffering from elephantiasis of both feet. He had suffered from the disease for the past ten years; gets fever once a year. His uncle was similarly affected. Treatment precisely the same as that adopted in Case 1.

	Inches.
Measurement of right foot (the largest) across the instep	11·6
" on September 22	9·3
Difference in eight days	2·3

Case 3.—Kamal J., a male prisoner, aged 32 years, of the Kandiâ caste, was admitted into hospital on September 14, 1872, with elephantiasis. Both feet were affected, but the right to the greater extent. He had suffered from the disease for four years, and was attacked with fever regularly twice a month. Treatment the same.

	Inches.
Measurement on Sept. 14 across the instep of right foot	12·2
Sept. 22	8·2
Difference in eight days	4·0
Measurement on Sept. 14 round the calf	9·0
Sept. 22	8·0
Difference in eight days	1·0

I shall not, as heretofore, operate on small scrotal tumours without first giving the treatment I now suggest a fair trial.

Balasore, Orissa.

(a) *Vide Indian Medical Gazette*, vol. v., p. 10.

(b) Nearly, if not quite, half the persons suffering from the disease in Northern Orissa (Balasore) are confirmed opium-eaters.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

A SERIES OF CASES ILLUSTRATIVE OF CEREBRAL PATHOLOGY.

CASES OF INTRA-CRANIAL TUMOUR.

(Under the care of Dr. HUGHLINGS-JACKSON.)

I REPORT here cases of intra-cranial tumour, partly as texts for a lecture about to be published in this journal. I shall, however, make occasional remarks on special peculiarities of the cases, reserving their main points for the lecture.

Case 1.(a)—*Severe Headache—Vomiting—Double Optic Neuritis (at first with good sight)—Paralysis of both External Recti Muscles—No Difficulty in Walking—Tumour and Cyst of the Right Lobe of the Cerebellum.*

The patient, aged 20, was a healthy-looking, blooming girl when I first saw her in March, 1871, in the medical out-patient room. To superficial appearance there was nothing the matter with her. She had suffered, however, from time to time, severe headache. For this reason I looked at her optic discs, and found the early changes of neuritis in each eye, but it is to be observed that there was no defect of sight. This was carefully tested by my friend Mr. Charles Howard. Her condition being of very evil import I admitted her into the Hospital. She came into Dr. Andrew Clark's ward, but by his kindness she was permitted to remain my patient. I have to acknowledge my indebtedness to Mr. Stephen Mackenzie for most valuable help in the investigation of her case.

No history of any nervous ailments in her family was obtained, with the important exception that a sister, after having had two previous convulsive seizures, was taken one evening at tea-time with a fit; she died four days later, never having regained consciousness after the seizure so far as to be able to speak. To return to the case of my patient. As already stated, she was healthy-looking; she was well nourished and intelligent. Menstruation began when about the age of 16, and continued regularly until Christmas, after which, until admission, she menstruated once only. She had always been subject to "bilious attacks," which she ascribed to errors in diet. I inquired for history of injury of the head, but was told that there had been none. But after the autopsy Mr. Stephen Mackenzie received from the patient's mother a clear account of an injury evidently severe. Seven years ago, when the

(a) This case was read at the Medical Society of London about a year ago. A brief note of it has appeared in the *Lancet* and *British Medical Journal*.

patient was getting out of a train in motion, she fell, striking and bruising her forehead. She walked home, but was strange in her manner, and, as the mother said, seemed delirious that evening. Next day she was well.

About Christmas, 1870, her present illness began. After a menstrual period she was seized with frontal headache and giddiness, the giddiness passing off when she sat down. A week or two later she had another attack of pain and giddiness which lasted about five minutes. She had occasional attacks of pain until admission, the one the day before being very severe, and this time there was vomiting, as there was in the subsequent attacks.

A day or two after admission the pain was quite gone, and she was, to all appearance, quite well. She ate well, slept well, was lively and intelligent. Nevertheless, she had double optic neuritis, although her sight was quite good; she could read "brilliant" with each eye. It was not until April 6 that a note was taken of the ophthalmoscopical appearance. Right eye: The disc was swollen and raised, and its "edge" merged into the neighbouring fundus. It was of a pinkish colour. There were no effusions of blood, and there were no white patches. The veins were dark, and knuckled over the edge of the disc; the arteries were obscured in the swelling. No change in the rest of the fundus. Left eye: The same state of things was observed in this eye, except that there were also small, irregular-shaped, whitish, non-lustrous spots on the edge of the disc. There were no changes in the rest of the fundus.

She had occasional attacks of intense pain in the head, with vomiting (the vomit was greenish), being in the intervals well in general health, except that she became after about two months perceptibly thinner, although even at the autopsy there was no great emaciation. Indeed, the striking feature of the case was that she seemed very healthy in the intervals of her attacks of pain. Mr. Stephen Mackenzie says—"When not in pain she ate and slept well. She generally went into the garden when fine, except towards the last, when her sight failed, and then also when she had a guide. She was usually very bright, and when free from pain amused the other patients with little tricks and quaint ways." It is only necessary to give an account of a single attack, choosing a severe one:—

April 29.—She was seized this morning with pain in the head—*rather suddenly*. At half-past six she had appeared, the nurse said, as well as usual, and at a quarter to seven she took her breakfast as if there were nothing the matter with her, and did not complain of feeling in any way unwell. At seven she vomited once, and then complained of her head. The nurse said, "She seemed quite unconscious, and when I called her and moved her about she took no notice, and was in stupor for about half an hour." After coming round from this stupor she retched, and her further condition was as follows:—She lay on her right side—the side on which she always lay, so far as was observed (except on one occasion)—with her right hand on her forehead. Mostly she lay still, but occasionally tossed about. She kept her eyes partially open and fixed, kept groaning and saying "Oh dear!" at each respiration. She seemed in great misery. On inquiry she referred the pain to the left side of the forehead, just above the eyebrow. When asked what it was like, she said "I don't know;" but after a leading question said it was "like a knife going in." She frequently retched, bringing up only yellowish fluid, which later became green. Her tongue was quite clean, but her bowels were much constipated. The pulse was 69, and quite regular; respiration 28. The thermometer (in axillæ half an hour) was in right axilla 97·4°, in left 98·4°. Castor oil was ordered; but as next day it had not acted, another dose was given, and this moved her bowels freely. On this day (second of attack) she had no vomiting, and the pain was less severe; and next day (third) she was quite free from pain.

She had many attacks. The pain was almost invariably referred to the left side of the brow and temple. Tapping with the knuckles over the seat of pain did not increase it nor bring it on when absent. Once the pain was referred to the left parietal region, and once to the back of the head. These facts as to the position of the pain are important, because, had they been allowed as evidence in localisation, they would have misled us in diagnosis very gravely.

So far an account of the whole of the symptoms has been given until May. There were no paralytic symptoms. There was no albuminuria, and, as before said, she seemed perfectly well when the pain was off. We concluded that she had severe cerebral disease, and that the disease was some adventitious product. As she was young, as there was no discharge from the ear, and as there was no likelihood of syphilis, we concluded that the adventitious product was an ordinary brain tumour—a glioma. (As will be seen, the greater part of the adventitious product was a cyst.) No attempt was made to localise the disease, simply *because there was no evidence whatever bearing on this question*, except, perhaps, negative evidence, showing that it was *not* of the motor tract (there being no paralysis), and therefore, inferentially, that it was either of the cerebrum or cerebellum.

Such was her condition without change until May 2, when she said she saw the nurse, who was walking up the ward, doubled. There was at that time no obvious abnormality of the ocular muscles, but she was not tested by coloured glass, which would have been practicable; she could still see for ordinary purposes well, and could read words of No. 1½ Snellen with the left eye, and 2½ with the right, although slowly and with difficulty. There was no limitation of the field of vision. Paralysis of the right external rectus was complete by about July 4, and it became so very gradually; yet she never saw double except on the occasion above stated, and I did not succeed on July 1 in developing double vision by coloured glasses, possibly because the palsy was very gradual. On this day the sight of the right eye was about as before, but that of left was slightly worse—she could only read No. 3 with it. The *left* external rectus was partially paralysed, and this was observed about May 19.

Now, these ocular palsies were the only paralytic symptoms. There was nothing peculiar in her gait except that after the palsy of the sixth nerve she held her head a little to one side, and that she complained occasionally of a little giddiness in walking. Probably these symptoms were the result of some confusion of images, although there was no actual double vision except at the first. There was no defect of co-ordination in the limbs, nor anything that could be mistaken for it, for there were no limb symptoms of any kind up to her death, which was somewhat sudden.

The following note terminates Mr. Stephen Mackenzie's report of her case:—"On October 10 she seemed to be unusually bright and happy, and was free from pain. Early in the morning of the 11th she was seized with severe pain in the head, situated in the left frontal region. She retched a good deal, but did not actually vomit. The attack seemed in no way to differ from her previous attacks, nor did it seem to be more severe than many former attacks had been. At about half-past seven an ice-bag was applied to the head, and this appeared to relieve the pain quickly. She sank into an apparently quiet sleep, and died at a quarter-past eight, very gradually, and without any convulsive seizure."

Autopsy (by Dr. H. G. Sutton).—Body well developed and fairly nourished. It weighed 8 stone 12 lbs. Scalp, skull, dura mater, and arachnoid healthy. *The convolutions of the brain were compressed together, and the surface of the brain was flattened.* The pia mater was healthy. On examining the base of the brain, the right lobe of the cerebellum was seen to be *smaller* than the left, and its surface sunk downwards as though the centre of the lobe was softened, and the surface in consequence had fallen inwards. From the outer part of this lobe some clear serous fluid was seen escaping from a cavity, and when cut into it was found to be a large cyst containing a quantity of clear serous yellowish fluid. The cyst was about an inch and a half long, and about an inch wide; it had a thin, white, smooth, but distinct wall, and it occupied a large part of this lobe. On the outer part of this cyst was a tumour, the section of which was about the size of a shilling; on section it was seen to be firm in the centre, and soft and gelatinous-looking in its outer parts. It had a yellowish colour in the centre, and this yellow appearance merged into the adjoining highly vascular parts. The gelatinous outer portions had a bluish, translucent appearance. The wall of the cyst did not pass over the inner surface of the tumour; the outer portion of the tumour reached the surface of the cerebellum immediately under the pia mater. The left lobe of the cerebellum was healthy. The right half of the pons varolii was flattened, and appeared in consequence smaller than the left. The medulla oblongata was flattened out, so that it was larger than natural from side to side, and smaller from behind forwards. This appearance was very marked. On section the medulla oblongata and pons varolii were seen to be otherwise healthy, as also were the hemispheres and ganglia of the brain. Cerebral vessels healthy. Pleuræ healthy. Lungs dark and much congested, otherwise healthy. Liver, spleen, and kidneys natural. Peritoneum healthy. Heart and pericardium normal.

(*To be continued.*)

LIVERPOOL SOUTHERN HOSPITAL.

PHANTOM TUMOUR.

(Under the care of Dr. CARTER.)

[Reported by Mr. RICHMOND LEIGH.]

M. J., A SERVANT, aged 19, was admitted into the Hospital on August 28, 1871, suffering from a tumour of the abdomen.

History.—She said it appeared three months ago after a kick from a child struggling in her arms, and was then nearly as large as now, but had increased slightly. She says it varies a little in size and painfulness.

On examination, a tumour, present in the epigastrium, extending from the ensiform cartilage to the umbilicus, and about nine inches in width, rounded, firm, clear on percussion, hyperæsthetic. Complains of pain in the back, head, etc., which varies in severity and extent. Is evidently of a hysterical temperament. She keeps her clothes tightly fastened below the tumour, which she says eases it. Tinct. valerianæ given.

August 31.—Complains of pain after eating. Tumour diminishes under compression. The nurse thinks the tumour varies in size; she could not examine it during sleep, as she awoke at the slightest touch. Asafœtidæ ordered.

September 4.—No improvement. The tumour resembling contraction of the upper part of the rectus, and having such doubtful characters, chloroform was administered, with no result till the full effect was produced, when the tumour disappeared entirely, and nothing of it could be perceived.

8th.—She left the Hospital "*in statu quo.*"

PERI-TYPHLITIS.

(Under the care of Dr. CAMERON.)

[Reported by Mr. RICHMOND LEIGH.]

E. B., a German, aged 18, seaman, was admitted July 18, 1871, suffering from pain in the abdomen.

Previous History.—Had been ill for eight days previous, and he thought it was caused by overwork.

On Admission.—Thin and anæmic. Pain in the abdomen, increased on pressure. Respiration 18; pulse 100. Slightly purged. No great debility or fever. ℞. Pulv. opii gr. ss. ter in die.

July 19.—Calomelan. gr. j. added to the opium.

20th.—Purged three times.

21st.—Pulse 16; respiration 110. Some degree of swelling in the abdomen, with hardness, especially in right iliac region.

22nd.—Swelling well defined in right iliac region; hardness greater; pain on pressure much greater in right iliac region than elsewhere in the abdomen. Abscess apparently forming.

24th.—Bowels acted on five times. ℞. Pulv. ipecac. co. gr. v. ter in die; liq. vesicatorius applied to right side of abdomen.

25th.—Pain very severe. No sleep. Bowels not open. Respiration 20; pulse 104; temperature 103°.

27th.—Purged three times. Pain diminished. Temperature 101·5°; pulse 100.

29th.—Swelling and pain much less. Temperature 103·4°.

August 1.—Temperature fell from 102·5° to 98·5°; pulse 84. After this he gradually improved, the pain and swelling diminishing, and, all the special symptoms having passed off, quinine completed the cure.

Remarks.—The tenderness at first was slight and general, but soon became localised in the right iliac region, at the same time becoming intensified. Swelling and hardness followed, so much so that at one time it was feared suppuration would result.

Addenda.—The case presents some interest as illustrating a form of disease of the cæcum which is not very frequent, and is, I believe, often overlooked in the early stage—viz., inflammation primarily seated in the tissues outside the cæcum—between the bowel and the pelvic lining, whence it is apt to spread to the peritoneum, and gives rise to a partial or local peritonitis. The disease, if not arrested, usually terminates in suppuration—the abscess presenting in the right iliac fossa, and frequently opening into the cæcum. The result is the formation of a fistulous communication with the bowel.

Mr. Leigh has omitted a point of some interest, and very frequent as a cause of inflammation of the cæcum and surrounding tissues—viz., that for some time before the attack set in there had been marked constipation. The "purging" alluded to as present on admission was the result of medicine which he had taken. Although, as described by Mr. Leigh, there was "general" abdominal swelling, a well-defined, tense, and somewhat tympanitic tumour could be felt in the right iliac region, in which pain and tenderness were at the maximum. As the disease progressed this feature of the case became more manifest; the general pain and swelling less so.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
„ „	*Six* „	0 14 0
The Colonies and the United States	*Twelve* „	1 10 0
„ „	*Six* „	0 15 0
India	*Twelve* „	1 15 0
„	*Six* „	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 16, 1872.

EXAMINATIONS.

THE subject of Examinations for Medical Qualifications has been assuming considerable prominence of late. In this respect medical examinations form no exception to examinations of all other kinds and descriptions. If we go on as we have recently progressed the English will be the most examined people in all Christendom. How far an excess of examinations necessitates defect in real education; what influence in the course of a few generations the process of universal cramming is likely to have upon the brain development of the nation; and what, to come nearer home, is to become of those of our lads with whose mental organisation that process disagrees, and whose ganglionic cells obstinately refuse to assimilate more than a certain quantity in a given time;—in other words, what is to become of our stupid boys?—are questions which range over too wide an area to permit us to discuss them now. We must restrict ourselves to certain matters which have recently been debated in many quarters, affecting those examinations which admit young men into the medical profession.

But, *in limine*, we must guard ourselves from misapprehension. Examinations for admission into the medical profession are clearly not to be placed in the same category with examinations for honorary medical distinctions. This difference, which would be acknowledged by all, and which was made the basis of the last abortive attempt at medical legislation, is—if we are to believe the complaints which reach us from various quarters respecting the most popular of our surgical examinations—in some danger of being lost sight of. The power which has been conferred on the medical Corporations of this country by the State to examine and license for the practice of Medicine and Surgery is, in the first instance, for the protection of the subjects of the State. It is not a power primarily for the development, by a process of selection, of the medical profession; nor is it a power primarily for the aggrandisement and growth of the

Corporations themselves, nor even primarily for the encouragement of medical and surgical science. But it is a power given with the end that there may be at the command of the public a supply of safe practitioners—persons sufficiently instructed to do what is necessary for the relief of those who consult them in all ordinary cases, and, above all things, not to do harm from ignorance. This we hold to be the principal function which the State confers upon the licensing bodies. Generally speaking, doubtless this function is well discharged by the three Corporations. But if we are to believe current report, there is a tendency in the Membership Examinations of the Royal College of Surgeons just now to depart from the principle we have indicated. For ourselves, we are slow to credit mere reports. But we strongly suspect that a tendency to overload the memory of the student with details, instead of rooting in his mind broad facts and great principles, is the great fault in the medical education of the present day; and we can easily conceive that a similar tendency will make itself felt in examinations. In the study of anatomy there is a great temptation to err in this direction; and as details alone, however easily crammed, are more easily forgotten, it is not surprising that the anatomical qualifications of many of those even who pass the necessary examinations are not of a lasting description. We have met with instances quite recently of students, who, although they had passed the anatomical examination a few months ago, had so forgotten all they had then learned as to be unable to indicate with anything like accuracy the position of the heart in the thorax, or to point out the distribution of the main branches of the fifth pair of nerves. And yet, whilst this is the case, complaints are rife as to the stringency and minuteness of the examination. We believe the opposite facts to be perfectly compatible. A student who has had to cram anatomical minutiæ, and to consider them, as far as his examination is concerned, of the same importance as the leading outlines of the science, is pretty certain to forget the one as readily and as surely as he will forget the other.

But besides the Royal College of Surgeons there are other bodies against which complaints are rife. In August last year a letter was published in this journal which drew attention to the unreasonable character of the Matriculation Examination imposed on schoolboys by the University of London. A complaint against the examinations of the same University for its medical and surgical degrees was made publicly by Mr. Christopher Heath in his introductory lecture delivered at University College at the opening of the present session. At the time we gave currency to Mr. Heath's remarks, and indicated our general belief in their justice. Since that, however, a correspondence on the subject has been carried on in the pages of our contemporary *Nature*, and to the question at issue we may again briefly refer. The charges originally brought against the University by Mr. Heath were to the effect that the examination was overloaded with questions on subjects having little or no reference to strictly professional studies, but which diverted the attention and energies of the student from the acquirement of professional knowledge. The subjects were chiefly those of mechanical and natural philosophy — studies which have acquired much greater importance in the examinations since the introduction of the Preliminary Scientific Examination. The position taken by Mr. Heath has been attacked by Professor Adams, of King's College, who has argued generally as to the necessity and benefit of the study of physics for medical students; but as his views are founded chiefly upon the supposition that the physics and chemistry of the animal body are precisely the physics and chemistry of the inorganic world, they scarcely do justice to his cause. Dr. Lionel Beale and Mr. F. Lyndon Attwood have found it easy work to demolish an argument founded upon such assertions as that the student ought to know "the relation between the surface temperature of the body, the quantity of heat passing away from it, and the amount of heat generated in the body by the food given to a patient." The plain answer being, that however much a student ought to know it, no student does know it, nor is any teacher capable of teaching him it.

No reasonable man will doubt that a knowledge of the leading principles and great facts of physics is a most valuable acquisition to the medical student. The mistake is to require of a young man, who in a few years has to obtain a knowledge of the vast circle of medical sciences proper, anything beyond this elementary knowledge. The danger of the plan of examinations pursued at the University of London is that each examiner should regard his own subject as of paramount importance, and demand from the student an acquaintance with it which would be only reasonable were it his sole pursuit.

We are glad to see that the University has appointed a committee to consider the charges which have been brought against its medical examinations. If numbers of graduates are to be taken as evidence of the success of a University intended to be national and supported by public money, it is certain that the University of London has not as yet filled the place in national education which it was expected and intended to fill. It has, however, the merit and reputation of having produced some of the most successful physicians, and one or two of the leading lawyers of the present day. The question which is now pressed on its governing body is—whether the high, if narrow, reputation which it has obtained is to be maintained and handed on; or whether, instead of highly efficient physicians and surgeons, its graduates are to degenerate into a set of gentlemen, who, having forgotten more than they know of all the sciences, have had no time to master the theory or practice of their own.

One word more on the general conduct of examinations. A modern writer says that a physician should be a calm intelligence. We say an examiner should be one. One great reason why examinations should be principally conducted in writing is that in a written examination there is no opportunity for the display of feeling or emotion on the part of either examiner or examined. We believe that the number of rejections due to nervous timidity is only slightly less than the number referable to ignorance. The best examiners are those who refrain from frequent expressions of assent or dissent by word or look to answers given, but simply conduct their examination to its termination with judicial calmness. The object of a pass examination at least should be to find out what a man does know, rather than what he does not know; and the interests at stake are so great, not merely to the candidate, but to his family, that a word or gesture on the part of an examiner which would interfere with a nervous student's chance of extricating himself from a difficulty, must to a conscientious man be a matter of lasting regret.

NUTRIENT ENEMATA.

The cases in which we are called upon to use nutrient enemata are amongst the gravest in Medicine, whether we employ them as a last resource to mitigate the pangs of hunger in a poor wretch dying of stricture of the œsophagus, or when we are fighting the battle of life and death in one who has barely escaped dying from gastric hæmorrhage. Those, too, who have been called upon to make use of them for any length of time must have felt how very unsatisfactory were the rules laid down for the composition and administration of such substitutes for food taken in the usual way. We accordingly take the opportunity afforded us by the appearance of a small treatise on the subject by Dr. Leube, of Erlangen, to say a word or two on such an all-important subject.

That nutrient enemata do possess a certain value is undoubted; therefore, that the mucous membrane of the great intestine

can absorb such materials as are thus thrown into it is also clear. But the question arises, Do these substances undergo any digestive change in the great intestine,—and if so, what substances are thus acted upon? Though the contents of the great intestine are always acid, the wall of the gut is strongly alkaline, and the follicles in its walls seem to secrete an alkaline fluid. This fluid has no effect whatever on albumen; it converts starch into sugar, but not readily, and slightly emulcifies fats. These substances typify all articles of food; so it is plain that nutrient enemata can undergo but little change from the intestinal juice alone.

Enemata should therefore contain substances already in a state to pass readily into the bloodvessels and absorbents, or should contain materials to induce the necessary change.

But in all such cases experience is better than *à priori* reasoning. From it we learn that egg albumen is not absorbed at all until salt is added, after which a portion passes unchanged into the circulation, and in many cases is thrown off by the kidneys, or, if much salt is added, produces diarrhœa. Milk is apparently but little better; it must be given in too large quantity, and comes away almost unchanged. In some cases it gives rise to sugar in the urine. Beef-tea, as ordinarily prepared, meets with the same objection—it must be given in too large quantity to be retained. For this is the rule in practice: if you want an enema to move the bowels, let it be large; if you wish it to be retained, let it be as small as possible. Moreover, if we are to hope anything from this line of treatment, we must take care to keep the bowel as quiet as possible, anything like irritability being a sure sign of the failure of the process. Naturally we might expect that peptone would be the best substance for injection into the rectum, but it is not easily prepared, and when introduced is promptly rejected. Meat-juice is a simpler substance to employ, but is not readily procured in sufficient quantity, and is only partially absorbed.

In his experiments Dr. Leube sought a digestive agent better adapted for the intestine than gastric juice, and found it in the pancreatic juice. This substance, as is now universally admitted, is capable of transforming albuminous substances; and though the products of this change are prone to pass on into the condition of leucin and tyrosin, still they possess a certain nutritive value. He accordingly took a quantity of beef cut or chopped into the smallest possible pieces, and to that added about half the quantity of fresh pancreas, also very finely divided. To this again he added one-sixth of fat; and finally, when the whole was reduced to the finest possible state of division, he added water at about the temperature of the body, till the whole formed a pulp which admitted of being injected. For injection he used an injection apparatus which differs somewhat from those commonly employed. In his results he has been very successful. Tested in every way, it is seen that a certain portion of albuminous material is thus absorbed by the great intestine. In every way, too, the results are better than on the former plan. The addition of starch is not an improvement; it is converted into sugar, and produces diarrhœa.

In making use of this plan of administering nutrient enemata, which is within the reach of all who have a screw syringe, certain rules should be observed. First, as already pointed out, the quantity administered should be small. In every instance the bowel should be well washed out with water some time before the use of the nutrient enema. After administration, the patient ought to be kept perfectly quiet. The enema will remain in the bowel for from twelve to thirty-six hours undisturbed; hence it is better not to trouble the patient too often. It must be remembered that in the cases where such enemata are necessary the patient remains for the most part absolutely quiet, and but little nutriment is necessary to maintain life; accordingly, the food administered should be proportioned to his wants under these conditions and not to those of health. Should diarrhœa come on as a result of the administration of these enemata, it is advisable to intermit a day, and to again resume their administration with every precaution. We commend Dr. Leube's plan to our readers; it only requires moderate care and skill, and is decidedly superior to any plan heretofore recommened.

AN UNFORTUNATE ACTION FOR ALLEGED MALPRAXIS.

In the Court of Common Pleas (sitting in Banco), on the 8th inst., Mr. Pope, Q.C., moved for a new trial in the case of Balmforth *v.* Buckley on the ground that the damages awarded—forty shillings—were insufficient. The plaintiff had placed himself under the care of the defendant, who it was asserted had not discovered that his hip was dislocated, whereby the plaintiff was permanently injured. It will be recollected that the case was tried at the summer sessions, and that the plaintiff had received the injury in stepping suddenly or incautiously from a railway carriage. This was at Manchester, where both plaintiff and defendant resided. It will be further recollected that on examination of the limb the defendant declared that there were no signs of dislocation of the hip, that the limbs were of equal length, and the foot was in its normal position. In this opinion the defendant was supported by Mr. Fletcher. Some other surgeons were subsequently called in, and they were of opinion that dislocation had existed from the time of the accident, and that it ought to have been detected by the employment of ordinary skill and attention. The medical evidence was contradictory and somewhat confused, and the nature of the accident appeared to be such that, even if the dislocation had been discovered in the first instance, it was doubtful whether any benefit would have arisen to the plaintiff from attempting or effecting its reduction. At all events, the jury so thought, after the able and astute summing-up of the case by the late Mr. Justice Willes. The Lord Chief Justice, in answer to Mr. Pope's motion for a new trial, said that the Court had consulted the notes of the late Mr. Justice Willes, and it appeared, on a conflict of medical testimony, that the learned judge's opinion was, that although the reduction of the dislocation ought to have been attempted, yet, in consequence of the fracture of the socket, success in the operation was doubtful, and he therefore thought the question of damages entirely one for the jury. There would therefore be no rule, and the verdict for the plaintiff would stand. Mr. Justice Brett desired him to say that the matter had been most carefully discussed by the learned judge. Now, we think it quite clear that this action ought never to have been brought. Even under the most favourable circumstances, the probability is that the dislocation could not have been permanently reduced. At all events, the doubt was so great, according to the medical evidence adduced, that the jury, who were bound to find for the plaintiff, estimated the damage he had sustained by presumed negligence at 40s. We cannot disagree with the verdict. But what a state of things does this trial disclose! What a moral may we not draw from the circumstances attending it! Here are two gentlemen kept for months in a state of anxiety, who, as it eventually turned out, were really little if at all to blame. If the verdict conveyed the only pecuniary loss they had to sustain, it would of course be of little or no moment; but the unfortunate defendants had to pay the expenses on both sides, the charges amounting, we presume, to some two or three hundred pounds. But we sympathise equally with the unfortunate plaintiff, for his 40s. will go but a short way indeed towards the extra payment of his solicitors of the costs as "between lawyer and client," and he will have to bear entirely the serious expenses of moving the Court of Common Pleas for a new trial. This case has been most injurious to both plaintiff and defendant, and certainly is not creditable to us as a Profession. The lawyers have been the only persons who we can suppose have received any benefit from it. They have got the "oyster"—their clients the "shells."

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

No. III.

Perhaps one of the most important and difficult questions that the Medical Officer of Health will have to deal with is that of the habitations of the poorer classes, especially if the district be an urban one. Not that the condition of the dwellings of the agricultural labourers is not an important one, but that, as we fear, the law is too lax, and vested interests are too great, to permit a rural sanitary officer to do much good for some time to come, except by calling attention, as he will have to do, to the insufficient house-accommodation of agricultural labourers. In the metropolis, in Liverpool, in Glasgow, the difficulties experienced in securing proper and adequate house-accommodation to the lowest classes are incredible, and regulations as to the minimum of cubic space permissible most difficult to enforce. Let anyone who doubts this read the admirable quarterly reports of the able veteran Medical Officer of Health for Whitechapel. As regards cubic space, it is of course desirable to fix a minimum, the transgression of which will render it desirable that a room or house should be deemed overcrowded. We have found that 300 cubic feet for an adult, 200 feet for children above 10 years of age, and 150 feet for children under 10 years are practicable and workable limits; and that a larger cubic space per inmate than those just mentioned cannot be enforced, though it is desirable that these minima should be extended gradually.

But sufficient cubic space for the indwellers is only one of the conditions essential to a healthy home. Ventilation must be enforced as far as possible, and ventilation without draught. Too frequently ventilation is urged upon the miserable and squalid inhabitants of crowded rooms, regardless of comforts. It appears to be forgotten that the sickly, ill-fed, ill-clothed, and badly-nourished dwellers in towns are very susceptible to the influence of cold, and that a means of ventilation which in a mansion or villa would secure comfort, entails misery upon half-starved paupers. Long-standing habits cannot be lightly disregarded. We have often entered some room, dirty, unventilated, revoltingly offensive with animal exhalations, and, rushing to the window, have thrown it open to gain, if possible, a breath of fresh air, feeling it impossible to exist many minutes in such an atmosphere. The distressed looks and the hacking coughs of the inmates have too often told us that to them a process of stifling is preferable to a blast of cold air; and no sooner have we left the room than down has gone the window with an angry bang. Considering how many poor wretches are dependent for warmth, in the absence of a sufficiency of firing and clothing, upon the exclusion of external air; and seeing what a large proportion of such creatures—especially children—are killed by lung affections, a too liberal admission of cold external air must be avoided. We fear that ventilation without draught is a thing little studied in the construction of any but the wealthiest class of mansions. Houses without any means of through ventilation (back to back houses) will give trouble enough in the manufacturing districts, and cellar dwellings in our older towns and cities.

The Medical Officer will, of course, make himself familiar with house-drainage, the trapping of sewers and drains, the means of preventing the ingress of sewer gases, the construction of water-closets and their appendages, and the removal of house refuse and excreta. He will frequently be called upon to advise as to the best modes of removing these, and he will be expected to be familiar with the relative merits and demerits of water-closets, privies, dry earth-closets, etc. We can do no more than refer him to the admirable reports in the Blue-books issued by the late Medical Department of the Privy Council for information on these heads.

Questions relating to local sources of contamination of water-supply—*e.g.*, of wells—will often engage his attention. He will scarcely be expected to analyse the water in such cases; but nevertheless he should be capable of estimating the importance of any proved pollution of a water by animal or vegetable matter, and he will be called upon to ascertain in such cases the source of the pollution. In the majority of cases no analytical examination will be absolutely necessitated—the proximity of a cesspit or leaky drain to a source of water, and the evidence of soakage of sewage or other abomination, will suffice for the condemnation of a water. Where houses are supplied from an external source, the Medical Officer must be especially alive to the contamination of water within the dwelling-house itself.

The urban Medical Officer will not forget to urge the enforcement of the Artisans' and Labourers' Dwellings Act in large towns, in the case of excessively dilapidated and dangerous structures.

Regulations as to common lodging-houses, and regulations of lodgings under the Sanitary Act, 1866, will of necessity demand attention. It must not be forgotten, too, that all public institutions—hospitals, workhouses, schools, factories, and workshops—as well as private houses and premises, fall under the jurisdiction of the Medical Officer of Health for the district in which they are severally situated; their public character, and the fact that they are under the supervision of other medical men, affording no exemption.

THE WEEK.

TOPICS OF THE DAY.

The preparations for the long talked of expedition for dredging, sounding, and scientifically investigating the deep sea are nearly complete, and the *Challenger*, a main-deck corvette, set apart for the service by the Admiralty, will sail, it is expected, early next month. The expedition will be under the direction of Professor Wyville Thomson, who is well known as having been already associated with Dr. Carpenter in previous deep-sea researches. Mr. J. J. Wild, of Zurich, an accomplished artist, will accompany the expedition as Dr. Thomson's private secretary. Mr. J. G. Buchanan, Senior Assistant in the Laboratory of the University of Edinburgh, goes as chemist. Mr. H. N. Moseley, M.A., of Oxford, and Radcliffe Travelling Fellow, a pupil of Professor Rolleston; and Dr. Von Willmoes Suhm, lately assistant to Professor Von Siebold, of Munich; and Mr. John Murray, of Edinburgh University, a Canadian by birth, are the naturalists to the expedition. Mr. Moseley and Dr. Suhm will devote themselves to the invertebrata; and Mr. Murray, who has had great practice in taxidermy and the preservation of animals, will take charge of the vertebrata acquired. The expedition is intended to circumnavigate the globe, and the voyage will probably occupy three years and a half.

The report of the Cambridge Syndicate, appointed to conduct the examinations for women above 18 years of age for 1872, does not afford much encouragement to those who ask for the female sex the intellectual training of the male. There was a slight increase of numbers over 1871, but the total number who presented themselves for examination in group A (the class which admits to other groups) was only 114, a small number considering that it represents the whole of England, the examinations having been held at six centres—Cambridge, Cheltenham, Liverpool, London, Manchester, and Rugby. Of these only 16 passed in the first-class, and 42 failed. Group A only includes English History, Composition, Language and Literature, and Arithmetic. Two candidates only presented themselves in Mathematics, neither of whom showed a satisfactory knowledge of the subjects required for passing.

We are not of those who think all corporal punishment should be abandoned in education. We believe that there are some boys who are so naturally and incorrigibly idle that they will only apply themselves under the stimulus of fear; and

even for the best of boys up to a certain age, when overtaken in a fault, it is a question whether a slight flogging administered by a really humane and kind head-master is not a better punishment—more deterrent, and less injurious to health—than a long imposition or being mulcted of the fresh air of the playground. But we would join with our contemporaries in the general press in condemning, in the strongest terms the system which still obtains at Winchester School, where an elder boy holding the office of a Præfect has the right by the laws of the school, and with the sanction of the masters, to administer a cruel punishment to a younger boy who refuses to obey some frivolous or vexatious command. A letter addressed to the *Times* by a Mr. Maude details such a terrible tale of brutality and tyranny, that if the masters of Winchester School are not shamed into the abolition of the present code of regulations under which such an outrage is possible, it is clearly high time that there should be interference from some higher quarter. Medically speaking, no punishment, administered even by a master, should break the skin. But the "tunding" that this unfortunate boy underwent is described as the administration of thirty blows with a strong ash stick across the shoulder-blades, which left the back in as bad a condition as that of a garotter who has been flogged at Newgate.

We are glad to hear that the infant hippopotamus is going on well. It sucks readily, and takes the water. If it be reared it will be the first hippopotamus born and suckled by its dam in Europe. The ill-fated young hippopotamus that was born at Amsterdam, and burned in the fire at the Crystal Palace, was brought up by hand. The water of the tank in which the mother and cub bathe is raised to the temperature of a river in Equatorial Africa.

THE EDINBURGH FEMALE MEDICAL STUDENTS.

Sydney Smith used to remark that in France there were three sexes—men, women, and clergymen. If it were possible for the witty divine to resume his connexion with Edinburgh institutions, he could in a similar manner classify her population into men, women, and avowedly female medical students. This last anomalous group has with the commencement of a new session renewed its efforts to secure standing-room in the Edinburgh School. When a few women first began to propound preposterous notions regarding their right to thrust themselves into medical schools founded for the education of male students, we spoke vigorously against a movement so dangerous, as we believe, to public morality. Since then we have been consistent in our opposition, and have requested our readers to resist an innovation calculated not only to injure seriously a venerated medical school, but also to bring a noble profession into disrepute. It suits the female agitators to sneer when their opponents refer to the indecency of their procedure. Sneers are sometimes the only substitute for argument, and—if we are to believe Mr. Darwin's theory of "expression in man and animals"—come much more naturally. We are glad, however, to be able to say that the opinion which we have all along expressed, especially regarding mixed classes, is shared by a writer and historian whose capability of estimating the tendencies of any social movement is admitted by all to be pre-eminent, and who would be the last to be accused of feeble sentimentality. In a letter, which his own special request alone prevents us from publishing, this distinguished writer, referring to the subject o mixed classes, observes that, whilst he recognises the right of women to study Medicine if they please, "to have young women present among young men in anatomical classes, clinical lectures, or generally studying Medicine in concert, is an incongruity of the first magnitude, and shocking to think of to every pure and modest mind." The career of the female medical students in Edinburgh will remain almost, if not altogether, arrested till the Scotch and English courts have decided upon several very important matters in the constitution of the University and the Royal Infirmary. We cannot offer any suggestions as to the decision of the higher legal authorities, but we are sure that in this case the law's delay will be unfavourable to the medical women, inasmuch as it will allow their Edinburgh partisans time to discover that they have been drawn into an agitation alike damaging to their medical school and their city.

HEALTH OF BISHOP'S STORTFORD.

The following information has been forwarded to us, and is perfectly reliable. What have the Local Board to answer in face of their late proceedings?—Several deaths have occurred in the present year from typhoid fever. Two deaths were registered in the month of September—ages 20 and 21—only a short time prior to the first resolution of the Local Board to have dung and refuse weekly removed from the town. Then came the memorial on which we recently commented; and the Local Board were easily led to rescind their salutary measure, and forthwith complied with the wishes of the memorialists by leaving as heretofore the period for removal of stable and other refuse indefinite, which term may mean in many cases twelve months. The Medical Officer's returns to the Board of Guardians for the poor of Bishop's Stortford only, not including the union house, show that the town has scarcely been free for one week from typhoid fever since March last, each weekly relief list of that officer having three, four, and sometimes five cases under his treatment. How many private cases there may have been cannot of course be ascertained. In addition to all this, fifteen deaths from small-pox in the town and union house were registered from September, 1871, to April, 1872. A maid-servant died of typhoid fever at the residence of a member of the Local Board in September last! On Saturday last a well and numerously signed memorial was presented to the Local Board, asking them to have dung and refuse removed fortnightly, and a proposition to that effect was made, but only to be rejected by the majority of its members, who agree in thinking that the inhabitants of Bishop's Stortford should not have too much pure air.

DEATH FROM VIOLENCE IN A LUNATIC ASYLUM.

An inquiry was opened on October 17, at Haydock Lodge Asylum, into the circumstances attending the death of Mr. William Lord, a gentleman who was admitted an inmate of the above Asylum on September 14, and who died on October 14 from the severe injuries he received. An inquest was held on the body of the deceased, and it was thon proved by Dr. R. M. Anderson, the Assistant Medical Officer at the Asylum, that the deceased had died from the injuries which had been inflicted on the chest and ribs. The deceased had slept in a room with six or seven other patients, and on the evening of the 8th one of them, named Booth, was found kneeling upon Mr. Lord; and on the 9th Mr. Lord was found at the bottom of the stairs, as if he had fallen down. The injuries, however, were not discovered till the 10th; and on the 11th, when his wife visited him, he denied that he had fallen downstairs, and said some of the patients and one of the attendants had abused him. At the inquest the jury returned an open verdict, to the effect that the deceased died from the injuries he had received, but how caused unknown. The result of the inquest seems to us anything but satisfactory. We should be glad to know why there was not an attendant in the room in which Mr. Lord slept. It is difficult to suppose that the injuries would or could have been inflicted if proper attendance had been given. A searching inquiry should, for the sake of the good name of Haydock Lodge, be instituted into the truth of the statement made by the unfortunate gentleman in his last days of life.

CHOLERA.

The two countries which have been recently invaded by cholera —Hungary and the northern part of East Prussia—continue still under the influence of the disease. A slight tendency to spread further, too, is visible. Up to the 8th inst. in Ofen 388 cases have come under notice, with 110 deaths and 127 recoveries, the rest (151) being left under medical treatment. Amongst the soldiers in that place 37 cases occurred, out of which 6 died. In Pesth 54 cases with 18 deaths took place. There were 12 cases in Marmaros; in Kashaw 14, 7 being fatal. Still, the number of fresh cases has begun to fall steadily for some days, a certain indication of the beginning of the decline. although the death-rate keeps somewhat near the former level. The number of fresh cases at Ofen, which has been before about or even more than 50, is now between 25 and 30. Such is generally the case; the decrease in the number of deaths begins after the decrease in the amount of fresh cases. In the district of Gumbinnen 12 cases happened up to the 6th inst., and 7 deaths. From Dresden 6 cases with 3 deaths were announced on the 3rd inst., but nothing more has happened up to the present. From Vienna it is officially announced that there were not more than 2 cases of cholera met with, out of which 1 ended fatally, all the others called cholera having turned out to be quite different diseases. Now, at least, strict measures are adopted everywhere to prevent its spreading further and to check it as much as possible—hospitals are erected, and cleanliness and disinfection put into action. At the meeting of the Town Council at Munich on account of cholera, a paper by Professor Pettenkofer was read, stating that epidemics during the winter season have not been observed hitherto except in South Russia. In South Germany it never lasts longer than over the month of November. At an assembly of medical men held at Warsaw on the 2nd inst., in connexion with the present serious spread of cholera there, it was resolved that quinine and a strict diet are to be considered as the best means for dealing with the disease!

HOW SMALL-POX IS SPREAD.

Some explanation is called for from the managers of the Worcester Infirmary for what appears to be a gross neglect of their duty in reference to the premature discharge of small-pox patients from their institution. We gather from the *Worcestershire Chronicle* that a letter from Dr. Buck, Medical Officer of the Inkberrow District, was read at the meeting of the Alcester Board of Guardians last week, reporting the outbreak of a case of small-pox at Abbot's Morton, and stating that the sufferer, a girl named Roberts, was recently an inmate of the Worcester Infirmary. In conclusion, the letter called attention to the conduct of the managers of the Worcester Infirmary in sending a number of infected persons from that institution to develope the disease in their homes. The Board directed Dr. Buck to take the necessary steps to prevent the spread of the disease, and it was resolved—"That the clerk write to the managers of the Worcester Infirmary, and express the strong disapproval of the Board that the girl Roberts should be discharged from that institution while there was any risk of her spreading the disease by returning to her home." The Marquis of Hertford said that the managers of the Infirmary had acted injudiciously and imprudently, but no doubt they acted with the best intentions. We beg to observe that something more than "best intentions" is required under the circumstances portrayed. The "best intentions" may be an excuse but it is no justification for so flagrant a breach of duty.

OBSTRUCTION TO VACCINATION.

Surely there should be some power vested in the Government, or in the Local Government Board, to meet such cases as the following. How is it possible to eradicate small-pox when boards of guardians can be so stupid and short-sighted as to pay for cases of successful vaccination, and yet let persons who refuse to have their children vaccinated go scot-free? One would have expected more sensible conduct from Yorkshiremen. The Registrar for the Brightside District, Sheffield, laid before the Board of Guardians on Wednesday week over 200 cases of persons who had failed to comply with the provisions of the Vaccination Act. He referred to the difficulties the registrars had to contend with in carrying out the Act; their efforts were foiled by the action of the guardians in prohibiting them from prosecuting. A guardian gave notice that at their next meeting he should move that the resolution adopted by the Board two months ago, restricting the power of the registrars in regard to prosecuting defaulting parents be rescinded. In opposition to the lukewarmness of the Sheffield Guardians, it is satisfactory to state that the Act in many places is carried out with a wholesome rigour. Last week, at the Hammersmith Police-court, the sitting magistrate fined a young woman in the mitigated penalty of 1s., and 2s. costs, for refusing to allow Dr. Frost, the public vaccinator, to take lymph from her child, which he had vaccinated a week before.

MEDICAL MICROSCOPICAL SOCIETY.

At the preliminary meeting of the proposed Medical Microscopical Society, held at St. Bartholomew's Hospital, on Friday, November 1, the chairman, W. Morrant Baker, Esq., F.R.C.S., etc., made a few introductory remarks, and then called upon Mr. J. W. Groves to give the reasons for the formation of such a Society, and the objects which were had in view for it when formed. Mr. Groves proceeded to state these briefly, and then read extracts from some of the communications on the subject with which he had been favoured by Drs. Carpenter, Burdon-Sanderson, Lionel Beale, and Rutherford; Messrs. R. Brudenell Carter, E. Ray Lankester, and others. Then followed a brisk discussion, in which Drs. Lawson, Heywood Smith, Frank Payne, and Woodman, Messrs. Jabez Hogg, T. C. White, B. T. Lowne, E. C. Baker, and others took part. It was ultimately decided that the Society should exist, and a provisional committee, composed of the Honorary Secretaries of the Royal Microscopical Society and the Quekett Microscopical Club, besides representatives from each of the London Hospitals, was elected. The next meeting, for sanctioning rules, electing officers, etc., will be held in the College Hall, St. Bartholomew's Hospital, on December 6 (*i.e.*, the first Friday in December), at eight o'clock p.m.

NOT "LEGALLY" QUALIFIED.

How such a mistake as the following could have occurred it is difficult to conjecture. It appears, on referring to the "Medical Directory," that Dr. Rudyard is M.D. of St. Andrews (Exam.) 1862; L.S.A., 1863; L.M. Glasgow, 1856. Now, neither of these qualifications confers the right to practise surgery. Yet this gentleman was lately appointed out-door Medical Officer of the St. Pancras Schools at Leavesden. The consequence has been that the Local Government Board have addressed a letter to the St. Pancras Guardians, calling their attention to the fact that Dr. Rudyard was not qualified to hold the appointment. The Guardians have referred the matter to their Schools Committee, and ordered a copy of the letter to be sent to Dr. Rudyard requesting a reply. The case seems one of some hardship; but it is unquestionably unlawful to appoint a gentleman, however otherwise fully "qualified," who does not hold a surgical diploma.

MEATH HOSPITAL AND COUNTY OF DUBLIN INFIRMARY.

On Saturday, November 9, Dr. Stokes delivered the first clinical lecture of the present session. Before the commencement of the lecture the three out-going clinical clerks—Mr. Henry Mallins, Dr. Chas. A. McMunn, and Mr. George Whittaker—were presented with their certificates.

TESTIMONIAL TO AN INDIAN SURGEON.

Dr. Thomas R. E. Loftus, lately assistant to Dr. Gibb at the Monkland Works, now of the Ceylon Medical Service, was entertained to a supper by a few of his friends on Thursday evening, the 24th ult., at Wallace's Hotel, Calderbank, N.B. Mr. David Strachan, Chapelhall, occupied the chair. After an excellent supper, the chairman, in the name of the subscribers, in some well-chosen remarks, handed to Dr. Loftus a very handsome gold watch, which bears the following inscription:—"Presented to Thomas R. E. Loftus, M.B., C.M. Edin., by a number of friends, as a mark of respect for his diligence and talent as a medical practitioner, on his leaving for Ceylon. Calderbank, 24th October, 1872." Dr. Loftus replied in feeling terms, and thanked his friends and well-wishers for so handsome a gift, and also those who had come to do him honour. In doing him an honour they had also conferred honour on the land of his birth, as he believed he was the only Indian in his Profession that had received such a recognition.

FROM ABROAD.—HYPODERMIC INJECTION OF ERGOTIN IN INTERNAL HÆMORRHAGES—GASTROTOMY FOR UTERINE TUMOURS—THE PARIS LUNATIC ASYLUMS.

Dr. Drasche, Physician to the Rudolf-Stiftung of Vienna, has published in some recent numbers (37-40) of the *Wiener Med. Wochenschrift* an interesting series of papers on "The Employment and Action of Hypodermic Injections of Ergotin in Hæmorrhage." After adverting to the difficulty which frequently exists in the treatment of hæmorrhages that occur in the course of various diseases in the form of hæmoptysis, epistaxis, hæmatemesis, etc., he goes on to describe the results he has obtained from the employment of ergotin. This must be regarded, he says, as the best of all hæmostatic agents for hypodermic use; and so long since as 1868 he recorded in his reports on the Rudolf-Stiftung the first essays that had been made with it. Since then Langenbeck and other surgeons have resorted to it with success for other forms of disease of the bloodvessels, as aneurism and teleangiectasis, as recorded in our own pages.

Confining himself within the scope of his own observation, Dr. Drasche first gives an account of the influence of injections as observed in two persons in robust health, the experiments being continued during nine days in the one case and six days in the other. Each injection was followed by a diminution in the number of the pulse by from four to six beats, and the sphygmographic markings exhibited a simultaneous contraction of the calibre of the vessels. The temperature was slightly increased, and the respiration continued normal. No influence upon the secretion of the urine was perceptible, and the health was quite undisturbed. Each injection was followed by some local irritation, which sometimes disappeared after a few minutes, but at others lasted a considerable time. The redness which was at first caused was followed by a greyish-yellow discoloration. Half-grain doses caused hardly any coloration, while two-grain doses induced intense and extensive redness. This, too, was accompanied by tenderness and swelling, this last continuing for several days.

The great bulk of the cases of disease in which Dr. Drasche has tried this means have been examples of hæmoptysis occurring in the subjects of tubercle. When this has been slight he has employed the usual hæmostatics; but when these have not succeeded, or when the bleeding has been considerable, he has resorted to the ergotin. Of nine of these cases he furnishes abstracts. The ergotin was administered in these in doses of from one grain to one grain and a half, the whole quantity employed in each case varying from one grain to seven grains and a half, and the treatment by it occupying from one to six days. On one occasion three grains and three-fifths were injected within six hours and a half. In almost all the cases local irritation was induced, but this usually soon passed away. Sometimes a circumscribed induration remained for some time, but this never suppurated. In most of these cases the efficacy of the ergotin was very prompt when other hæmostatics had previously been tried without success; in others, although less speedy, it was still successful; and in one of them only did it fail. In two cases of epistaxis that are cited the effect was very speedy, and the dose required very small; and, although other means would have stopped the bleeding, none more simple could have been adopted. In a case of hæmatemesis the bleeding was arrested promptly after the internal administration of ergotin had been employed without any benefit. In a case of intestinal hæmorrhage, occurring in typhus, the bleeding was completely arrested, but in another case it persisted. It has been used advantageously, also, in the hæmorrhage connected with scorbutus, the amount and duration of the local irritation in these cases being considerable.

A general review of his experience with it convinces Dr. Drasche that ergotin is as efficacious as it is an easily employed remedy. In some cases its effects were so rapid and so remarkable that no doubt could possibly be held respecting them. Although if such effects are in many cases necessarily temporary, yet is the gain very considerable; and where it has been entirely without effect the extent and nature of the lesion offer the explanation. The injections, in fact, are an invaluable means when other agents have been tried without effect, or when sudden and profuse hæmorrhage calls for instant action. The best vehicle for the ergotin is glycerine, and five grains to the drachm forms the most suitable proportion. A syringeful of this holds one grain of the ergotin, and, according to circumstances, the quantity may be injected once or twice a day. The entire quantity required amounted to a maximum of seven grains distributed over six days. On one occasion, however, six grains were injected within three days. The region of the pectoral muscles is the best locality for the injection. The mixture should be shaken before each injection; and this should be slowly performed, in order to avoid throwing the fluid into the cellular tissue, and inducing localised capillary hæmorrhage. The subsequent handling of the injected part should be effected in the gentlest manner. More or less local pain and irritation follow each injection, and these are sometimes considerable. This sometimes depends upon the more or less intimate mixture of the ergotin with the glycerine, and the manner in which the injection is performed. Circumscribed inflammation at the injection points is also not uncommon, but the infiltration afterwards disappears. When the injections have been long continued, or have been too strong, tingling of the finger-ends and cramps of the hands are sometimes complained of.

At a recent meeting of the Académie de Médecine, M. Demarquay read a report on the operation of Gastrotomy employed for the removal of Uterine Tumours. Communications from M. Kœberlé and from M. Boinet, quite opposite in the recommendations they furnished, had been referred to him. M. Kœberlé related the successful extirpation of a large fibro-cystic tumour, and strongly advocated the operation. M. Boinet, on the other hand, delivered in an elaborate paper, in which he severely criticised the operation, passing all the hitherto published cases in review. He showed that the operation had for the most part been performed accidentally in cases mistaken for enlarged ovary. As a general rule, fatal complications followed; but MM. Kœberlé and Péan, encouraged by a few successful cases, have not hesitated to advocate the adoption of gastrotomy for the treatment of uterine tumours upon the same principles that it is resorted to for ovariotomy. Against such practice M. Boinet strongly protests, it being, in his opinion, a very dangerous procedure that often proves fatal, the adoption of which as a regular operation is by no means justified by the occurrence of a few successful cases. It should be always rejected when the tumour is not

pediculated, and especially when it involves the partial or entire removal of the uterus. M. Demarquay enters upon an elaborate and impartial examination of the cases and statistics that have been adduced on either side, and, although himself one of the boldest of surgeons, agrees with M. Boinet in denouncing the operation. He admitted, however, the justice of a remark made by M. Giraldès, that the statistics quoted are made up of cases so diverse in their nature and in the extent of the lesions produced, that they cannot be safely employed for the definite appreciation of the operation; and M. Richet, who formed with M. Demarquay the committee to which the cases and papers had been referred, is not quite so positive in the matter as his colleague. He cautioned the Academy against pronouncing any summary condemnation of an operation which, at present, is feared as ovariotomy once was; but which, like it, may yet enter into the regular domain of surgery, in spite of academical reprobation. Finally, it was resolved that the subject should be submitted to a full discussion as soon as the question of septicæmia, now occupying the Academy, can be disposed of. This probably will not be very soon, as much of the material of the discussion on pyæmia, amidst which the Academy was so long entangled, seems undergoing the process of reproduction. The patience of that learned body is worthy of all admiration, as we sincerely hope it is beyond all imitation.

The *Revue des Deux Mondes* of November 1 contains an article from the pen of M. Maxime Du Camp on the Lunatic Asylums of Paris, written, as those which have preceded it, with great descriptive power. He states that the accommodation furnished by these is utterly insufficient. Among the magnificent projects of Baron Haussman which have been nipped by the late events was the construction of ten lunatic asylums, at a cost of 70,000,000 fr., in and around Paris, each capable of containing 600 patients. One of these was to be devoted to clinical instruction, and another for the reception of convalescents prior to their being restored to their homes. Of these only three have been completed—viz., Sainte-Anne, Ville-Evrard, and Vaucluse. These, together with Bicêtre and Salpétrière, contained on December 31, 1871, 2237 patients. Charenton (where a charge is made of from 900 fr. to 1500 fr.) accommodates 503 inmates; and there are 523 others in the twelve private asylums which exist at Paris. But not less than 7115 lunatics had to be provided for. These consisted of 2935 males and 4180 females,—a preponderance of females, M. Du Camp remarks, not confirmatory of the supposed mischievous influence of tobacco in this direction. The Assistance Publique, to accommodate the remaining 3852 lunatics, has therefore to enter into contracts with thirty-four provincial asylums,—a procedure attended with the great disadvantage of removing them to a distance from their friends, and thus encouraging that forgetfulness which, under any circumstances, too readily takes place.

M. Du Camp dwells upon the utter insufficiency of the medical attendance provided for lunatics in Paris. In the five municipal asylums, containing 3920 patients, there are only fifteen medical officers, and of these only eight are residents. He says that he has visited asylums in many countries, and that the *beau ideal* of such an institution is the establishment at Illenau, founded in 1837 by Dr. Roller, and still conducted by him with great success. Certainly if abundant attendance is to secure this it ought to be obtained, as for the 420 patients there are 150 attendants and servants and seven resident physicians. This of course is a proportion never likely to be realised in ordinary asylums. M. Du Camp is also rather a severe critic on the asylum doctors themselves. Springing as they have done, he says, from the school of Esquirol, who, a full believer in the efficacy of asylum management, knew nothing about Medicine, they are a race of medical sceptics. They will enter into the most philosophical discussions concerning the varieties of insanity and its diagnosis, but they entirely ignore all medical treatment beyond that which is hydro-therapeutical. He hopes for better things when the pathological anatomy of insanity has been more investigated, but which has been far more cultivated than he has any idea of; and, like a good Frenchman, he feels sure that the microscope, wielded as it is in the hands of M. Robin, must some time or other throw light on the minuter shades of cerebral pathology.

One disgrace to French civilisation, it is to be hoped, the publication of this paper by M. Du Camp will be the means of speedily abolishing. He states that the criminal lunatics, who are brought to Bicêtre from the prisons, having exhibited insanity since their conviction, are kept confined in cages with iron bars in the Jardin des Plantes, and are fed exactly like animals through these bars. This is something so revolting that, told upon less authority, it would simply be incredible. He also observes that the French lunacy laws are defective in containing no provision for the detention of criminal lunatics after recovery or apparent recovery. The consequence is that, set at liberty, they often again commit violent actions. The present lunacy law of 1838 is about to undergo revision, probably in the present session. Unfortunately, this will not be in a direction calculated to give more security to the public, but in obedience to a popular clamour produced by alleged illegal confinement, and stimulated by sensational writers, although declared by those who have the best opportunity of knowing to be quite unfounded in fact.

THE DRUITT TESTIMONIAL FUND.

The names of Drs. John Ogle, Gream, and Porter (Dublin), and Messrs. Burney Yeo and Clover, have been added to the General Committee, and that of Dr. Peregrine to the Sub-Committee.

The name of Mr. John Wood was inadvertently omitted from the list of those who were present at the preliminary meeting.

Subscriptions may be sent to the Treasurer, Mr. H. Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. Norton, 6, Wimpole-street; or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-street, Regent-street. Subscriptions will be acknowledged weekly in one or more of the medical papers.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions up to Wednesday, the 13th inst:—

	£	s.	d.
Sir James Paget	10	10	0
Miss C. W. Edmonds	10	10	0
Dr. Peregrine	10	10	0
Dr. A. Farre	10	10	0
Dr. Quain	10	10	0
Dr. Gream	10	10	0
Mr. Prescott Hewett	10	10	0
Mr. Walton	10	10	0
Mr. Churchill	10	10	0
Dr. Webb	5	5	0
Dr. Laycock (Edinburgh)	5	5	0
Dr. Duncan (Edinburgh)	5	5	0
Mr. Lester (Edinburgh)	5	5	0
Miss H. M. Edmonds	5	5	0
Dr. Forbes Winslow	5	5	0
Dr. Burney Yeo	5	5	0
Mr. Clover	5	5	0
Mr. Squire	5	5	0
Mr. Du Pasquier	2	2	0
Dr. Stephen Ward	2	2	0
Dr. E. Sheppard	2	2	0
Dr. Porter (Dublin)	2	2	0
Mr. Fayrer	2	2	0
Mr. Dixon	2	2	0
Mr. Tegart	2	2	0
Dr. Cotton	1	1	0
Dr. Boggs (Paris)	1	1	0
Dr. Bishop (Paris)	1	1	0
Mr. Gay	1	1	0

DISEASE AND MORTALITY AT HOME AND ABROAD.

Four deaths occurred last week in East London from small-pox.——Dr. Griffiths, Medical Officer for Clerkenwell, reported last week that the deaths in the district for the week ending the 2nd inst. were only 14, the average being 29; hence the mortality was less than half the average. ——There has been a renewed outbreak of small-pox at Attercliffe, Sheffield; two deaths occurred last week, and no less than fourteen cases were reported in Dolphin-street alone.——The *Journal of the*

Society of Arts states that the mortality accounts show a large increase in the number of deaths in Paris, the return for the week ending September 20 giving 875, against 807 in the previous week. The comparative returns for the same week give the following results per 1000:—London, 19 deaths; Turin, 22; Paris, 24; Brussels, 27; Vienna, 30; Berlin, 33; Florence, 34; and Rome, 42.——By an order of the health authorities at Lisbon, dated October 30, the port of Ceara, which was considered as suspected of yellow fever, is declared free from the disease from October 21, and the port of Aracati is to be closed, as suspected of the same disease, from the same date.——According to the *Official Medical Gazette* of St. Petersburg, the cholera epidemic appeared in fifty-two governments, two provinces, and one district; 208,530 persons were attacked, 80,388 of whom died. This year's returns will hardly be more favourable.——1181 deaths were registered in London last week; this shows no less than 369 below the average. Small-pox caused 15 deaths, against 6 and 14 in the two previous weeks. London has probably never been so free from the prevalence of zymotic disease as it is now.—— In Callao small-pox is fast assuming an epidemic form.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

No. XXI.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

THE WESTMINSTER HOSPITAL THIRTY YEARS AGO.

Scenes in the Board-room—Quarrels, Lay and Clerical—Mr. Hale Thomson on his Trial for "Ignorance and Incompetency"—Strange Evidence—Sketch of Mr. Hale Thomson.

Some twenty-five or thirty years since the board-room of the Westminster Hospital was the arena of frequent contentions, which were usually carried on with great bitterness and acrimony. The medical staff consisted of two antagonistic parties, each party having its clerical and lay adherents amongst the governors of the Hospital. Mr. Hale Thomson was the moving spirit of one medical clique; the other was headed by Mr. Guthrie. The clerical disputants were officered by one of the Canons of Westminster and a neighbouring incumbent. The opposing clerical party were headed by two popular Nonconformist preachers. The laity was divided in a similar manner. Thomson, through family influence, had the control of what was called the "old Westminster party." This party was numerically the larger, and in all questions was usually in the majority. Nothing could be more remarkable than the composition of these two parties. Stripped of all extraneous matter, the real question at stake in most instances was the election or non-election of certain gentlemen to the medical offices in the institution. Mr. Hale Thomson had succeeded by the aid of his party in obtaining the office of Surgeon, much to the annoyance of some of his colleagues, inasmuch as the late retirement of Sir Anthony Carlisle was thought to have been brought about by certain intrigues of that gentleman. However this may be, Mr. Hale Thomson(a) was decidedly unpopular with his medical brethren and the students, and he had made himself personally disagreeable to the chairman of the governors and to other influential persons. For a long time there had been brooding a spirit of chronic discontent, and it required no great powers of observation to foresee that a crisis was at hand, and that some effort would be made to injure or even depose Mr. Thomson. I had been, at the time of the occurrence which is about to be described, a governor of the hospital for some years, and had served one year on the House Committee. I made myself a governor in consequence of some circumstances which took place in reference to the retirement of Sir Anthony Carlisle, which will form a separate chapter in these "Recollections." I was long enough in office to see that intrigue was the order of the day on all occasions, and that everything was regarded as fair in a "war" which had for its object the injury of the foe and the exaltation of self. The scenes which constantly took place at the weekly board were often of a character to surprise and annoy me, particularly as some of the fiercest combatants were clergymen either of the Church or of Dissent. I recollect on one occasion giving mortal offence to some of the gentlemen of the Abbey, by venturing an opinion that the Hospital must have been built immediately over the old Westminster cock-pit, as I could not understand the pugnacity and fighting proclivities of my fellow committeemen on any other ground. As I have said, Mr. Thomson had become remarkably unpopular both with the students and his colleagues, with perhaps a single exception, and he seemed to hurl defiance against them on all occasions. So isolated was he that I recollect on one occasion he proposed to perform lithotomy on a man who had a stone or some foreign body in his bladder, and whether his colleagues declined to assist him in his diagnosis, or whether he would not ask them to do so, he called in Mr. Liston to sanction the operative procedure. I rode down with Mr. Liston on this occasion, and it was decided that some foreign body was in the bladder. Mr. Thomson operated, certainly with considerable skill, and, if I remember rightly, with success.

One afternoon, just upon thirty years since, Mr. Hale Thomson called at my house and said that he required my assistance in a matter of vital importance to himself. I soon ascertained that the cloud had burst, and that he was about to become the object of an inquiry as to his competency as Surgeon to the Hospital. A charge had been laid before the House Committee against him in general terms, but sufficient to make it necessary for him to defend himself or resign his post. The charge was brought against him by most of his colleagues and one or more surgeons connected indirectly with the Hospital, and in so many words accused him of "ignorance and incompetency." The charges, I said, were vague; or, rather, no *distinct* charges were made. When he told me all this, and asked me to act as his assessor, in conjunction with Mr. D. O. Edwards, who had been formerly, for many years, Resident Surgeon of the Hospital, I excused myself on the score of my youth and inexperience in matters of the kind. However, on a subsequent visit which he made me with Mr. Edwards, I accepted the post, on condition that Edwards did the heavy part, and was at my side to assist me with his vast knowledge and his ready suggestions. Of course, I concluded, when I agreed to act, that the bill of indictment would be furnished to us; but in vain we applied for it, and we entered the board-room in perfect ignorance of the charges we were called upon to answer! Anything more injurious or unjustifiable it is impossible to conceive—not even the issuing of "general warrants" by a tyrannical Government, which proceeding was so successfully denounced by John Wilkes in the last century. Had the prosecution shown more knowledge of human nature, and the tribunal more knowledge of the laws of evidence, the "trial" might have had a very different result, and have ended in a triumph instead of a defeat of Thomson's enemies. The "court" consisted of the then Treasurer of the Hospital, the Hon. Pleydell Bouverie, one

(a) Thomson was, in some respects, a remarkable man. He had come into a fortune somewhat early in life, had married the daughter of the Treasurer of the Westminster Hospital, and through his influence had obtained the post of Assistant-Surgeon, and afterwards of Surgeon, to the institution. He had good natural abilities, unflinching courage, a striking face, and a manly bearing. He was generous, impetuous, rash, and imperious; a staunch friend, but a bitter enemy. He was what Johnson called "a good hater." But though not what is strictly called "a man of pleasure," he was anything but a man of business. He had never worked either as a student or as a practitioner, and consequently was anything but a well-informed surgeon, and certainly not equal to the position he held as Surgeon to the Westminster Hospital; but he retained his position by the mere force of his self-esteem and indomitable pluck. I have spoken before of his courage, and it may not be out of place here to relate an anecdote in illustration of this fact. Guthrie, to whom Thomson in early life was very much attached, had a serious quarrel with Sir Charles Forbes, who, like Guthrie, was a retired military surgeon. Forbes challenged Guthrie, but he declined the challenge. Thomson, however, offered to "go out" as his proxy, and actually did so. Shots were exchanged, but no harm was done, and Sir Charles declared that his "honour had been satisfied." For many years Thomson was facetiously called "bullet-proof Thomson." He maintained the same chivalrous bearing to the end, and was never long "cowed" by any troubles or dangers. He unfortunately became mixed up with a speculation which consisted of working an invention for silvering glass. He went into the business with his usual ardour and spirit, but it proved a failure, and it is supposed he sank nearly £60,000 in the venture. At all events, afterwards he was a broken man, so far as "circumstances" were concerned; but he retained his good spirits, his cheerful countenance, and his erect and manly bearing. He was found dead in his bed in Clarges-street, Piccadilly, having taken, apparently, an overdose of chloroform, which he was in the habit of taking to relieve pain. I knew him well and intimately for many years, and, though quite cognisant of his faults, I was also familiar with his better qualities. He was sadly out of place in our profession, for which he had no single qualification, except what Sir Astley Cooper says should be one—"a lion's heart." He would have made a first-class cavalry officer, and, if he had had to fight, not a braver man would have been found.

or two lawyers, and seven or eight laymen. We were unfortunate in our chairman, for, though a man of the highest honour and integrity, and a strict disciplinarian, he was self-willed, obstinate, and somewhat narrow-minded. With the utmost desire to conduct the proceedings justly, he so far strained the point as might have inflicted a grievous injustice and a permanent injury on the defendant. The prosecution was conducted by Mr. Pennell and by another surgeon; the defence by Mr. Edwards and myself. As soon as the court was opened, I rose to demand, on the part of the defendant, to be made acquainted with the particular charges against him. I was informed that I could not have them; that, as then understood, the prosecutors had not even given them to the judges! I protested against the withholding of the information I required, and only consented to proceed in the matter under that protest. I moreover insisted that the strictest "rules of evidence" should be observed on the trial. As we should probably have to rely mainly on our cross-examinations to elicit the truth, I requested that no new matter should be introduced in the re-examination, and if there was, that I might have the right of a second cross-examination on the said new matter. This was promised us, but, unfortunately, was not carried out.

We were completely taken by surprise when the first witness was called to prove mistakes which Mr. Thomson had made many years before, when he lectured on anatomy. Many instances were adduced in point; it is only necessary to allude to two of them—one somewhat ludicrous: his mistaking the last division of the os coccygis for the first phalanx of the thumb; the other of a graver nature: his demonstration of one of the principal veins for an artery. The cross-examination of the witnesses to these and similar statements, which we were not in a position to contradict, was not, however, without its results. I elicited from the witnesses that the greatest industry had been exerted by the prosecutors to obtain evidence against the defendant for a long period before the inquiry had commenced. I complained of the hardship to Mr. Thomson of raking up such a kind of evidence at so long a period after the alleged mistakes had been made. This hardship was felt still more strongly, inasmuch as the judgment and knowledge of junior students were placed in antagonism to those of a teacher who, whatever his shortcomings, could scarcely be supposed to be so entirely ignorant of anatomy as they wished to make out. The effect, however, of these statements in question upon the Committee were evidently adverse to Mr. Thomson. Unfortunately, we could not call upon him to contradict the statements which had been made against him. He declared to myself and my colleague, Mr. Edwards, that the mistakes were not his, but those of the witnesses. Of course we could not bring in this contradiction as evidence, and I confess that the first three days' proceedings impressed me with the conviction that we were conducting a hopeless cause. After each day's proceedings, Thomson, Edwards, and myself held a council of war. Thomson was still undaunted and confident of his acquittal, and relied upon the cross-examination of any subsequent witnesses that might be brought up against him for incompetence during the period that he was Assistant-Surgeon and Surgeon to the Hospital.

(To be continued.)

REVIEWS.

La Chirurgie Militaire et les Sociétés de Secours en France et à l'Etranger. Par Leon Lefort, Professeur agrégé a la Faculté de Médecine de Paris, etc. Paris: Baillière. 1872. Pp. 400.

Military Surgery and the Aid Societies in France and Abroad. By Leon Lefort, Adjunct Professor in the Faculty of Medicine, Paris.

A carefully written pamphlet on the comparative mortality of hospitals in France and other countries, published a few years ago, will have made the name of Professor Lefort favourably known to a large number of English readers. In the present work the same author attempts a more ambitious but equally practical task—namely, the reform of the medical service of the French army.

The book consists of three distinct parts—first, a set of proposals for the improvement of the French system, based on a very full description and comparison of those in use in the Prussian, Austrian, and Italian armies (here, by the way, it may be remarked that the English army and its medical department are not even noticed by our author, except in reference to the Crimean war); secondly, a treatise on the proper functions of voluntary aid societies; and, thirdly, a narrative of the writer's experiences as Surgeon-in-Chief of the First Ambulance of the French Aid Society at Metz, and as an independent volunteer with the Army of the Loire. His title to speak on these subjects is derived from an education for the Army Medical Service, from participation as an extra military surgeon in the Italian campaign of 1859, and from his position as an observer commissioned by Government in the Schleswig-Holstein war of 1864, besides various missions to foreign countries in time of peace. The criticisms of an intelligent observer like M. Lefort, untrammelled by official bonds, have a value which entitles them to the respect not only of his own countrymen, but of others who, like ourselves, have still many improvements to make in our means of provision for great wars.

As a matter of course, our author has not written many lines before he falls foul of the Intendance, an institution whose conspicuous and melancholy failures have led to its adoption or imitation in our own Control department. But we have not yet arrived, it may be hoped, at the height of unwisdom which makes the financial officer the chief in all medical matters, whether in the management of a hospital or in the provision for a campaign. The forcible illustrations which are given in this work of the disasters incident to such a system need scarcely be quoted. Even the peremptory orders of the Emperor in Italy seem to have been of little avail to mitigate the evil. The assumption, on which the arrangement is based, that the doctor is a mere prescribing and operating machine, not fit to be trusted with responsibility or credited with common sense, is one which surely has at least outlived its date in civilised countries. As a single instance of the efficiency of the Intendance in Italy, the serving out of medicine-chests perfectly empty seems to approach very nearly the famous green-coffee exploit of our own service.

The Prussian field-hospital organisation, on which M. Lefort's recommendations for the French army are chiefly based, has for its main object the avoidance of large aggregations of patients. To this end every army corps, consisting normally of about 30,000 men, is furnished with twelve independent field hospitals, any one of which may be detached and made permanent whenever necessary, and three "sanitary detachments" of 206 persons (including two surgeons and five assistant-surgeons), and forty-one horses each. Besides these, during a battle four men per company (a company has 250 men) are told off for the duty of carrying back the wounded from the ranks to the first dressing-station, where those of the regimental surgeons who are not with the line are stationed, in conjunction with the "sanitary detachment." Each field hospital has fifty-four persons, including two surgeons and three assistant-surgeons, with twenty-seven horses, and is calculated to take charge of 200 sick or wounded men—in all, about 8 per cent. of the corps. The chief medical officer has complete control of the field hospital, and its efficiency, as was shown in the late war, depends entirely upon his skill and power of organisation. The "detachments" are commanded by their own officers. Thus every army corps has 1266 persons attached to it, besides the regimental medical staff and a reserve consisting of 107 persons, whose sole duty it is to attend to the sick and wounded. The statement that 60,000 men were employed in these duties by the Germans in the late war is thus rendered in some degree intelligible.

The hospitals of the second line, called "war hospitals," are established as occasion may require in the rear of armies. Those of the third line, or "reserve hospitals," are in towns within the frontier, away from the scene of active war. The "*Etappen*" system establishes a complete chain of transport between these and the field hospitals, and provides resting-places, shelter, and medical attendance at all principal halting-places. The "*Etappen bureaux*" are of course placed wherever possible at the railway-stations, so that as soon as a railway has been reached there need be no difficulty in passing the sick soldier back from hospital to hospital till he is deposited in the home district from which his regiment is recruited. If he is well enough to travel sitting, he can be sent by any train; if not, he must be conveyed in one of the hospital trains which the Prussian service has adopted from the American—an example which has been lost (M. Lefort remarks) upon France, and we may add, upon England. The well-known form of carriage, with a passage along the middle, and litters hung in

two tiers on each side by indiarubber rings, is familiar to everybody by means of pictures; but the reality has never been seen in this country or in France, except when the Germans used it to fetch away their wounded, or when, at the end of the war, they brought the sick and wounded French prisoners home to France in their own hospital trains. M. Lefort suggests a steel spiral spring instead of the indiarubber as a means of suspension; but in practice this is not found to answer, as its movements are far too jerky for the purpose. Indiarubber, it is true, has the defect of want of durability. Most likely a thin steel spring shaped like a carriage-spring will be found the best solution of the difficulty. But it is in the link between field hospitals and the railways that the chain is weak. M. Lefort, though he describes the agonies of men with gunshot fractures a few days old conveyed on straw in springless country waggons, does not suggest a remedy; but there can be no doubt that any contrivance which would transfer a great number of gunshot fractures from the non-transportable class to the transportable would not only save a great deal of suffering, but would be of great service, in a military point of view, in lessening the amount of material required to be carried for the field hospitals. None of the ambulance waggons now in use fulfil this condition.

In contrast with the Prussian system, which provides one medical officer to every 190 men, the French has only one for every 382 men, and has no reserves whatever in rear of the army, except what the Intendance, with long delays and many difficulties, may improvise. There is an "*ambulance divisionnaire*," or principal dressing and operating station for each division, whence the wounded are sent back to the corps hospital; but, as when the army moves this has to move with it, it is necessary to use the "deplorable resource" of evacuations. The sick and wounded are thus thrown upon neighbouring towns, or if at a seaport sent off by shiploads to France. It is impossible here to follow our author into details, but we may say that his proposals for remedying these and other defects in the French service seem eminently practical and well considered. A French army medical officer, with the fear of the Intendance (his official superiors) before his eyes, would not dare to make them.

Bad, however, as is the administration of the Intendance, there is a further depth to be reached; and this, in M. Lefort's opinion, has been actually attained by the Red Cross Society of Paris. The Intendance, from its association with armies, has at least some knowledge of their wants. The Council of the Red Cross Society, on the other hand, composed of counts and rich bankers craving notoriety, strangers equally to military and to medical affairs, presented the *ne plus ultra* of incompetence:— . . "l'Intendance civile volontaire, représentée par la Société de Secours aux Blessés, devaient montrer ce que peut l'incompétence et l'imprévoyance." Various instances are given in support of this severe condemnation, and appear fully to justify it. Nothing was more likely than that a society so constituted should fail to accomplish its object. M. Lefort declares that they have still to account for a balance of nearly three and a half millions of francs—money subscribed for the sufferers in the late war—and maintains that this sum, if it exists, ought to be distributed to the widows and orphans of the fallen, instead of being kept for a committee and its officials to play with. It may be remembered that the English Red Cross Society admitted itself to have kept back a balance of £75,000 at the end of the war.

The first ambulance of the Society, of which our author was placed in charge after being deposed by a *coup d'état* of the Committee from his post of Chief Surgeon of the Ambulances, went to Nancy, and thence to Metz, where it remained till the capitulation; after which, although the Prussians had given it a free pass to rejoin the French armies, it was dispersed and its materials sold for trifling prices by agents of the Society, in spite of M. Lefort's protests. The narrative of its doings during the great battles and the siege is interesting, though scarcely very encouraging; and we cannot but deplore the lamentable accident which befel M. Good, formerly surgeon in the Confederate army, who was M. Lefort's constant companion in his rides to the Prussian lines. M. Good was fired at by the French outposts, and was thrown by his frightened horse, the result being unfortunately a persistent paraplegia. Accident and sickness have not spared the volunteer contingent in this war more than they have in other cases.

We have been able to give but a slight sketch of M. Lefort's work. The book will possess much interest for all who are conversant with the subject. Probably in a later edition the arrangement may be made a little more systematic with advantage.

Elementary Treatise on Natural Philosophy. By A. Privat Deschanel, formerly Professor of Physics in the Lycée Louis le Grand, etc. Translated and edited, with extensive additions, by J. D. Everett, M.A., D.C.L., etc., Professor of Natural Philosophy in the Queen's College, Belfast. Part IV.—Sound and Light. London: Blackie and Son. Pp. 786 to 1050.

Professor Everett has laid teachers and pupils of natural philosophy under great obligations by translating and publishing in the way he has done Deschanel's work. As a treatise on physics it is singularly clear, and seems to occupy the golden mean of neither being too mathematical nor too little so. It may thus, in the hands of a judicious teacher, be used for almost any class of pupils. The engravings with which it is amply adorned are exceedingly beautiful, and are really more telling than those in any other treatise of the kind which we now possess. Professor Everett is to be congratulated on the close of his labours and on their results. His own additions to the book are most judicious, and add largely to its value: though not so extensive in this volume as in the preceding one, they are marked by the same care and complete understanding of the subject. The fact that the book is divided into four parts, any one of which may be studied separately, is a very great convenience for those who may wish to direct attention to one department only.

A Year-book of Therapeutics, Pharmacy, and Allied Sciences. Edited by Horatio C. Wood, jun., M.D., Professor of Medical Botany in the University of Pennsylvania, etc. New York: Wood and Co. London: Sampson, Low, and Co. Pp. 360.

Like all such collections, this book is of very unequal value, but the name of the editor is guarantee that his work is well done. Dr. Wood is a clever young physician for whom we have entertained sincere respect ever since he dealt so completely with Salisbury's supposed discoveries regarding malaria; and his essay on "Heat-Stroke," recently reviewed in these columns, shows he is capable of something more. Some of the more noteworthy things to be found in this volume are various papers on reducing bodily heat; Bumstead on the treatment of syphilis; an estimate by the editor of the value of amyl nitrite in angina pectoris; various papers on puncturing the intestine, extract of meat, digitalis, aconite, etc., etc.

The Treatment of Syphilis with Subcutaneous Sublimate Injections. By Dr. George Lewin, Surgeon-in-Chief in the Syphilitic Wards of the Charité Hospital, Berlin. Translated by Carl Proegler, M.D., and E. H. Gale, M.D. Philadelphia: Lindsay and Blakiston. Pp. 249.

This translation of the German surgeon's work may serve to bring his facts more definitely under notice, but his doctrines have, we think, been fairly tried and condemned. We have seen patients on whom this plan has been tried, and in certain cases very ugly scars are left behind. Our object should be to cure disease *cito tuto et jucunde*; here assuredly the *jucunde* is wanting. However, we advise our readers to judge for themselves. The book is well worth reading.

NEW BOOKS, WITH SHORT CRITIQUES.

Elements of Chemistry, Theoretical and Practical. By William Allen Miller, M.D., etc., late Professor of Chemistry in King's College, London. Revised by Herbert McLeod, F.C.S., Professor of Experimental Science, Indian Civil Engineering College. Part I.—Chemical Physics. Fifth Edition. London: Longmans.

*** Miller's "Elements of Chemistry" have passed so steadily and rapidly through edition after edition, that each successive volume, in considerable measure, occupied the time of the lamented author. His death entailed the necessity of finding one able and willing to undertake like labours for the future; and it would seem that his mantle has fallen on no unworthy successor. This volume has long been a favourite text-book with those desirous of obtaining an adequate knowledge of chemical physics, who might not seek to pursue the subjects dealt with in the second and third volumes in the work,—in so much that they may be said to have commanded separate audiences. This volume is singularly clear in style, and at the same time very accurate. If there is anything connected with the work which lacks improvement it is the woodcuts. These look as if the blocks were badly worn and wanted renovation; if so, it would be better to procure new ones of a better style. But even as it stands the book is an admirable one, and well befits its career of usefulness.

FOREIGN AND COLONIAL CORRESPONDENCE.

AUSTRALIA.

MELBOURNE, September 10.

THE GOVERNMENT AND THE MEDICAL BOARD—PROPOSED MEDICAL ACT.

I THINK I mentioned in a previous letter that the Duffy Government, by way of a parting shot, had appointed as members of the Medical Board Dr. Lloyd and Dr. McCarthy, two gentlemen who did not possess the slightest claim whatever to this recognition. I mentioned also, I think, that five other members of the Board—namely, Dr. Howitt, Dr. Youl, Dr. Barker, Dr. Motherwell, and Mr. Thomson—had resigned, and that the present Government had appointed a Board, consisting of Professor Halford, Dr. James Robertson, and the Hon. Dr. Hope, to examine and report as to the reasons of such resignation. The report of this Board has not been published; but as the Government "removed" the whole of the existing Board, in accordance with the provisions of the Medical Act, it is to be supposed that this was the course recommended. It was generally expected, however, that the reconstitution of the Board would, in fact, be its re-formation, less Dr. Lloyd and Dr. McCarthy; that, in fact, as Drs. Lloyd and McCarthy were *de trop*, they would in this manner be dropped, and their places—or, at least, one of their places—be supplied. Some surprise, however, was felt when it was made known that, with the exception of Dr. McCrea, the chief medical officer, a new Board would be appointed. This being the case, the five members who had resigned very naturally felt themselves aggrieved at having been virtually dismissed, after having tendered their resignations. The fact is, however, the Government was in mortal dread of being called to account by some of the friends of Drs. Lloyd and McCarthy, who, though professionally of exceedingly small moment, have a good deal of political influence. In stress of fear, therefore, the Chief Secretary dismissed them all, so as to be able to say he treated them all alike, and that, therefore, Drs. Lloyd and McCarthy had no cause for grumbling. As a matter of policy, perhaps, the Government is right; but it is felt that some hardship has been inflicted upon the five gentlemen who really sacrificed themselves in order that a principle affecting the whole Profession might be asserted. The world is proverbially ungrateful; and possibly it will not be too vividly remembered that the credit of the Profession has been upheld by the protest practically recorded against the thrusting in of Drs. Lloyd and McCarthy where they were not needed. But it is really an instance where the utmost gratitude is due; for if the eligibility of personal worth and position is not to be recognised in selecting those who fill these offices of State, they had better at once be made the rewards of those solicitous adventurers who make up in importunity what they lack in scientific skill or honourable qualities. The Medical Board does not, indeed, stand in the same relation to the Profession here that the Medical Council does in England to the Profession of Great Britain. But it is nevertheless the only medical body in association with the State; and therefore it is but just that it be composed of gentlemen who have some reasonable regard for the decencies of the brotherhood they belong to.

As a matter of course there is lamentation and objurgation in the small section to which the eliminated members belong; and if their malevolent organ (the *Medical Gazette*) had not died—as all malevolent organs do—a twelvemonth ago, there would have been much ink-shedding on the subject. As it is they can only lament in the daily journals, some of which have been unwise enough to sympathise with them and take their part. The general Profession, however, is well satisfied, and the common effect cannot but be for good. The names of those who now compose the Board have not been gazetted yet, but they are said to be Dr. Tracy, Dr. Brownless, Dr. Martin, Mr. Gillbee, Mr. Garrard, and Dr. Wilkie. It is impossible to take exception to them on the score of position and respectability, and it must be confessed that, although some hardship has been experienced by their five predecessors, the principle of legitimate succession has been well maintained.

The Medical Society, however, at the instance of Mr. T. M. Girdlestone, has taken up the subject of the amended Medical Bill, which was drafted and ready for introduction into the Assembly more than two years ago. The hon. secretary has been instructed to write to the Chief Secretary, calling his attention to the subject. It is contended that until the principle of representation is fully carried out the Profession will always be likely to see the Medical Board swamped by the introduction into it of ineligible persons—of which we have had but too lately so signal an example. It is questionable if the Government will respond to the invitation to take up the matter this session, but it will not be for lack of being besought to do so. As the subject of medical reform is being warmly taken up in New South Wales, a spirit of emulation may perhaps help to stimulate our own Government to respond to the request now made to give us a statute something more worthy of the name than the Medical Act of 1862, which, never a complete measure, is now simply effete and useless.

PROVINCIAL CORRESPONDENCE.

IRELAND.

DUBLIN, November 12.

OPENING OF THE MEDICAL SESSION.

DR. P. C. SMYLEY opened the 120th session of the Meath Hospital on November 4. Dr. Stokes, senior Physician to the Hospital, presided; and among the visitors present were Dr. F. Kirkpatrick, President of the Royal College of Surgeons; Sir John Gray, M.P.; and the Hon. David Plunket, M.P.

The lecturer feelingly alluded to the death of Robert St. John Mayne, the junior Surgeon to the Hospital, who fell a victim to small-pox last December. He then went on to say—"Had the Meath Hospital no history the 'introductory' might be given up, as it had been elsewhere. But the Meath has memories of more than a hundred years. A noble roll of heroes, who have graven their names on the scroll of fame—the names of Graves and Stokes, Cramptou and Porter, and many others—will be handed down from one generation to another. The introductory brings old Meath men together,—men from all parts of the world; for wherever you may go, you will find the pupils of this Hospital holding honourable and distinguished positions; and whatever their position they are still proud of the old Meath."

Dr. Smyley proceeded to urge the importance to the medical man, of a sound preliminary education. The study of the profession of Medicine should be earnest, should be real. "All these various examinations and tests are, after all, only very inadequate protections for the public. Your object should be more noble and your aim higher than merely passing an examination. For your own happiness in your daily life you should be well and fully educated. You cannot, like the lawyer, consult your authorities when called upon to act. You must be ready to act at once; for in Medicine and Surgery there is no place for the old precept of 'Try again.' All your senses must be educated. You must learn how to see as well as what to see. Your senses of touch and smell are equally important. There are no trifles in Medicine or in Surgery."

Having passed in review the various modern improvements in the art and practice of Medicine and Surgery, Dr. Smyley continued—"To the younger student I would say—'Do not waste your first year. We have prizes here for first year's men, and do not be prevented trying for them by other men appearing more intelligent or clever than you feel yourselves to be. None of you know what you can do until you try.' I should like to see all the first year's men going in for the prizes to try their strength against each other. I would urge you to be thoughtful of what you say, and how you say it. In the wards of the hospital you will be brought in contact with your suffering fellow-creatures; a thoughtless word or the inconsiderate laugh often leaves a wound in the sick man's heart no after kindness can atone for. As Hood says—

'The wounds I might have heal'd,
The human sorrows and smart!
And yet it never was in my soul
To play so ill a part.
But evil is wrought by want of thought,
As well as want of heart.'

To the senior student I would say, You have a grand future before you if you only take advantage of it. Even country practice, so much decried by some, has its charms in spite of the rose-coloured tickets. The country practitioners of Ireland are a credit to any country, and the only fault I have with them is that they are too clever and well educated now, and do not send up their operation cases to Dublin as they used to do. The services open a fine career to a young man, though pro-

motion may be slow. It is a very good thing to get the liberal pay of 10s. a day at once after passing an examination; but it is always well to look to the future, and calculate whether it would not be better to run the risks of private practice than the certainty of 15s. a day after fifteen years' service, and most likely a big liver, and too often a broken heart to boot. If he survives for twenty to twenty-five years he may become a full surgeon, and inspectors-general do exist. In the navy and Indian service I understand that promotion is more rapid. But, to return to general practice, hard work and small pay must always follow an over-supply, and when there are twenty to thirty applicants for a dispensary of £70 a year, you can hardly expect ratepayers and guardians to give more. Dr. Stokes long ago warned the Profession what the result would be—first, the educated gentleman would be ground down by the ignorant poor-law guardian, and, in time, the demand for men who could submit to the grinding process would be supplied, and the Profession gradually be reduced to be anything but a learned profession. Happily the last part has not come true as yet. In your daily intercourse with the public do not be too vain of your newly-acquired knowledge. Alison, in his 'History of the First French Revolution,' says—'If we trace these frightful disorders to their source, we shall find them all springing from the pride of a little knowledge.' And again, 'But unfortunately the knowledge of the difficulty of the subject, and of the extensive information which it requires, is one of the last acquisitions of the human mind; none are so rash as those who are the worst qualified.' Though this is said of politics, it is equally true of Medicine. Remember you have but a small knowledge of your Profession, whether you pass your examination first or last; and when you meet your brother medical man, or are called in after him, be careful of his fame. Many a sore heart has been made by a shake of the head. You never raise yourself by putting down another. The only man who is really happy is he who stands on the shield supported by the willing shoulders of his brother in arms. In conclusion, gentlemen, whatever changes may be made from time to time in the Profession from within or from without, the educated medical man who is really in earnest will always have plenty to do in this suffering world. And, though wealth and riches may not be his portion, he has the happiness of knowing in his own heart that he is following in the steps of Him who went about doing good."

Mr. Coppinger's address at the Mater Misericordiæ Hospital, on November 4, dealt especially with the subject of the cure of disease. "As yet no science of therapeutics exists, and our most valued remedies for disease are borrowed from empiricism. The backward state of therapeutics is, indeed, more than proven by the very existence of the 'nihilism' school in Medicine. Some of my hearers may not be aware that the spirit of scepticism has so entered into our Profession that there now exists an anomalous class of physicians who believe not in physic. There is a manifest absurdity about homœopathy, with its infinite promises and its infinitesimal doses, that stamps its followers as quacks. But the man of the 'nihilism' school openly disbelieves in medicine, and uses none. He is certainly not an empiric, but neither is he a physician. Real physicians seem to be divided into two distinct classes. In the one we see the man who, by the light of our improved pathology, studies disease,—labouring, of course, to cure his patient, but directing towards treatment comparatively little of his attention. He works more for science than for his patient, and generally does more for posterity than for himself. In the other class we have him whose every effort is directed towards acquiring the perfect skill in the treatment of disease. Of the first group we have an example in Sir Charles Bell; of the second we have almost a perfect instance in the late Sir James Simpson. The obligation laid on the student to learn the manufacture of drugs was difficult to understand. Surely a man can be a soldier, and have a very thorough practical acquaintance with the use of gunpowder without knowing much about its manufacture and composition; but a medical man must be a sort of amateur druggist before he can become a qualified physician. Mr. Coppinger afterwards treated at length of the operations of skin-grafting and transfusion. The labours of an eminent Dublin surgeon had now invested the latter operation with a simplicity and safety that had already gone a great way to extend its application; and practical application is the real test of scientific truth in Medicine." In conclusion he said—"Gentlemen, I have dwelt at some length on the importance of practical curative measures, because I think this work is usually entirely neglected by the students of our hospitals. This institution contains, now, over 200 beds, occupied at all times by the poor who suffer from injury or disease. It is managed by a community of ladies, whose unselfish work is as much above praise as it is independent of it. Of the medical staff I can at least say they will certainly give you all the assistance in their power. It therefore remains with you, gentlemen, to make use of your time, for the last thing a student of the Mater Misericordiæ Hospital can lack is want of opportunity."

The session at the Ledwich School of Medicine and Surgery was formally commenced on November 2, when an introductory lecture was delivered by Professor Robert Travers, M.A., Lecturer on Forensic Medicine in the School. He directed the attention of his hearers to the objects of medical study, the necessary preliminary education required of those seeking to embrace Medicine as a profession, and the motives which should influence the members of that Profession.

Three ladies have entered their names for the winter courses of lectures and hospital practice at one of the Dublin schools. They have been received without any demonstration.

GENERAL CORRESPONDENCE.

SEA-VOYAGES IN PHTHISIS.

LETTER FROM DR. HERMANN J. JONES.

[To the Editor of the Medical Times and Gazette.]

SIR,—A belief exists to-day in the minds of many of the medical profession that phthisis pulmonalis, even in a very advanced stage, is capable of being cured by long sea-voyages, and, like other fashionable cures for incurable diseases, will no doubt have its day. These voyages entail grave suffering both to the patient and his relatives: the former dreads leaving his home and the society of those dear to him, and the latter equally grieve at his departure. The expense, too, is often a serious consideration. The following facts will tend, I think, to prove that in tubercular consumption such treatment is useless or even injurious:—

In October of last year I started for Australia in one of the best ships in the merchant service, in charge of a patient, a young man 22 years of age, suffering from phthisis, and having a large cavity in his right lung. On the morning of October 7, 1871, we left Gravesend and sailed down Channel with a fine breeze and moderate sea. My patient's first trouble commenced now—namely, inability to sleep at night, owing to the constant noise on deck. Every two or three hours the watch turn out (often in heavy sea-boots) and run up and down the deck trimming sails, etc. This dreadful noise at night was a great trouble throughout the voyage to Melbourne.

On October 9 the pilot left us, and we lost sight of Old England. From the 10th to the 14th we were in a heavy gale, confined to our berths by sea-sickness. Quite impossible to sleep during the storm owing to the noise, rolling of the ship, and sea-sickness. I may here remark that sleep on board ship in rough weather is very unrefreshing, owing to the constant movement of the body with the ship—particularly to invalids with feeble muscles. During the gale all the ports and skylights had to be closed, and we now experienced what a close and unhealthy atmosphere is found in a ship's cabin during rough weather.

On the 18th my patient was sufficiently recovered from sea-sickness to come on deck for a short time, the weather being fine and warm, thermometer 69° in the cabin. I found now that he was much weaker than when we left home.

On October 21 we passed Teneriffe; on the 24th the Cape de Verde Islands. Thermometer 83°, a mild debilitating tropical heat, which made my patient very weak.

We crossed the line on November 4; thermometer 86°. Squalls of wind and rain. Heat very oppressive; thermometer remaining about the same day and night. After sunset the deck is covered with a heavy dew. The tropical heat causes the invalid to feel dreadfully languid; he is constantly perspiring. We have found by this time that the food on board even a good ship is very inferior to that on shore. How can thirty or forty sheep crammed together in a pen on the main-deck be expected to produce good mutton? The same may be said of all the live stock.

On November 13, in latitude 28° 48′, longitude 26° 8′, we had a thick fog; thermometer 72°. My patient is now much weaker; cough increased; feverish at night. There are many other consumptive patients on board, although not under my care; and none are in the slightest degree benefited by the voyage. Of course the second-class passengers go through much greater trials in every way than the first.

On November 23 (nineteen days after crossing the Line), we find ourselves in latitude 47° 14′ South, longitude 3° 10′, with the thermometer at 50° in the cabin, and no fires; and it is no uncommon thing for outward-bound Australian ships to go as far as this below the Cape of Good Hope. We have a gale of wind, with a heavy sea and fog, and sighted two or three large icebergs. This is called escaping the much-abused English winter. From hence to within a short distance of the Australian coast, which we sighted on December 21, the weather continued cold and stormy, so that my patient could very seldom go on deck. He is very weak; much more cough and expectoration; appetite very bad. On December 24 we passed through the Heads, and sailed up the beautiful bay of Port Phillip, landing in Melbourne on December 26. Weather very hot when the hot north wind blows, being 95° or more in the shade.

My patient is now so weak that he can hardly walk; and after becoming weaker and weaker, and suffering slightly from diarrhœa, he died on January 31, 1872.

From conversation with resident Australians (doctors and others), and from the list of deaths in the *Melbourne Argus*, I found that most passenger ships from England have had deaths from phthisis at sea, or land patients of this class to die in a few weeks or months far from home and friends.

I sincerely trust that this letter may be a warning to patients suffering from true tubercular consumption, and cause them to hesitate before undertaking a voyage to the Antipodes. I returned to England *viâ* Cape Horn in May this year, and many of my fellow-passengers were disappointed invalids returning home. No doubt people suffering principally from the effects of dissipation, over-work, etc., often derive benefit, but cases of true tubercular consumption, in my opinion, never.

I am, &c., Hermann J. Jones, L.R.C.P. Lond.

53, Blenheim-crescent, W., November.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, November 5.

Mr. Hilton, F.R.C.S., in the Chair.

Mr. John Croft exhibited a patient who had a Series of Nodular Tumours along the arm from the middle of the forearm upwards along the line of the lymphatics. The patient was aged 18, and was engaged as a waiter. The hard nodules were of various sizes and were connected with hard cords. There was no history of the disease. The masses tended to increase, so the two lower were removed. Their structure was myxomatous. The wound healed slowly, and now its scar was hard in the centre.

Mr. Hulke some three or four years ago saw a similar case in the Middlesex Hospital. Here a series of tumours ran along the inside of the arm, and had existed for an indefinite time. They gradually softened down and suppurated. Here there was so much tenderness he imagined the condition one of subacute inflammation.

Mr. Cooper Forster said he had sometimes seen farcy in the horse follow such a course.

Dr. Crisp said farcy always ended fatally by giving rise to glanders.

Mr. Croft had examined the history carefully, and there was no such infection.

Dr. Duffin gave the following interesting account of a case which appeared in our journal for September 24, 1870. We then recorded a remarkable case of Perinephric Abscess that had occurred in the practice of Dr. Duffin at King's College Hospital. The diagnosis had been to a great extent founded on the position assumed by the pelvis and thigh of the patient both during progression and when seated. When the boy attempted to walk the position of the limb was very much that observed in cases of psoas abscess; but when seated he was noticed to rest only on the tuberosity of the opposite ischium, so as to relax the lumbar fold of the affected side as much as possible. The vertebræ and other bony parts of the neighbourhood were readily excluded from the diagnosis. This was further confirmed by the presence of a large quantity of pus in acid urine. After a few days the abscess pointed, and was opened by Professor Wood. The wound was subsequently dilated; a probe was passed from its base vertically downwards towards the base of the bladder. It was at the time thought possible that the probe had passed along the canal of the urethra, and that the lower end of the latter was obstructed by a calculus. The boy left the hospital much improved. He continued to attend from time to time. He never completely lost the pus in the urine, and the fistula in the loin continued to weep. Still he could resume his occupation as a printer's devil. On September 12 of the present year the patient had a severe fit of shivering, followed by vomiting. Intense pain set in in both loins, and his legs became œdematous. The ordinary signs of uræmia developed, and the lad died after a few days. The specimen was exhibited at the Pathological Society on November 5. The track of Mr. Wood's probe was probably between the ureter and the psoas muscle. The right kidney was small, and all trace of structure had vanished. The upper part of the pelvis of the organ had ulcerated away, and the pus issuing from it had bathed the back and upper part of the kidney, eating its way partly to the head of the psoas, partly to the outer edge of the quadratus lumborum. The ureter was largely dilated and thickened. Its orifice into the bladder was three lines wide. There could be very little doubt that a calculus had at some time passed down it. Mr. Cooper Forster also informed Dr. Duffin that he had removed a stone from this boy's bladder three years and a half ago. The opposite kidney presented extensive evidences of recent disease. Its pelvis was full of pus. Wedge-shaped mases of inflammatory effusion ascended through both the medulla and cortex of the organ to its surface. In adverting to the results of cases of abscess in the cellular tissue about the kidney, Dr. Duffin stated that he had now collected twenty cases in which early puncture had been performed. Of these, eighteen had been attended with a considerable modicum of success, twelve with complete recovery. He also cautioned against the danger of deferring the operation, as the matter tended to make its way between the pillars of the diaphragm into one or other pleura. Of this accident at least ten instances were on record. He finally again insisted on the diagnostic value of the position of the limb.

Mr. Hulke alluded to the case of a strong healthy young woman who presented a sinus below the crest of the ilium. This remained open, and dead bone could apparently be detected; but acute peritonitis set in, and she died. The opening passed upwards to the region of the kidney, behind which was a large abscess. This had burst, and given rise to the peritonitis.

Dr. Rasch briefly alluded to three cases he considered were instances of perinephric abscess, but in none was there any confirmatory post-mortem examination.

Mr. Hulke exhibited some Multiple Dermoid Cysts removed from a woman who had died from cancer of the uterus. As usual in such cases, all the pelvic viscera were matted together, but in the uterine appendages, probably originating in the ovaries, were a number of large cysts, containing dark fluid, hair, etc. Round these were clusters of small ones. On the surface of the liver were a number more.

Mr. Hulke also exhibited a Calculus from the Neck whose nucleus was of wood. It was taken from a woman aged 26, who had had the tumour six years. There was no projection into the mouth, as in ranula, and it had grown very slowly; sometimes it was painful and swollen. On trying to remove it, he found the mass adherent to the cornu of the hyoid bone, and in its centre was a calcareous mass having a core of wood. The calculus consisted of carbonate and phosphate of lime, as was usual in salivary calculi. No history could be got of the piece of wood reaching that spot. She attributed the tumour to injury by a snowball.

Mr. T. Nunn referred to a case where a hay-seed covered with salivary salts had been removed from an abscess at the angle of the jaw. In another case, an abscess formed in the submaxillary region, in which was a bit of grass. In both instances the foreign body had probably made its way down the salivary duct, and set up irritation.

Mr. Hulke himself referred to another case, where a piece of grass came out of an abscess in the neck.

Mr. Hulke also showed a Syphilitic Stricture of the Rectum, in which the gut exhibited a well-marked diverticulum. The patient, a woman aged 25, died after lumbar colotomy. The diverticulum ran up some way from the great gut, and was well marked. Its length was uncertain, it having been cut; but its nature was unmistakable. It was lined like the intestine in every way.

The Secretary exhibited (for Mr. Lawson Tait) a Cystic Polypus of the Uterus, which was removed by the écraseur. The cysts contained clear fluid.

Mr. T. Norton exhibited a Loose Cartilage, removed from the knee-joint. It gave rise to great pain at times, and the leg was kept in a half-bent position. It was removed by an

orifice some inches above the joint. The specimen was referred to Mr. Croft and Mr. Arnott.

Mr. Croft exhibited a specimen of what he called Chronic Herpes, or group of vesicles, removed from a nævoid growth. It had existed on the side for some time, and gave the child great pain. The vesicles were of various colours. He removed nævus and vesicles together.

Dr. Tilbury Fox suggested the growths were papillary. He did not think we ever encountered chronic herpes except it was syphilitic.

Dr. Cayley said they might be dilatations from the vessels shut up below.

Mr. Cooper Forster said he had often seen such vesicles where nævi were degenerating, as this was. They were little dilatations from the smaller bloodvessels. In one case a man had nearly bled to death by the bursting of a vesicle.

Mr. W. Tay said herpetic vessels did not collapse on puncture as these did.

The specimen was referred to the Morbid Growth Committee.

Mr. Cripps Lawrence exhibited a Cyst which projected from the anterior fontanelle of a child, which gradually enlarged and pulsated. The child died of bronchitis.

The same gentleman also exhibited a specimen showing a Peculiar Arrangement of the Funis.

MEDICAL SOCIETY OF LONDON.

Monday, October 14, 1872.

Thomas Bryant, F.R.C.S., President, in the Chair.

The President announced that new premises had been taken for the Society at Chandos-street, Cavendish-square, and, as they seemed to be everything that was desirable, he asked the support of the Fellows for the Council, who had taken a great deal of trouble to secure so desirable a place.

A vote of thanks was then proposed by Dr. Hare, seconded by Mr. Wm. Adams, and carried unanimously.

Mr. Francis Mason showed a patient upon whom he had operated about a year and a half ago for Ununited Fracture of both Bones of the Left Forearm. The patient had two years previously to the operation fallen down a flight of stairs, sustaining a severe compound fracture of the radius and the ulna. The arm was perfectly useless, and the question of amputation seriously entertained. Mr. Mason then briefly described his method of securing the fragments, which consists of transfixing them with a needle, and taking a loop of wire either simply or in a figure-of-eight form round the needle, the end of the wire and that of the needle being made to emerge from the same aperture in the skin. Mr. Mason likened the proceeding to the usual operation for hare-lip, and to one form of acupressure. By withdrawing the needle the loop of wire is necessarily released. The bones were firmly united. The patient could grasp well, and stated that she could perform her ordinary duties very satisfactorily.

The President asked whether the arm had been immovably fixed. He thought perfect union was often secured even after the lapse of years by complete fixity.

The President then brought forward two cases:—1. Eruption after taking Chloral. W. C., aged 19, was admitted into Guy's Hospital with fracture of the left great toe. While engaged rolling a heavy piece of iron along the ground on wooden rollers the iron slipped off and fell on his toe, smashing it very much; there was a good deal of bleeding. After nineteen days treatment symptoms of tetanus were noticed, and chloral hydrat. gr. xx., syrup. aurant. 5j., aquæ 5j., 4tis hora, were given. Seven days after the boy had a rubeoloid eruption, which lasted three or four days, when chloral was given up. The tetanus got worse, and a subcutaneous injection of morphia in addition to chloral was administered. The eruption had disappeared, but recurred on the readministration of the chloral. Ultimately the boy recovered. A similar eruption had been noticed in another patient at Guy's while taking chloral.

Case 2 was that of a man, aged 38, suffering from a Tumour of the Palate which had been growing for eight years. The growth of the tumour was slow, and it was thought not to be cancerous. The patient desired chloroform, but it could not be given to the full extent. Tracheotomy was then performed, and the valuable instrument (a canula) invented by Dr. Trendelenberg was inserted; this instrument prevented blood from running down the trachea. The patient recovered completely and with great rapidity. The tumour was of a fibro-plastic character.

Mr. W. Adams thought the case a very successful one. He gave some account of a similar case which is recorded in the *Transactions of the Pathological Society*. He used a gouge in the operation.

Dr. Hesse, of Leipzig, said he had seen Dr. Trendelenburg's instrument used in Berlin.

Mr. W. McCormac said the instrument had been used in Germany, and quoted the statement recently made to him by Dr. Schönburg, of Königsberg, that this instrument was a great comfort to surgeons operating upon the mouth or jaws. He asked what extra risk was caused by the operation of tracheotomy. He thought it must be great to counterbalance its great advantages.

Dr. Veiel, of Stuttgard, had seen this instrument used last winter in Berlin by Langenbeck for an operation on the tongue. Dr. Langenbeck had stated at a congress of German surgeons that he thought the operation of tracheotomy almost devoid of risk.

The President thought that the operation of tracheotomy should not be dissociated from the disease necessitating it. In this case it was rather to be regarded as a simple incision.

Dr. Wiltshire brought forward a case of so-called Uterine Hydatids, the true nature of which, he explained, consisted of moniliform enlargements of the villi of an imperfectly developed chorion or placenta. He had seen the case in consultation with Dr. Ayling. The patient was in a typhoid condition, with a quick pulse and a high temperature. There had been great loss of blood, and offensive discharge for weeks. More than a quart of diseased chorion villi were removed, and the patient made a good recovery. The discharge was not due to a parasite, but to a degeneration of chorion villi, a good name for which was vesicular mole. The characters of such growths were explained, and the importance of perfect removal dwelt on. The significance of hardening in uterine tumours was pointed out.

Dr. Greenhalgh agreed with Dr. Wiltshire's observations, and said he had only seen five cases. They were of a very puzzling character, and the name proposed by Sir James Paget was appropriate—viz., "vesicular mole." He quite concurred with Dr. Wiltshire that hardening of the tumour was very significant of its uterine character.

Mr. Peter Marshall thought great credit was due to Dr. Wiltshire for the diagnosis of this case, and said he had noticed a rancid taste in the mouth in two cases he had seen.

The President mentioned a case of true hydatids of the uterus, which was secondary to cystic disease of the breast, and in which he saw true hydatids pass per vaginam.

Dr. Godson and Dr. Bloxam also stated their experience.

Sections of Stones which he had removed were shown by Mr. Bryant. One showed a stone within a stone; the others, four in number, co-existed in a man's bladder without facetting or having any evidence of friction.

Dr. Thudichum suggested that the calculi were in active process of formation, and therefore no time had been afforded for facetting or smoothing.

OBITUARY.

JOHN HUMPHREYS,

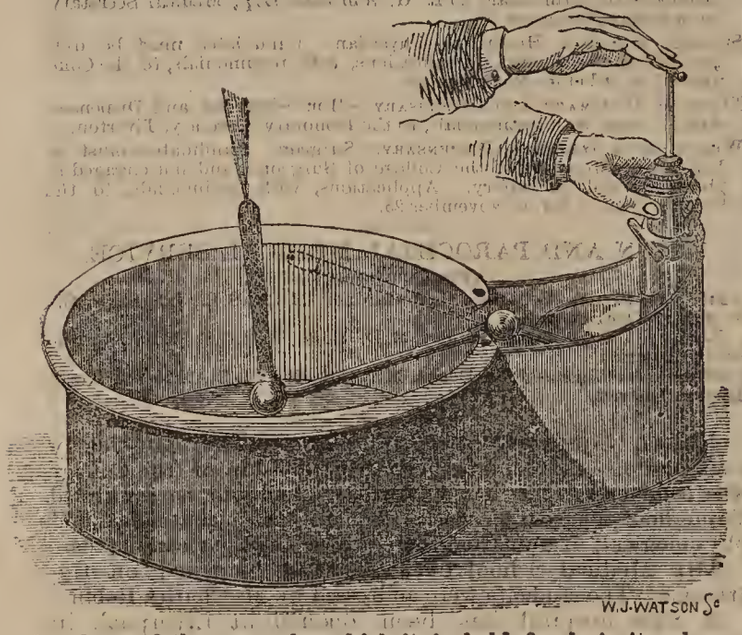
Of Southampton-row, Cheltenham, a Member of the Royal College of Surgeons, a Licentiate of the Apothecaries' Company, and a distinguished member of the Masonic lodge at Gloucester, departed this life on the 24th ult. at the early age of 40 years. He was a son of Thomas Humphreys, a solicitor, of East India Chambers, Leadenhall-street, who has been many years in practice. He was brought up at Charing-cross Hospital, of which he was Resident House-Surgeon for several years, and to which institution he was much attached. On leaving the Hospital, he obtained the appointment of Resident Medical Officer of the branch Dispensary at Cheltenham, which he also occupied some years, and enjoyed the confidence and respect of the board of governors, and the gratitude and affection of the numerous patients who were benefited by that institution. He lately commenced a very successful private practice in the town. He was much beloved, and his memory will be cherished by many who had the advantage of his sympathy, attention, and professional knowledge. He was much skilled in optical and other sciences, and made a large number of preparations to illustrate the microscopic characters of organised bodies, a subject of which he made a specialty. Had his life been spared, he would doubtless have added much to our knowledge in this branch of observation. He was a careful, thoughtful, and conscientious student, his great aim

being to arrive at the truth, however difficult it might be. His family, and numerous private friends, deeply deplore his loss. He was considerably benefited by a bequest from a deceased patient, in grateful acknowledgment of his services. By a public subscription, a memorial is to be erected to his memory in All Saints' Church, Cheltenham, of which church he was the churchwarden at his decease.

NEW INVENTIONS.

ALLEN'S IMPROVED ENEMA AND DOUCHE, WITH BIDET.

This apparatus is made of strong tin, enamelled white inside, the outside enamelled in imitation of wood, marble, or china, as desired. The back part forms the bidet; the front forms a compartment for holding warm or cold lavements or injections, and in which the pump is fixed. There is also a silvered jar for medicated lotions or enemata. Both pump and jar can be instantly removed for cleansing by lifting out the small



hand round the pump by which it is held firmly in its place. The tubes from the pump are jointed in such a way that they can be raised or lowered at pleasure; and each of the injection-tubes can be reversed from the end to the middle joint, or *vice versâ*, so as to serve any form of application, for male or female. The apparatus is most simple in construction and use, and no attendant is required by the person using it. We have no doubt that it will be found most useful for patients suffering from disorders of the rectum and uterus.

MEDICAL NEWS.

University of London.—The following is a list of the Candidates who have passed the recent Second M.B. Examination:—

First Division.

Ashby, Alfred, of Guy's Hospital.
Barfoot, George Harry, of University College.
Birt, George, of Birmingham General Hospital and University College.
Branfoot, Arthur Mudge, of Guy's Hospital.
Cane, Leonard, of University College.
Dalton, Benjamin Neale, of Guy's Hospital.
Eardley-Wilmot, Robert, of King's College.
Godlee, Rickman John, of University College.
Greenfield, William Smith, of University College.
Harris, Michael, of Guy's Hospital.
Harris, Robert, of Guy's Hospital.
Jones, Thomas, of Guy's Hospital.
McCann, Thos. Anthony Aloysius, of University College.
Nankivell, Charles Atkinson, of University College.
Ottley, Walter, of University College.
Perkins, Charles Edward Steele, of Guy's Hospital.
Philpot, Joseph Henry, of King's College.
Russell, Ebenezer Geer, of Guy's and Royal Victoria Hospital, Netley.
Saunders, Henry William, of St. Thomas's Hospital.
Warner, Francis, of King's College.

Second Division.

Hoar, Charles Edward, of King's College.
Owen, Edmund Blackett, of St. Mary's Hospital.
Taylor, Herbert, of St. Bartholomew's Hospital.
Williams, William, of Guy's Hospital.
Yate, Edward, of St. Bartholomew's Hospital.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 12th instant, viz.:—

Baily, Frederic William, Highbury, student of King's College.
Benham, Henry James, Wigmore-street, of University College.
Biggs, Henry Grave, L.R.C.P. Edin., Southsea, of Guy's Hospital.
Brown, Joseph L'Oste, L.R.C.P. Lond., Grantham, of Guy's Hospital.
Coates, William Harrison, L.S.A., Henley-on-Thames, of St. Thomas's Hospital.
Duke, David, L.S.A., Kennington-park-road, of Guy's Hospital.
Fletcher, George, Bromsgrove, of St. Thomas's Hospital.
Goodchild, John Arthur, South Eaton-place, of St. George's Hospital.
Greaves, Edward, L.R.C.P. Edin., Great Easton, Leicester, of Guy's Hospital.
Gray, Frederick Archibald, Stonehouse, Devon, of University College.
Hands, Arthur, L.R.C.P. Lond., Inkberrow, Redditch, of the Birmingham School.
Hopper, Arthur Richard, Liverpool, of the Liverpool School.
Hopkins, Rees, L.R.C.P. Edin., and L.S.A. Pontypridd, Glamorgan, of the London Hospital.
Horton, Walter, L.R.C.P. Edin., Wednesbury, of the Birmingham School
Jenkinson, Harold, L.S.A., Ranskill, Notts, of the Leeds School.
Le Mottée, George Herbert, L.S.A., Guernsey, of King's College.
Lidderdale, James, Great Bedwyn, Wilts, of St. Mary's Hospital.
Molyneux, Harold Joseph, Wigan, of the Liverpool School.
Morgan, George, Pontypridd, of the London Hospital.
Parker, George Williams, L.R.C.P. Lond., L.S.A., New Cross-road, of St. Thomas's Hospital.
Robey, Ralph Prime, Newcastle, of the Birmingham School.
Robey, Samuel Henry, Newcastle, of the Birmingham School.
Snell, Simeon, Leeds, of the Leeds School.
Stecle, Henry Francis Arthur, Liverpool, of the Liverpool School.
Turnell, Arthur Pythias, Brixworth, Northampton, of University College.
Vowell, Charles Martin, Charlton Kings, of King's College.
Webster, Joseph Henry, L.R.C.P. Edin., Nottingham, of the Edinburgh School.
White, Ernest William, Norwich, of King's College.
Whitefoord, Adam John, L.R.C.P. Edin., St. John's Wood, of University College.
Wright, John Frederick, L.S.A., Seymour-street, of the Middlesex Hospital.

Four candidates were referred to their professional studies for six months.

The following were admitted Members on the 13th inst.:—

Anderson, Richard John, M.D., Queen's Univ., Ire., Newry, co. Down, student of the Belfast School.
Branfoot, Henry Seymour, Lynn, of Guy's Hospital.
Davis, Arthur Percy, Fowey, Cornwall, of St. Bartholomew's Hospital.
Evans, John, L.R.C.P. Edin. and L.S.A., Dowlais Iron Works, of the London Hospital.
Fenn, Ernest Harrold, Grafton-street, of the Middlesex Hospital.
Hall, Frank Algernon, Newmarket, of St. Bartholomew's Hospital.
Haslam, William Doidge, Little Missenden, Bucks, of University College.
Hewitt, Frederick Charles Cresswell, L.S.A., Twickenham, of St. Bartholomew's Hospital.
Hudson, John, Horsforth, near Leeds, of the Leeds School.
Humphreys, Henry, L.S.A., Hackney Downs, of University College.
Jacobson, Walter Hamilton Acland, (a) The Palace, Chester, of Guy's Hospital.
Jepson, Edward, Durham, of St. Bartholomew's Hospital.
Jewesbury, Charles Frederick, Gloucester, of University College.
Jones, Vaughan Daniel Williams, Narberth, of Guy's Hospital.
Lidbetter, Thomas George, L.S.A., Tranfield, Sussex, of Guy's Hospital.
McMonagle, Joseph, M.D. New York, St. John's, New Brunswick, of St. Thomas's Hospital.
Odell, William, L.S.A., Hertford, of St. Bartholomew's Hospital.
Piers, Charles Edward, Cape of Good Hope, of St. Bartholomew's Hospital.
Runcorn, Henry, L.S.A., Manchester, of the Manchester School.
Winterbottom, Augustus, Sloane-street, Chelsea, of St. George's Hospital.
Wright, Frederick Wade, Leeds, of the Leeds School.

Five candidates were referred to their professional studies for six months.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 7, 1872:—

Brady, John Charles, Lady Somerset-road, N.W.
Comfield, Thomas, Chigwell, Essex.
Duke, David, Kennington-park-road.
Lyth, John Burdsall, Sheffield.
Townend, Joseph Henry, Hackney-road.

As Assistants in Compounding and Dispensing Medicines:—

Plimmer, William Thomas, Uttoxeter.
Robertson, Frederick Freer Leslie, Camberwell-road.

The following gentleman also on the same day passed his Primary Professional Examination:—

Waller, William Bevan, St. Thomas's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Wallis, Ferdinand, M.R.C.S.—House-Surgeon to the General Infirmary and Dispensary, Doncaster.

(a) This gentleman is a son of the Lord Bishop of Chester.

MILITARY APPOINTMENTS.

War Office.—Medical Department.—Staff Surgeon John James Henry retires upon temporary half-pay; Staff Assistant-Surgeon Rosslewin Morgan retires upon temporary half-pay; Surgeon William Henry Harris, from the 76th Foot, to be Staff Surgeon, *vice* James Good, appointed to the 76th Foot; Assistant-Surgeon William Raymond Kynsey, from the Royal Artillery, to be Staff Assistant-Surgeon, *vice* James Magill, appointed to the 33rd Foot.

Royal Military College.—Assistant-Surgeon Franklin Gillespie, M.D., from the 33rd Foot, to be Assistant-Surgeon, *vice* John Greig, appointed to the Royal Artillery.

BIRTHS.

Barker.—On November 9, at 3, Larne-villas, Aldershot, the wife of J. Barker, Esq., Surgeon 22nd Regiment, of a son, stillborn.

Newman.—On October 30, at Stamford, the wife of William Newman, M.D. Lond., of a daughter.

Rayner.—On November 7, at Teviot Dale, Stockport, the wife of Edwin Rayner, M.D., of a daughter.

Simpson.—On November 6, at Hampstead-lane, Highgate, the wife of G. A. Malcolm Simpson, M.D., of a daughter.

Walters.—On November 6, at Reigate, the wife of J. Walters, M.B., of a son.

MARRIAGES.

Forbes—Barber.—On October 24, at the parish church, Greasley, Duncan Macdonald Forbes, L.R.C.P. Edin., L.F.P.S. Glasg., to Hannah Grace Argyll, only daughter of Thomas Barber, Esq., of Lamb-close House, Greasley, Notts.

Richmond—Marshall.—On November 7, at Christ Church, Hampstead-heath, the Rev. W. Richmond, M.A., to Harriet Susan, only surviving daughter of the late Robert Marshall, M.D., Bengal Army.

Watson—Steinbach.—On November 11, at St. George's, Bloomsbury, Charles Cradock Watson, Esq., late of the Royal Navy, and third son of John Watson, M.D., L.R.C.P., M.R.C.S., L.S.A., etc., of 6, Southampton-street, Bloomsbury, to Amalie Carolina Steinbach, eldest daughter of the late Karl Steinbach, of Carlsruhe, Baden.

DEATHS.

Evanson, Laura, widow of the late Richard Tonson Evanson, M.D., and eldest daughter of the late Henry Rowles, Esq., of Stratton-street, Piccadilly, at Home Hurst, Torquay, on November 6.

Kidd, Sophia, the beloved wife of Joseph Kidd, M.D., of Finsbury-circus, and George-street, Hanover-square, at Brooklands, Blackheath-park, after a few days' severe illness, on November 6.

Leeson, Henry Beaumont, M.D., F.R.S., etc., late one of the senior Physicians of St. Thomas's Hospital, Southwark, at Bonchurch, Isle of Wight, on November 8, in his 70th year.

Lowry, Jane Freud, wife of Thomas Harvey Lowry, M.D., and daughter of the late Captain William Tucker, R.N., at West Malling Place, Kent, on November 8, in her 36th year.

Newman, Sarah Tinley, the dearly loved wife of William Newman, M.D. Lond., at Stamford, on November 6.

Simpson, Archibald, M.D., at 29, Canonbury-park, N., on November 11, aged 42.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Alnwick Infirmary.—House-Surgeon. Applications, with testimonials, to J. A. Weson, Esq., Honorary Secretary, on or before November 18.

Amalgamated Friendly Societies' Medical Association, Derby.—Medical Officer. Candidates must be Members of one of the Royal Colleges of Surgeons of the United Kingdom, and registered in accordance with Act of Parliament. Applications, with testimonials, to the Secretary, Mr. J. Bullivant, 58, Abbey-street, Derby, on or before November 23.

Birmingham Hospital for Women.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

Bristol General Hospital.—Assistant House-Surgeon. Candidates must produce proof of the possession of a registered qualification. Applications, with testimonials, to Henry Fox, R.N., on or before November 21.

Charing-cross Hospital Medical School.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

Cheltenham General Hospital and Dispensary.—Dispenser and House-Surgeon's Assistant. Applications and testimonials to David Hartley, Esq., Resident Surgeon.

City of London Hospital for Diseases of the Chest, Victoria-park, E.—Assistant-Physician. Applications, with testimonials, to the Treasurer, on or before November 16. Further information may be obtained from the Medical Officers or the Secretary at the Office, 24, Finsbury-circus, E.C.

Doncaster General Infirmary.—House-Surgeon. Applications, with testimonials, to the Honorary Secretary.

Durham County Asylum, Sedgefield, Ferryhill.—Assistant Medical Officer for the Female Department. Applications, with testimonials, to be sent without delay to Dr. Smith, Medical Superintendent.

Friendly Societies' Medical Institute, Northampton.—Medical Officer. Candidates must be Members of the Royal College of Surgeons of England, and registered in accordance with Act of Parliament. Applications, with testimonials, to the Secretary, on or before November 19.

General Infirmary, Northampton.—House-Surgeon. Candidates must be Members of the Royal College of Surgeons of England and Licentiates of the Apothecaries' Company. Applications, with testimonials, to the Secretary, on or before November 19.

Hospital for Women, Soho-square.—Two Clinical Assistants. Apply to Henry B. Ingram, Secretary, on or before November 16.

Kildalton, Islay.—Medical Officer. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen, Islay.

Leicester Provident Dispensary.—Medical Officer. Candidates must be duly qualified and registered. Applications, with testimonials, addressed to the Chairman of the Board of Governors, on or before November 27.

London Fever Hospital.—Resident Medical Officer. Candidates must possess both a medical and surgical diploma from some recognised examining board of the United Kingdom. Applications, with testimonials, to the Secretary of the Hospital, Liverpool-road, Islington, on or before November 26.

National Hospital for Diseases of the Heart.—Consulting and Junior Physician. Applications to W. F. Portlock-Dodson, Honorary Secretary.

Owen's College, Manchester.—Assistant-Lecturer in Chemistry, and Junior Demonstrator in the Chemical Laboratory. Applications, with testimonials, to the Council (under cover to the Registrar), on or before December 3. Further information may be obtained of the Principal, J. G. Greenwood, Esq., or from Professor Roscoe, Owen's College.

Royal Edinburgh Hospital for Sick Children.—Resident Medical Officer or House-Surgeon; also an Assistant to the extra Physicians. Applications, with testimonials, to the Honorary Secretary, Mr. Henry, 20, St. Andrew-square, Edinburgh, on or before November 21.

St. Thomas's Hospital, S.E.—Medical and Surgical Registrars. Applications, with testimonials, to R. G. Whitfield, Esq., Medical Secretary, on or before November 30.

Suffolk General Hospital.—Physician. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee, on or before November 24.

Tiverton Infirmary and Dispensary.—House-Surgeon and Dispenser. Applications, with testimonials, to the Honorary Secretary, Tiverton.

Westminster General Dispensary.—Surgeon. Candidates must be Fellows or Members of the College of Surgeons, and not engaged in pharmacy and midwifery. Applications, with testimonials, to the Secretary, on or before November 25.

UNION AND PAROCHIAL MEDICAL SERVICE.

APPOINTMENTS.

Islington Parish.—Sebastian C. T. Gardner, M.R.C.S.E., L.S.A., to the St. Peter's District.

Newbury Union.—Silas Palmer, M.D. Edin., L.R.C.S. Edin., to the Second District.

Okehampton Union.—John Deans, M.R.C.S. Eng., L.S.A., to the North Tawton District.

Royal College of Surgeons. — The half-yearly examination of candidates for the Fellowship of the College was commenced this day (Saturday), and will be continued throughout the ensuing week. For the first (anatomical and physiological) examination there are twenty-four candidates.

The Medical School of Paris was reopened on the 7th inst. The students were addressed by M. Charles Robin.

A new hospital has been opened at Liverpool, in which infectious diseases are to be treated.

It has been decided by the Glasgow Police Board to appoint a public analyst for the city. They have appointed a Medical Officer of Health, at a salary of £600 a year.

A new convalescent home has been opened at Saltburn. The building is adapted for receiving fifty patients. It has been erected by members of the Pease family, of Darlington, at a cost of upwards of £12,000.

The election of House-Surgeon for the Doncaster Infirmary took place on Thursday week. The Committee reduced the number of candidates to four. Altogether there were thirty-seven applicants for the office, and Mr. Wallis was declared elected.

Dr. Tibbits, the Medical Superintendent of the National Hospital for the Paralysed and Epileptic, has been appointed Medical Officer for Electrical Treatment to the Hospital for Sick Children in Great Ormond-street. We see, from Messrs. Churchill's list of announcements, that Dr. Tibbits is about to give the Profession the benefit of his experience in "A Handbook of Medical Electricity."

West Kent Medico-Chirurgical Society.—At a meeting of the above Society, held on Friday evening, November 1 (President Ralph Gooding, B.A., M.D., in the chair), Dr. Tilbury Fox read a highly interesting paper "On the Treatment of Psoriasis." In the author's opinion, the treatment of psoriasis by arsenic internally, and tarry preparations externally, was erroneous and much too general. For his own part, he had almost entirely given up this plan of treatment, except in certain chronic cases, and where there was a syphilitic taint, when he found Donovan's solution of great value. In all other cases he mainly relied upon soothing applications locally—viz., wet packing, alkaline and size baths, and oily preparations—and, internally, remedies in accordance with the constitutional diathesis. This plan of treatment was especially successful in acute cases occurring in young children. Dr. Fox laid stress upon psoriasis being treated on the same

principle as other diseases—*i.e.*, having due regard to constitutional and other causes likely to affect it—and not as a specific and special disease, as was, he feared, too often the case. The next meeting of the Society will be held on Friday, December 6, at 8 p.m., when a paper will be read by Mr. Harry Leach, of the Seamen's Hospital, Greenwich, entitled "Notes on Chronic Dysentery."

Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland.—The quarterly meeting of the Committee of this local branch of the above Society was held on the 6th inst., in the rooms, 33, High-street. The chair was occupied by Dr. Drennan, and amongst the other members present were—Dr. H. S. Fergusson, Dr. Wilberforce Arnold, Dr. Whitaker, Dr. Filson, and Dr. Stewart, Hon. Secretary. After the transaction of the usual routine business of this branch, and instructions having been given for the annual meeting in February next, the Committee separated.

Hospital Sunday, Liverpool. — The report and accounts in connexion with the "Hospital Sunday" collection were read at the annual meeting of the subscribers held last week at Liverpool. There were collections in 239 places of worship in the town, and the amount realised was £6923, a larger sum, it was stated, than had ever yet been raised by these collections. An amount of £720 had also been collected in the "Hospital Saturday boxes" placed in the various manufactories and workshops in the town. The total amount received, including donations, etc., was £8230, of which sum £7800 had been distributed amongst the different medical charities, leaving a balance in hand, after payment of necessary expenses, of £74.

Professional Examinations.—The following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the candidates at the "pass" examination for the diploma of Membership on Friday, the 8th inst., on which occasion seventy-eight gentlemen offered themselves, against ninety-five in the corresponding period of last year:—1. In injuries of the head, under what circumstances would you feel warranted in using the elevator or applying the trephine? 2. Describe the operation for applying a ligature on the external iliac artery, and the parts cut through in its performance. 3. Give an account of the descent of the testicle; and mention the affections resulting from imperfections in the process. 4. Mention the boundaries of the femoral ring. Describe the mode of formation of the saphenic opening of the fascia lata. Enumerate the coverings of a femoral hernia, and state from what structures they are derived. 5. Describe Syme's operation at the ankle-joint, the parts cut through; and state in what Pirogoff's method differs therefrom. 6. Describe the varieties of fracture of the upper end of the humerus, their diagnosis, prognosis, and treatment. The following were the questions on the Principles and Practice of Medicine submitted to the fifty-four candidates on Saturday, the 9th inst., viz.:—1. A person has a fit, attended with more or less impairment of consciousness, and is found to have lost the use of the right arm and leg, and to be incapable of speaking. What is the probable nature and seat of the lesion of the brain? 2. Describe the physical signs which indicate a copious effusion in one of the pleural sacs; and mention the circumstances which would induce you to have recourse to paracentesis, and the mode in which you would perform the operation. 3. What are the proportions of the chief ingredients contained in the following preparations of the British Pharmacopœia, 1867? For what purposes are they severally used? and in what doses would you employ them?—tinctura opii, tinctura camphoræ composita, confectio opii, pulvis cretæ compositus cum opio, solutio morphiæ hydrochloratis, liquor arsenicalis, syrupus ferri iodidi, syrupus ferri phosphatis, vinum antimoniale.

Infinitesmal Poisoning.—M. Vulpian calculates that the trillionth drop of putrified blood with which M. Davaine declares he poisons rabbits is equivalent to a drop in 50,000 cubic metres of water.—*Gaz. Hebd.*, November 1.

Tracheotomy performed by means of Galvano-Caustic.—Professor Voltolini relates a case in which galvano-caustic has been for the first time (in Germany, as Verneuil had already used it in France) employed for executing laryngo-tracheotomy. It was performed for the purpose of removing a growth from below the glottis, where it gave rise to dangerous obstruction of respiration. The operation was almost painless, and only a few drops of blood were lost. An aperture having been thus secured, the operator was much surprised to find, on making a laryngoscopic examination fourteen days afterwards, that the new growth, which it was now intended to remove, had entirely disappeared. There seems to have been no doubt as to its reality, and Professor Voltolini explains its disappearance by the action that had been set up in it by its having become pierced by the galvanic knife during the first stage of the operation.—*Berlin. Woch.*, No. 41.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Tom.—Shall be noticed next week.

Professor Vanzetti.—Yes, received; and shall be noticed as soon as possible. Many thanks for your note.

Ishmael.—Try Maw, Aldersgate-street.

S. G.—1. *Dublin Journal*, vol. vi., by Dr. Beatty, of Dublin. 2. Dr. Bright, *Med.-Chir. Trans.*, vol. xix.

Enson.—Chordæ Willisii, so called after Willis, who first described them in his work "De Cerebri Anatome," 1664.

C. P.—"Principles of Surgery," vol. iii., p. 262.

N. W.—Female medical students are admitted into the University of Gröningen.

Erinensis.—Yes.

Dr. Richard B. Taylor, Santillana.—Enclosure received with thanks. Bound books can be sent by post from this country to Spain at the rate of fourpence for every quarter of a pound.

G. G., Wolverhampton.—The earliest account of the contagious catarrhal fever, or influenza, was published by Boeckel, 1580, who calls it a new disease.

September 28.—The number of the *Medical Times and Gazette* of this date being out of print, subscribers who do not bind will much oblige by posting it to this office, when the publishers will return the published price in postage-stamps.

J. C.—The article in the *Edinburgh Review* "On the Progress of Medicine and Surgery" was not written, as reported, by Sir Henry Holland, though he is understood to have looked over and approved it. There is no secret that the writer is Dr. Wynter, a well-known member of our Profession, who for some years past has practised with great success in psychological medicine.

Bishop's Stortford.—We have received a letter from one of the medical practitioners at Bishop's Stortford, apologising for the memorialists and the Local Board, on the ground that the refuse which they would allow to remain for an indefinite period to pollute the air of their town is principally "stable manure." We do not admit the cogency of the explanation. An ordinary dung-heap in an open town is undoubtedly a nuisance, and once a week is certainly not too often for its removal.

Musical.—Yes.

"Thou canst cure the body and the mind,
Rare doctor, with thy twofold soundest art;
Hippocrates hath taught thee the one kind—
Apollo and the Muse the other part;
And both so well that thou well both dost please—
The mind with pleasure and the corpse with ease."

—*Davies of Hereford.*

Mrs. Siddons and Electricity.—In his "Life of the Kembles," Mr. Fitzgerald, quoting Mrs. Inchbald, gives an account of the sufferings of "the tragic muse" from lumbago and an affection in her hip, which she attempted to cure by such a "quack remedy" as electricity. Mrs. Inchbald wrote—"Mrs. Siddons is restored as by a miracle. She had a nervous affection from her hip to her toe, which made that side totally useless, and in torturing pain that kept her sleepless for months. All medical art, such as embrocations, etc., failed. She heard of a new-invented machine that performed surprising cures by electricity. Her physicians all told her such an operation would make her disorder still worse. Her surgeon, Sir James Earle, said No! but he assured her it would do her no good. On his word, fearing no harm, she tried it, and was almost instantly cured. But the agony she suffered in the trial she describes as if burning lead was running through her veins when the sparks touched; and Mr. Siddons said her shrieks were such that he really expected the mob would break open the door, thinking he was killing her."—Vol. ii., pp. 92 and 95.

Public Health Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I observe that in your notices of the election of the Officer of Health for the parish of St. George's, you dub all the selected candidates "Drs." As one of them I have no title to the distinction, and, as a surgeon, do not covet it; but it is difficult to say what will be the result of conferring honours on the candidates for such appointments by a professional journal. But I think I see in the circumstance a danger of another kind, which I think should be resisted before it becomes a custom—namely, that the new department of Public Health is being appropriated by the medical section of the Profession, to the exclusion of the surgical. This, I think, will be as unwise as it is unfair, for many of the

most important diseases affecting the public health are deemed surgical—to wit, syphilis, struma, erysipelas, pyæmia, deformities, accidents, etc.—a proper knowledge of which requires as wide a range of scientific and general information as any which fall under the notice of the physician. The medical officers of the public services are expected to combine the two functions of Surgeon and Health Officer—and they are equally necessary in civil life; moreover, it will be a serious evil in the education of the Profession if the belief becomes general that the training of the physician is the only one which fits him for the position of Health Officer.

With Mr. Simon at the head of the department, and other distinguished surgeons in the ranks, the junior need not abandon to the physicians this new opening to official work, which is in no way incompatible with his ordinary duties.

I am, &c.,

November 12. F.R.C.S.

COMMUNICATIONS have been received from—

Professor Vanzetti; Dr. R. E. Power; Mr. W. R. Dalton; Mr. Wathen; Mr. Hitchcock; Dr. Fayrer; Mr. Rae; Ishmael; Mr. J. W. Groves; Mr. Vincent Jackson; Dr. F. B. Pollard; Mr. C. Roberts; Mr. T. C. White; Mr. Haynes Walton; Dr. J. N. Vinen; Dr. Thomas Stevenson; Dr. Scrivener; Mr. T. M. Stone; Mr. J. Chatto; Mr. Marshall; Mr. Teevan.

BOOKS RECEIVED—

Report on the Structure of the White Blood-Corpuscle, by Joseph G. Richardson, M.D., Lecturer on Pathological Anatomy in the University of Pennsylvania, etc.—Twenty-ninth Annual Report of the Managers of the New York State Lunatic Asylum, Utica.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—Guy's Hospital Gazette—Doncaster Chronicle—The Northern Whig—The Airdrie, Coatbridge, etc., Advertiser—Liverpool Mercury—The Anti-Game Law Circular—Leamington Spa Courier.

APPOINTMENTS FOR THE WEEK.

November 16. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

18. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Mr. Bond, "A Case of Poisoning by Sulphuric Acid." Mr. Bryant, "Dislocation of the Humerus." Dr. Routh, "On Overwork and Premature Mental Decay, and its Treatment."

19. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Anthropological Institute, 8 p.m. Meeting.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Mr. Bellamy, "The Parts six years after Excision of the Astragalus." Dr. Crisp, "Gordions in the Lungs of Sheep." Dr. Moxon, "Abscess of the Liver bursting through the Hepatic Vein into the Cava and Right Heart;" "Acute Interstitial Pneumonia." Dr. Tilbury Fox, "A Case and Specimen of Ictcroderma." Mr. De Morgan, "Perforation of the Diaphragm and Intestine by a Fractured Rib." Mr. Fairlie Clarke, "Specimen of Epulis." Mr. Spencer Watson, "Five Recurrent Fibroid Tumours." Mr. Cooper Forster, "Fracture of the Base of the Skull, from a patient who lived three months after the accident." Dr. C. T. Williams, "Mediastinal Tumours and Dilatation of the Bronchi." Dr. George Johnson, "Paralysis of the Vocal Cords associated with Aneurism of the Aorta." Mr. Nunn, "Cast of the Inferior Extremity showing Curvature of the Femur." Mr. Arnott, "Epithelioma of the Labium Pudendi in a Girl, aged 20." Dr. R. King, "Extreme Aortic Stenosis."

20. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

21. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

22. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Clinical Society, 8½ p.m. Dr. Schliep will read a paper "On the Stomach-pump in the Treatment of Chronic Gastric Catarrh and Dilatation." Mr. T. Nunn, "On Two Cases of Cancer of the Breast, illustrating the Chronic and Acute Forms of the Disease." Mr. Hulke, "On a Case of Œsophageal Spasm in a Child." Dr. C. Theodore Williams, "On Cases of the Pyrexia of Phthisis treated by Cool Baths."

Quekett Microscopical Club, 8 p.m. Paper by Mr. B. D. Jackson, "On the Fall of the Leaf."

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 9, 1872.

BIRTHS.

Births of Boys, 1266; Girls, 1196; Total, 2462.

Average of 10 corresponding weeks, 1862-71, 2128·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	607	574	1181
Average of the ten years 1862-71	719·6	689·6	1409·2
Average corrected to increased population	...	...	1550
Deaths of people aged 80 and upwards	...	...	45

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	3	1	2	2	...	1	4	1	2
North ...	751668	4	1	3	...	6	1	3	1	7
Central ...	333887	1	1	1	...	4	...	1	1	1
East	638928	1	5	2	...	7	...	3	4	4
South	966132	6	3	6	1	8	...	8	...	5
Total	3251804	15	11	14	3	25	2	19	7	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

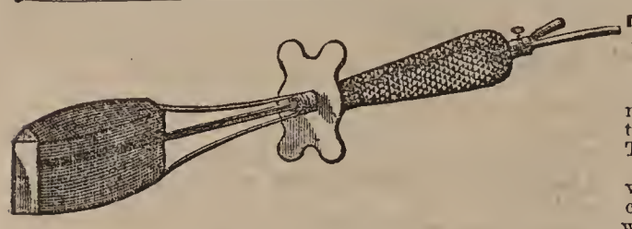
Mean height of barometer	29·862 in.
Mean temperature	50·3°
Highest point of thermometer	61·8°
Lowest point of thermometer	38·4°
Mean dew-point temperature	46·3°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·33 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 9, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Nov. 9.	Deaths Registered during the week ending Nov. 9.	Temperature of Air (Fahr. Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2462	1181	61·8	38·4	50·3	10·17	0·33	0·84
Portsmouth ...	115455	12·1	82	44	58·4	36·0	48·7	9·28	0·61	1·55
Norwich	81105	10·9	53	30	60·0	33·0	46·3	7·94	0·50	1·27
Bristol	186428	39·8	140	58	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	57	25	59·1	39·0	48·3	9·05	0·60	1·52
Birmingham ...	350164	44·7	303	169	61·0	39·7	49·7	9·83	0·44	1·12
Leicester	99143	31·0	80	30	61·2	36·0	48·1	8·94	0·32	0·81
Nottingham ...	88225	44·2	74	28	62·4	36·6	48·3	9·05	0·64	1·63
Liverpool	499897	97·9	355	211	63·0	39·8	49·5	9·72	0·89	2·26
Manchester ...	352759	78·6	261	190	60·2	36·0	47·4	8·55	0·96	2·44
Salford	127923	24·7	113	64	61·5	36·2	48·1	8·94	0·88	2·24
Oldham	84004	20·2	52	62	...	...	...	...	...	...
Bradford	151720	23·0	103	77	61·5	40·6	50·5	10·28	0·25	0·63
Leeds	266564	12·4	293	135	64·0	40·0	49·6	9·78	0·24	0·61
Sheffield	247847	10·9	197	102	60·5	39·7	49·3	9·61	0·49	1·24
Hull	124976	35·1	103	56	60·0	32·0	46·2	7·89	0·31	0·79
Sunderland ...	100665	30·4	100	59	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	117	68	...	...	...	...	...	...
Edinburgh	205146	46·3	101	86	61·0	31·7	46·0	7·78	2·10	5·33
Glasgow	489136	94·8	389	251	60·5	36·0	46·3	7·94	2·48	6·30
Dublin	310565	31·9	150	144	64·9	29·0	49·1	9·50	0·21	0·53
Total of 21 Towns in United Kingd'm	7393052	34·0	5585	3070	64·9	29·0	48·3	9·05	0·72	1·83

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·86 in. The lowest was 29·16 in. at the beginning of the week, and the highest 30·21 in. on Thursday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.



THE BLOW-PIPE GAS CAUTERY.

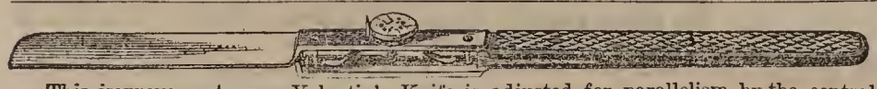
(The late Mr. BRUCE'S.)

The Instrument consists essentially of two tubes connected together, one of which may be attached to a gas-receiver or to an ordinary gas-jet, and serves as the burner; the other tube is inclined to the former at a slight angle, and serves as a Blow-pipe. The accessory parts of the Instrument consist of the following:—

1st. An indiarubber ball, capable of containing about 110 cubic inches of gas, which may be readily filled from any ordinary gas-jet by means of a pump-ball. In cases in which the gas-jet is conveniently situated, this receiver may be dispensed with, and the burner connected directly with the pipe by means of an elastic tube.

2nd. Three or more small platinum cups of various forms, adapted to the different purposes for which the Cautery may be applied. One of these cups is hemispherical, one conical, and one terminates in a probe-like extremity. Other forms adapted for special purpose have been made, but are not contained in the ordinary cases. To facilitate removal of the cups whilst heated, a small metal clip has been introduced.

3rd. Shields of different forms to protect the surrounding parts during the application of the Cautery. These consist of discs of metal and ivory, mounted upon handles, and perforated by holes of various sizes, and a plate, with a slit in the centre, to allow the Cautery to be applied along a line.



NEW SECTION KNIFE,

FOR MAKING MICROSCOPIC SECTIONS.

This improvement upon Valentin's Knife is adjusted for parallelism by the central screw, the flat head of which is divided into ten equal parts. This enables the blades to be readjusted at precisely the same distance apart. The thickness of the section is, therefore, known. The central part of the knife is strongly gilded, to prevent rust attacking the steel. Upon removing the short blade of the instrument and the adjusting screw, a capital razor-blade is formed, which may be used separately.

Inventor, Patentee, and Sole Maker, HAWKSLEY, 4, Blenheim-street, Bond-street, London, W.

GUY'S AND ST. THOMAS'S HOSPITALS.

CAUTION.

J. MILLIKIN, Surgical Instrument Maker to the above Institutions, begs to announce that he has NO CONNEXION whatever with Nos. 7, Southwark-street, and 12, Palace-road, and that all communications intended for him must, in order to insure prompt attention, be addressed to

3, ST. THOMAS'S-STREET, BOROUGH,

where he is now conducting his business of Manufacturer of every description of Surgical Instrument and Appliance, Artificial Legs, Arms, and Hands, Trusses, Bandages for Prolapsus Ani, Uteri, Pendulous Abdomen, Moulded Leather Splints, Spinal and Orthopædic Apparatus, &c., Dissecting, Pocket, Amputating, and Minor Operating Cases.

MILLIKIN & WALTERS

(Late J. MILLIKIN),

7, Southwark-street, Borough, & 12, Palace-road, Lambeth,

SURGICAL AND ORTHOPÆDIC INSTRUMENT MAKERS,

Beg to inform the Medical Profession that they keep their Stock always complete with EVERY DESCRIPTION of CUTTING and BLUNT INSTRUMENTS of the best make and of the most modern and improved construction. A large assortment of Splints, Crutches, and Bed-rests, &c., always on hand.

SALMON, ODY, & CO.,

(Established 1806)

PATENT TRUSS MAKERS

TO HIS LATE MAJESTY WILLIAM IV.

ELASTIC STOCKINGS, KNEE-CAPS, LEGGINGS, BELTS, &c.; LADIES' ABDOMINAL BELTS.

292, STRAND, LONDON, W.C.

LINT,

As supplied to the largest Hospitals in the United Kingdom.

ROBINSON & SONS,

SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS & COTTON WOOLS,

WHEAT-BRIDGE MILLS, NEAR CHESTERFIELD.

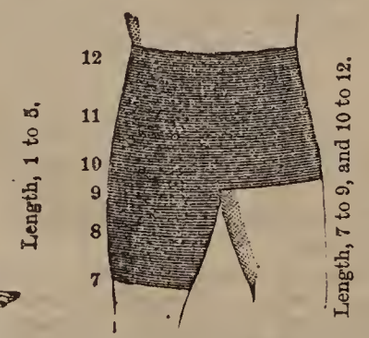
London Warehouse, 17, Bouverie-st., Fleet-st.

TRADE MARK.

HOOPER'S SPIRAL ELASTIC BANDAGES.

The Measures should be taken next the Skin, as follows:—

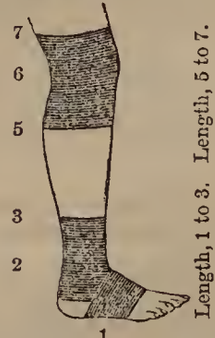
Stocking.



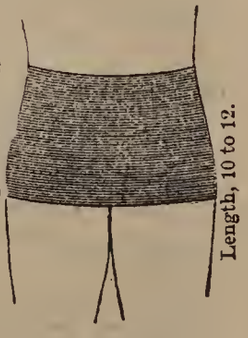
Abdominal Belt & Thigh-piece.

1, Round thickest part of instep.
2, Round ankle-bone.
3, Round small of leg.
4, Round thickest part of calf.
5, Round leg just below knee.
6, Round knee-cap.
7, Round leg just above knee.
8, Round middle of thigh.
9, Round top of thigh.
10, Round body at hips.
11, Round body at umbilicus.
12, Round waist.

The Length should also be given.



Knee-cap & Ankle-sock.



Abdominal Belt.

HOOPER, Manufacturer, 7, Pall-mall East, and 55, Grosvenor-street, London.

ORIGINAL LECTURES.

LECTURES DELIVERED IN THE

COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

(*Continued from page* 510.)

GRANULAR CONJUNCTIVITIS.

THE conjunctiva may not return to its natural state after an attack of conjunctivitis, but undergo certain changes. These consist of proliferation of the papillæ, proliferation of certain glands, and neoplastic growths. The subconjunctival areolar tissue also is involved in proliferation. The general effect is hypertrophy of the parts. The palpebral conjunctiva has an abundance of small cylindrical papillæ, like those on the cutis vera, which commence from within half a line of the anterior edge of the eyelid, and, increasing in size as they pass posteriorly, end at about a line behind the posterior tarsal edge. The oculo-palpebral portion has but few papillæ; they are larger and fungiform, not unlike those so named on the tongue. The ocular portion is without any. The glands in question are the trachoma glands, almost confined to the posterior part of the palpebral and the oculo-palpebral portions of the conjunctiva.

Conjunctival Objective Symptoms.—Together with swelling and hyperæmia of the palpebral and oculo-palpebral portions of the conjunctiva, there are excrescences with physical characters according to their locality—those in the former portion being abundant, chiefly like normal papillæ exaggerated; those in the latter being scanty, pale, chiefly isolated, in the form of granules in rows crossed by furrows. But, as there are degrees in their development, some artificial classification is needed, and the concisest plan is to recognise four varieties.

1. *The Purely Granular.*—This is the mildest. The granules appear in general like boiled sago-grains at the base of the palpebral and oculo-palpebral portions of the conjunctiva, traversed by a coarse vascular network. So long as they have undergone no metamorphosis, and are only enlarged, they are identical with the lymph or trachoma glands of the conjunctiva, which resemble the solitary glands of the intestines. They may be solitary or close-set. That they are really trachoma glands I doubt not; the examination of them shows that they are succulent, consist of closed follicles, with an investing membrane of dense areolar tissue continuous with the surrounding same tissue. Within is areolar tissue less condensed, containing lymphatic cells, a few capillaries, and some moisture. They are so far solid that nothing escapes when punctured. Some surgeons still maintain that they arise from proliferation of the sub-mucous connective-tissue corpuscles, and allege, in confirmation of it, that they may be found on the conjunctiva, where the trachoma glands do not exist.

But they are found in various stages—namely, as whitish specks or granules, just visible, just raised (requiring for the most part to be looked for), or more or less raised. The most prominent may stand out almost free on the surface. They may press through their vesicular and succulent form, as pointed out by Marston in Dr. Beale's "Archives of Medicine," and become part and parcel of that granular state common to all the textures of the conjunctiva at a late period of granular conjunctivitis. Then, further changes cannot be traced, because they cannot be distinguished from the outgrowths of the papillæ and the generally hypertrophied condition of the conjunctiva.

2. *The Pure Papillary Variety.*—This is a low development. It consists of the normal palpebral papillæ, enlarged by proliferation. At a later period the red colour changes to a greyish-brown tint. This arises from an aplastic collection of opaque cells between them. These cover alike the palpebral and oculo-palpebral conjunctiva, and sometimes pass to the ocular also. It is said that they may occupy the cornea as well.

3. *The Mixed Variety.*—This is the most usual form. It is a combination of the granular and the papillary, and constitutes what is best known under the term of granular eyelid. The palpebral conjunctiva is much swollen and relaxed, and the excrescences seem to exceed in number those of the papillary variety, and tend to run into the diffuse form of granulations. The oculo-palpebral conjunctiva presses forwards with swelling, and displays the close-set granules in rows, red rather than transparent, but among which a few genuine sago-like granules stand out.

4. *Diffuse Variety.*—This arises from a higher grade of development: more proliferation, more neoplastic formations. The palpebral conjunctiva is very much swollen, relaxed, and spongy, and there rise up from the deep parts of it irregular velvety or villous diffuse granulations, sometimes like condylomata, and intersected by fissures. Sometimes they are very like the large granulations of a suppurative wound. Sometimes they are pedunculated, when they may be large enough to make irregular bulgings of the integuments of the eyelid. The oculo-palpebral conjunctiva is flattened and studded with mixed granulations. The inflammatory product is always more marked in the superficial than in the deep parts of the conjunctiva.

In all severe cases, and therefore generally in the last two varieties, the subconjunctival tissue proliferates freely, and is much swollen from a gelatinous effusion, which infiltrates the conjunctiva and gives the well-known gelatinous appearance.

The caruncle and the semi-lunar fold are swollen and hyperæmic, and in the mixed and diffused variety the latter is sprinkled with granules.

A microscopic examination of a piece of palpebral granular conjunctiva shows on the free surface a layer of recent cells in luxuriant proliferation, covering all elevations and depressions; beneath this—that is, in the vascular tissue—a thicker layer of newly-formed cells with neoplastic bloodvessels.

The ocular conjunctiva is not definitely affected in pure granular and pure papillary conjunctivitis. In the activity of the mixed and diffused forms it is hyperæmic and swollen; but these symptoms decline if the palpebral inflammation be reduced, and at most only a little hypertrophy of it remains. An inordinate quantity of muco-purulent fluid is generally secreted in the more recent granular conjunctivitis. The tears also flow unnaturally under any local irritation, especially that of cold, or under any irritation of the system, especially from alcoholic drinks. The discharge quickly becomes purulent. In cases of long standing, at intervals there may be little or no discharge. In still more chronic and quiescent cases there may be neither inordinate discharge of tears nor of mucus.

Palpebral Symptoms.—In the severer forms the eyelids are reddened and swollen, and the upper lid drops a little. The swollen oculo-palpebral portion of the conjunctiva interferes with the action of the levator palpebræ muscle. The tarsal cartilages swell and no longer fit the eyeball, and enlarge laterally. Through this the upper eyelid hangs loosely, and the under one is pushed away by the swollen conjunctiva. The Meibomian gland-ducts swell and become granular. Some degree of ectropium, by which the punctum lachrymale is displaced outwards, is apt to occur whenever the conjunctiva is much swollen. Overflowing of the tears is the result.

Eyeball Objective Symptoms.—The cornea may become hazy or opaque and even vascular in advanced stages of granular conjunctivitis. Opacity with vascularity is called pannus. These states are stages of the same lesion, haziness being the first and slightest, and are brought about in several ways—through contact of the cilia (trichiasis), the result of induced tarsal disease; through contact of the edge of the eyelid (entropium), excited by the same; through contact of the granulations on the tarsal surface, the effect of which is always more apparent in its upper half, because the upper eyelid is the more in contact with it, and has a greater range of movement; through extension of inflammation from the conjunctiva. The last two are generally combined, and are the ordinary cause of pannus, which is thus formed:—Numerous delicate vessels pass from the conjunctiva over the superior edge of the cornea, and these, together with the deposit of plastic element, form a greyish cloudy opacity, giving it a dull and inexpressive appearance. The vascularity increases, and the cornea is ultimately surrounded by a thick tumefied network of varicose vessels, interspersed with numerous granulations, and has a brown-red colour. Neither the iris nor the pupil may be visible, and the corneo-sclerotic junction may be concealed. The vascular supply is chiefly from the bloodvessels of the recti muscles. From time to time phlyctenulæ may form. Penetrating ulceration or an abscess may follow.

Eyeball Subjective Symptoms.—Irritability; intolerance to bright light; high sensitiveness to cold air, dust, smoke, and wind; pain from use of the eyes in reading or writing, and during minute work, especially if done by artificial light, attended in each instance by increased redness; mistiness of sight, arising from the excretions passing over the cornea;

rainbow colours around luminous bodies from the same cause; still more misty sight when the cornea loses its transparency. When the cornea has suffered long and intensely, the interior of the eyeball may be inflamed, whereby the function of the retina is much damaged.

Constitutional Symptoms.—Persons with well-marked granular conjunctivitis—in this country, at least—always look unhealthy. Some evidence of hectic fever, with paleness and emaciation, are rarely absent in chronic cases.

Causes.—All the above-described phenomena do not constitute any specific or independent disease. They are only sequences—the occasional modes of termination, therefore later stages, chiefly chronic effects of conjunctivitis. There can be no other pathological interpretation.

They are developed far more frequently from mild than from severe conjunctival inflammation, but are common to all degrees of the catarrhal and purulent varieties of ophthalmia. Sometimes they appear as a relapse, or exacerbation of an attack of catarrhal or purulent inflammation, with renewed activity of symptoms. The conditions which bring them about are not understood, for their appearance is uncertain. Influences which produce impairment of nutrition probably play an influential part. We only know that the perpetuation of the irritation by which the original inflammation was induced, the prolonging of it, seems specially to tend to their development. We find that what appears to be a slight catarrhal inflammation, often appearing and disappearing either spontaneously or by treatment, or mild purulent ophthalmia with exacerbations, leaves after each attack a few granules or granulations, till at last there is the full-formed granular state.

The recurring inflammation has its origin as much in the organised products of the former inflammations as in original tissue. But it might be developed so insidiously and from such mild preceding inflammatory action as to bear the semblance of being an independent and acute disease. The early existence of such inflammation is apt to be overlooked or disregarded—occurrences more likely in warm climates. Slight conjunctivitis is very common in high temperatures, and pterygium may be induced by it, without, apparently, any discomfort. From this has arisen the error that the granular excrescences—the sago grains—which often arise from very slight conjunctival irritation, are the primary lesion producing the granular conjunctiva with all its distressing details.

It is very common for the granular excrescences to remain for years without any other part of the conjunctiva becoming affected. I have watched such instances in this country. I have also learned that it does not necessarily precede other forms of granulation.

The prevalence of granular conjunctivitis among the poor of Ireland is notorious. It is the most common cause of blindness in that country, and sticks to the Irish when they emigrate, and is transmitted to their children. It is generally supposed to be due to their habits of crowding together under conditions contrary to sanitary laws. But, allowing this to have its weight as a means of spreading contagion, their damp, cold climate has, I believe, much influence in originating the primary conjunctivitis.

Its perpetuation in communities is not due to any secretion proper to the hypertrophied parts, but to infection arising from the pus in the excretions.

Sir W. Wilde has published many valuable papers on this subject. The most comprehensive is his medical report of the epidemic of ophthalmia which prevailed in the workhouses and schools of the Tipperary and Athlone Unions.

According to my experience, the disease is rarely seen except among very poor people, and those of the lower classes who live in organised masses, in schools, in the public services, in pauper establishments, and in places of punishment. And the commonest of all existing causes is the use of nitrate of silver in substance for the primary inflammation, or in lotions or salves of such strength as to be highly irritating.

Granular conjunctivitis is often masked. The severity of its subjective and objective symptoms declines. A renewal of the inflammation is followed by remissions. These are repeated, but there is scarcely any discomfort till some variety in the recurrence, or some impulse given by new irritation, developes it in a permanent form.

Course.—All varieties may get well spontaneously in children, and the repair may be quick. Granulation is, however, seldom seen so early in life, nor is it severe. Nor is it a condition of old persons. Slight forms of any variety in adults may get well with or without treatment. Severe mixed and diffused forms very seldom get quite well under any circumstances—by which I mean that the conjunctiva is restored. Yet if such be left untreated, the eyelids and the cornea become much damaged. The conjunctiva swells more, till its nutrition seems interfered with; then it is somewhat bloodless, and, shrinking, it is converted partially or entirely into a kind of cicatricial tissue, which assumes several forms, such as spots, or streaks, or radii, among which may be interspersed reddish or yellowish-grey tissue. In some places there is no longer conjunctival tissue where such changes have been effected. The secreting power of the membrane is destroyed, and dryness of the eye is felt. Similar changes might occur in the granular variety. If the palpebral and the oculo-palpebral fold of the conjunctiva have undergone much partial or general cicatricial change, the conjunctival sac is shrunken and shortened, an effect which is very apparent when either of the eyelids is everted. Then, too, the so-called posterior symblepharon is apparent as vertical bands. The shrinking may be also apparent in the restricted movements of the eyeball. With all this the caruncle and the semi-lunar fold shrink and almost disappear. The cornea passes into complete pannus or xeroma. The eyelids suffer in shrinking of the tarsal cartilages, destruction of the Meibomian glands, and trichiasis. Sometimes the cilia follicles are destroyed. Entropium may be induced.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

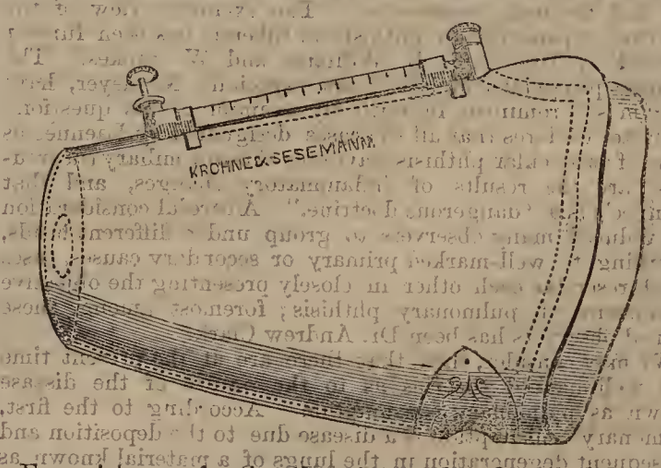
METHYLENE ETHER.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

Since the commencement of the recently revived controversy on anæsthetics, many members of the Profession and of your readers have asked me for answers to inquiries they wish to have solved. Most pertinently stands forth the question of safety. "If you yourself were about to undergo an operation, and had determined on taking an anæsthetic, which would you select in respect of safety and convenience: chloroform, ether, your own bichloride of methylene, or other substance?" This was a question asked of me within the last few days.

I answer the question in the present short note because it is urgent and important, and I answer without hesitation. For safety I might prefer ether, for convenience I should methylene-prefer; but I should actually combine the two. I should inhale from a mixture, of pure methylene bichloride and absolute ethylic ether, having a fluid specific gravity of 1·100.

The boiling-points of pure methylene bichloride and of ethylic ether are within 4° Fahr. of each other; the vapour-density of each is nearly the same—that of ether being 37, and that of methylene 42·5, compared with hydrogen as the standard of unity. In combination, therefore, the two liquids yield a mixture possessing a steady and uniform boiling-point and a nearly equal vapour-density, so that equality of effect is sustained throughout a long administration. The vapour is, moreover, agreeable to inhale—it is neither irritating nor suffocating. I am inclined to think, too, that the physiological action of the methylene is favourably modified by the ether.



For quickness of action the mixture thus described does not approach simple methylene bichloride, but for safety I believe it stands hardly second to the safest anæsthetic I have ever experimented with—viz., methylic ether gas. It is best administered from a simple mouth-piece that has been constructed for me by Messrs. Krohne and Sesemann, and of which

a diagram is subjoined. From three to six fluid drachms is the average quantity required to produce good anæsthesia.

For the sake of brevity I call the combination METHYLENE ETHER.

ON INFLAMMATION OF THE LUNG AS A CAUSE OF CONSUMPTION.

By ARTHUR ERNEST SANSOM, M.D. Lond., M.R.C.P.,
Physician to the Royal Hospital for Diseases of the Chest, City-road, and to the North-Eastern Hospital for Children.

THE subject of pulmonary consumption has been thought uninteresting from its very hopelessness. There can be few of us to whom the loss of a near relative or a dear friend has not pointed the practical lesson of how imperfect is our knowledge and how feeble is our art. No disease has more completely illustrated the fallacy of trust in so-called specific remedies; and if, as seems to be really true, there is a tendency by adoption of modern methods of treatment to avert for some years the fatal result, nevertheless the general features of the disease, as it presents itself to our daily experience, remain substantially the same. It can scarcely be wrong to say that the leaning is great for our thoughts concerning pulmonary consumption to run in a groove, and our treatment to fall into routine. It is, however, a matter of the highest importance that we resist taking too much for granted, that we reconsider our modes of thought—the more so when we consider the frightful prevalence of the malady, and the responsibility which attaches to us in our endeavours to stay its ravages and mitigate its terrors.

I think it will be granted that a large majority of the present generation of medical practitioners in this country inseparably connect in their own minds the ideas of phthisis and tubercle. The cases which present themselves picture to them—(1) a condition of general dyscrasia, leading to (2) the deposition in the lungs of a material known as tubercle, which (3) undergoes softening and other changes; and by the sequence of these processes is induced the catalogue of symptoms. This doctrine is the result of the teaching of the illustrous Laennec. "The progress of pathological anatomy has proved to demonstration," wrote Laennec thirty-five years ago, "that pulmonary phthisis is owing to the development in the lung of a peculiar species of accidental production, to which modern anatomists have specially applied the name of tubercle." Lébert, approaching the subject from the pathological side, insisted that the material called tubercle was of a specific nature, containing elements found in no other morbid product. Louis afterwards entirely endorsed these views; and the theory thus formulated has been enunciated in most of the text-books of this and other countries. Even at the time of Laennec, however, the opinions of medical investigators were not unanimous on the subject. Broussais looked upon tubercles as the result of inflammation of the lung-tissue, not of deposition of heterologous material. Though Louis treated this view as the "merest conjuncture," Andral and Cruveilhier considered that inflammation *could* be the cause of tubercles and of phthisis. Professor Alison, of Edinburgh, in 1824 adduced many arguments to prove that the development of tubercle as the result of inflammation was "a real and frequent occurrence." The exclusive view of the essential dependence of phthisis on tubercle has been further opposed by Drs. C. J. B. Williams and W. Stokes. The German physicians of late years, especially Niemeyer, have been most prominent in critically examining this question; the latter declares that all the cases designated by Laennec as those of tubercular phthisis (save only those of miliary tuberculosis) are the results of inflammatory changes, and that Laennec's is a "dangerous doctrine." A careful consideration has induced many observers to group under different heads, according to well-marked primary or secondary causes, cases which resemble each other in closely presenting the objective phenomena of pulmonary phthisis; foremost among these clinical observers has been Dr. Andrew Clark.

We may consider, then, that there are at the present time two well-marked theories as to the nature of the disease known as pulmonary consumption. According to the first, pulmonary consumption is a disease due to the deposition and subsequent degeneration in the lungs of a material known as tubercle. According to the second, pulmonary consumption is the result of a progressive destruction of the tissue of the lungs by various forms of inflammation which may occur *ab origine*, independently of tubercle. My own experience has led me strongly to incline to the second of these theories; and it is because I believe that the general adoption of it will prove to be of the highest practical importance—practical, because it teaches us that phthisis is no longer irremediable; because it places in a new and clearer light the initial causes and the preventive treatment; because it may induce members of the community to pay greater heed, with a view to their efficient treatment, to those apparently trivial symptoms which are nevertheless starting-points of the malady; because it affords certain definite indications for therapeutic applications according to the inception and the course of the pathological changes—that I venture to present some of the reasons which have led me to adopt it. To investigate the subject from all points in the limits at my disposal is simply impossible. I propose, therefore, to approach it only from the side of every-day practice—from the point of view of clinical or vital and not necroscopic pathology. I shall record without any attempt at elaboration, in certain groups or classes, cases which have occurred in my own practice, and make from them what I consider to be legitimate deductions.

CLASS I.—CONDENSATION OF UPPER LOBES OF THE LUNGS, WITH SYMPTOMS OF EARLY PHTHISIS—COMPLETE ABSORPTION OF EXUDATION, WITH RECOVERY.

Case 1.—*Condensation of Left Upper Lobe—Renewed Attacks, Site of Condensation varying—Complete Absorption and Recovery.*

Miss Rose C., aged 12, was brought to my house on September 10, 1864, suffering from cough, much debility, pyrexia, and impaired nutrition. Had been subject to attacks of bronchial irritation ever since the age of 9 months, when, it was stated, she had pneumonia. The family were well known to me, and there was no evidence of predisposition to phthisis. The physical signs were—increased resonance on percussion over all the right lung and generally over the back of the chest, with loud rhonchi accompanying inspiration. Over the upper lobe of the left lung decidedly impaired resonance. I had the advantage of a consultation with Dr. Scott Alison, who had seen the young patient some years before, when there was the same evidence of local condensation, and, inasmuch as recovery had then occurred, our opinion was that the density was not due to tubercle, and the prognosis favourable. Treatment by counter-irritation and tonics was followed by complete recovery. In the spring of 1866 another attack occurred, and on March 24 I again found complete dulness under the left clavicle. Local blistering, administration of perchloride of iron with chlorate of potash, and subsequently pancreatic emulsion, again followed by recovery. I have attended her on many occasions subsequently when similar series of symptoms have presented themselves, the site of local condensation, however, in the lung constantly varying. There was an attack in 1867 (September and October), in 1868 two (one in March, the other in September and October), in 1869 two (in March and October), in 1870 two (in February and March, and in August), in 1871 one (in May). Since that time perfect health. The course was singularly uniform—a period of great depression and lassitude, with gradually increasing pyrexia, followed by cough, with first mucous, afterwards purulent, sputa. Physical signs: Complete dulness on percussion, dense tubular respiration and bronchophony, followed by the ordinary râles of resolution. The parts attacked were upper lobe of right lung alone, base of right lung alone, base of left lung, apex of left lung. Catamenia first appeared at the age of 16. The last attack observed (on May 10, 1871) was preceded by symptoms of irregularity; after having been absent for seven weeks the menses occurred twice in fourteen days, and then became long persistent. At this time the application of a blister to the chest-front was followed immediately by the occurrence of a profuse epistaxis. The internal treatment of these attacks was conducted on the following plan:—In the early pyrexia, bromide of potassium in fifteen to twenty-grain doses; in the stage of purulent expectoration, sulphite of soda in twenty-grain doses; subsequently quinine and steel, with cod-liver oil or pancreatic emulsion. In the intervals of the attacks, as at present, except a somewhat heightened resonance on percussion, there were no morbid signs whatever to be detected in the lungs.

Case 2.—*Condensation of Upper Lobe of Left Lung in a Rachitic Infant—Recovery.*

Harry S., aged 1 year 8 months, brought to me on May 15, 1866; manifested great pallor; frequent screaming. Wasted since three or four months from birth; no teeth had appeared till he was 13 months old. Abdomen was large and flabby, and liver-edge prominently felt. The child presented all the

general signs of rachitis; respiration attended with wheezing. The father was syphilitic; brother, Case 3.

Physical Signs.—Dulness over left upper lobe, with localised moist rhonchi.

Treatment.—Pancreatic emulsion; a teaspoonful twice a day. The child, I was told, gradually improved, and became quite well.

Case 3.—Condensation of Upper Part of Right Lung in Cachectic Child—Complete Absorption—Recovery.

Arthur S., brother of preceding case, aged 5 years, seen March 23, 1871. Complained of frequent cough, pain in the left side, headache, loss of appetite. Had been pretty well until a month previously, when, it was stated, he had an attack of pleurisy. There were much wasting and pallor.

Physical Signs.—Marked deficiency of percussion resonance over upper portions of right lung, front and back, with tubular expiration.

Ordered mixture of sulpho-carbolate of sodium and quinine; cod-liver oil ʒij., bis die. March 31: Moist sounds manifested over the affected portion of the right lung. General improvement gradually followed. April 25: Syrup of iodide of iron substituted for mixture. May 8: Percussion over right supra-clavicular region still gave higher pitch, and the scapular region was quite dull; some moist râles. June 8: Much stronger and better; it seemed at home that there was little the matter. Percussion over the back now gave a clear note, in the front (right apex) slightly higher pitch; dry harsh breathing. July 31: Much better; very fat; only physical sign remaining was slight feebleness of respiration over the upper part of the right scapular region. Impetigo of chin and face, which was treated by sol. Fowleri (mijss. pro dos.). September 18: Well. No physical signs abnormal.

Case 4.—Condensation of Upper Portion of Left Lung—Disappearance of Physical Signs—Recovery.

Miss G. W., aged 11, lymphatic and cachectic, seen by Dr. Dobell and myself on January 5, 1865. Complained of cough, especially in early morning, loss of appetite, and headache.

Physical Signs.—Resonance good over chest-front, but respiratory murmur more complete on right side. Impaired resonance over upper half of left scapula, with increased vocal vibration and vocal resonance, and localised chirping rhonchi.

Treatment included alkalies, cod-liver oil, and pancreatic emulsion, and a prolonged stay at Bournemouth.

Recovery took place slowly, but on February 6, 1866, no abnormal physical signs could be detected. In January, 1869, the young lady was well, and there were no abnormal signs whatever.

Case 5.—Condensation of Upper Part of Left Lung following Pneumonia of the Left Base and Pleurisy—Extreme Bronchial Spasm—Recovery.

Mr. J., aged about 40, baker, sent for me on July 2, 1868, suffering from extreme dyspnœa, with well-marked pneumonia of the left base.

On the 14th a friction-sound was heard about the nipple, and moist rhonchi and râles of resolution at the back.

The recovery from the acute attack was slow, and there were repetitions of spasmodic dyspnœa.

On October 30 I found decided dulness of the left infra-clavicular region, with slight flattening, and feebleness of the respiratory murmur. Cod-liver oil and quinine were prescribed.

On April 2, 1869, I was called to see the patient, who was suffering from an extremely severe attack of bronchial spasm. I considered that it was probably due to the inhalation of irritating particles of flour, and I advised immediate removal from the neighbourhood of the bakery. In a few days paroxysms entirely ceased, and he kept well till February, 1870, when he had another, but slighter, attack of dyspnœa. February 22: There was slight dulness remaining over the affected area, and the breath-sounds were harsher than normal. Then occurred gradual improvement, and the patient, who was before much reduced, became strong and muscular, the local signs disappearing.

The foregoing are some out of many cases in my note-book showing physical signs of condensation of, or deposit in, the upper portion of the lung, with signs of pulmonary and general irritation, which have terminated in complete disappearance of all morbid physical signs, and restoration to health. Looking at these as clinical examples, it would, I contend, be impossible to predict concerning them whether they would hereafter pass into the condition known as that of pulmonary phthisis or no. The determination of this would have to be necessarily left to the subsequent course of the phenomena. A condition wherein there are physical signs of density of the lung localised in its *upper* portions, accompanied by cough and expectoration, by general feverishness and malnutrition, is pointed out in our text-books as the initial of pulmonary consumption. It is quite true that a consolidation of the apex of the lung which disappears is the exception, and not the rule; but my own experience tells me that such instances are not so rare as I formerly considered them.

In the first place, on examining my notes of these cases of condensation of the apical portions of the lungs which terminated in recovery, I find that the initial causes were various:—1. One case presented only signs of acute catarrh, accompanied by herpes (right apex involved). 2. Malaria and conditions of insalubrity(a) (as in the case of a city schoolmaster with temporary condensation of right apex). 3. Direct irritation (as Case 5, from inhalation of flour). 4. Inflammation in cases presenting a strumous appearance (Cases 2 and 3), or having a hereditary history of phthisis (case of a child of 7 with condensation of left apex). 5. Pertussis—a very common initial cause. 6. Rubeola. 7. Probably a peculiar condition of the vaso-motor system. This latter seems to me to be the most probable explanation of the phenomena in Case 1, and would help us to understand the peculiarly varying localisation of the dense patches, the menorrhœa, and the epistaxis which followed the counter-irritation of the chest. It can, I think, scarcely be doubted that the local pulmonary irritation was in these cases adequate to the production of the various signs and symptoms, general as well as special. It was no particular dyscrasia that joined the local cause—the symptoms were similar in kind, and they passed away when the local cause which induced them was removed. The nature of the pneumonic process, however, differed in different cases. In Cases 1 and 3 the signs were those of ordinary acute pneumonia, with dense consolidation, such as is described by modern Continental authorities as "croupal" pneumonia, but differing from this in its usual characteristic of attacking the inferior portions and involving all or nearly all the affected lung. In most of the other cases there was patchy condensation, of which the physical signs are less that complete dulness of percussion-note which hepatisation gives than a higher pitch and a long-continued localisation in the portions affected of harsh or diffuse tubular breathing, with moist sounds. Such are included under catarrhal pneumonia. The pathological conditions of the affected portions of the lungs in all these cases are hyperæmia, exudation with extrusion of (or development outside the vascular walls of) white blood-corpuscles (the exudation being richer in fibrine in the acute cases), afterwards liquefaction of exudation, which is partially absorbed and partially expectorated in the form of pus or of cells which have undergone in greater or less degree a fatty degeneration.

Having briefly considered these cases, we will pass on to another class, in which with similar initial causes there has been a further development of those symptoms which we recognise as those of pulmonary phthisis.

CLASS II.—CONDENSATION OF PORTIONS OF LUNG IN PERSONS PRESENTING NO APPARENT TENDENCY TO PHTHISIS—PROGRESS OF PHTHISICAL SYMPTOMS.

Case 6.—Condensation of Apex and Base of Left Lung, probably from inhalation of Rouge-powder—Hæmoptysis—General Improvement—Subsequent Condensation of Apex of Right Lung.

Edward W., 20, silverworker, applied at the Royal Chest Hospital, March 25, 1870; complained of pain in chest and back, and cough with much expectoration. He began to be ill twelve months ago with symptoms of a violent cold; he was laid up six weeks with "inflammation of the lungs." A strong, muscular man, without the slightest predisposition to phthisis. Volunteered statement that he had been accustomed to breathe particles of rouge-powder, used in the course of his trade to polish silver, and believed this the cause of his symptoms.

Physical Signs.—Deficient resonance over upper lobe of left lung, with harshness of inspiration; deficient resonance over the left base at the back. Treated by a mixture of ammonia and chloric ether with iodide of potassium; cod-liver oil.

On May 4 occurred hæmoptysis to the extent of half an ounce. Mixture changed for sulpho-carbolate of sodium. Continued oil. May 20: Percussion-note was clearer, so that differences

(a) Dr. Thorowgood has called my attention to some observations in the Royal Navy Report, 1860, p. 27. Excessive overcrowding among seamen on the Mediterranean station induced a form of pulmonary disease classified as "Cachexia Pulmonalis," which was characterised by debility, loss of flesh, and congestion of the *upper lobes* of the lungs, with decided physical signs of condensation. On arriving in England a great number of the men thus affected improved rapidly, and after a time entirely recovered.

could scarcely be detected, but respiration was of varying quality in different regions. He had greatly improved, and felt "pretty strong." He continued improving with slight variations till July 27, when he omitted treatment for three weeks. On August 26 increased cough, which became paroxysmal, and expectoration. Under treatment as before he improved, and on October 7 had gained 7 lbs. October 21: Slight hæmoptysis, with volatile pains in chest.

January, 1871.—Hæmoptysis again to the extent of a quarter of a pint, ceasing after administration of ext. ergotæ liquid.

April 18.—Cough had ceased to trouble him, but there continued to be some expectoration, occasionally blood-tinged. After the commencement of May, 1871, I lost sight of the patient till January 2, 1872. He had been, he told me, getting on very well till a month ago, when slight hæmoptysis had returned; generally, however, he was free from cough, but there was some expectoration. The physical signs were deficient resonance in the *right* infra-clavicular region, as far as the lower border of the second rib, with a few dry râles. The patient continued to take cod-liver oil.

Case 7.—Condensation of Left Apex in an apparently Strong and Muscular Woman—Frequent Hæmoptysis.

A. W., 48, came under my care as out-patient at the Chest Hospital, September 21, 1869. She complained of severe cough with profuse expectoration, and occasional pains in the chest. Voice was hoarse and whispering. Had been ill ever since October, 1868, when she caught a severe cold. She had never completely recovered, and for the past six months the cough had been almost incessant. She had lost flesh greatly, but now weighed 11 st. 8 lbs., and presented an appearance of full, firm muscles without superabundant fat, and an apparently large and capacious chest.

Physical Signs.—There was dulness on percussion over the left apex, over the right lung some bronchitic râles; but the signs did not seem adequately to explain the frequent cough and obvious dyspnœa. Treatment: Cod-liver oil and sulphocarbolate of sodium. No obvious improvement followed; cough was violent, paroxysmal, and ineffectual. Loss of weight occurred, and on December 31 she weighed only 10 st. 11 lbs. Only change in physical signs was occurrence of some moist sounds over the dull area. Quinine and oil with small doses of morphia to relieve cough were now given; and, after a period of six weeks, in which there was no improvement, the patient began to mend slightly. In June she had gained weight up to 12 st. 1 lb.; cough, however, still very violent. In July patient went to Margate, but became worse there. In August hæmoptysis occurred in slight degree. Hæmoptysis increased, recurring at frequent intervals till the middle of November. It was treated by administration of ext. ergotæ liquid. with the quinine mixture. Some improvement now occurred, with, however, occasional outbreaks of hæmoptysis. In the spring of 1871 she gained considerably in weight; on May 26 she weighed 12 st. 9 lbs. No material change took place in the symptoms, and in August she ceased attendance. On December 22 she again applied, the cough being now very distressing; the sputa frothy, with a little blood.

Physical Signs.—Dulness over upper lobe of right lung; a few moist signs only.

February 9.—Hæmoptysis returned and continued for fourteen days. I last saw her February 23; there was then flattening of the anterior chest-wall and incurvation of sternum. No displacement of viscera. There was dulness over a triangular patch in the upper lobe of right lung, with coarse râles; over the upper lobe, at the back, dry leathery creak. Deficient resonance over all the upper lobe of left lung.

I think it will be granted that no physician who watched these cases could fail to form the opinion that they were examples of pulmonary consumption; and one who had been accustomed to the old view of the essential dependence of phthisis on tubercle would say that they were cases of tubercular phthisis. In the first place, however, there could be no pretence whatever for saying that either of these patients presented the signs of a tendency to tuberculosis. The aspect of both was as foreign from that of tubercular persons as could be well conceived, and there was no family predisposition to such disease. The initial causes of the disease they suffered appeared clear in each case—in one it was the direct irritation of foreign particles breathed into the lungs; in the other, it was an acute inflammatory attack, though whether this was of the nature of pneumonia, pleurisy, or both, there was no history to show. The result of the irritation in each case was the production of local consolidations of the lungs, just as in the first class of cases quoted, but differing from those in that the consolidations did not wholly disappear, but persisted or reappeared in new situations, and were accompanied by hæmorrhages and signs of severe invasion of lung-tissue. It might be seen that these cases, however, differed in several points from those which manifest the ordinary course of pulmonary tubercle—first, though the local consolidations were distinguished without doubt, they were scarcely adequate to explain the severe pulmonary distress; secondly, there were no signs of progressive softening and gradual formation of cavities; thirdly, the cough was more paroxysmal than is usual in simple tubercle, and was ineffectual in expelling any sputa to afford relief. If one traces the pathological results of chronic irritation of the pulmonary tissue such as occurred in these cases, one finds two distinct chains of phenomena. In the one there is an infiltration of cells in the connective tissue of the lungs, with progressive thickening of this connective tissue, to the compression and obliteration of the air-cells and the conversion of the pulmonary structure into a hard and fibrous mass—such is known as "interstitial pneumonia"; or there is a proliferation of cells within and among the air-cells a fatty degeneration of these cells in greater or less degree (causing them to assume irregular shapes, and constituting what are called tubercle-corpuscles), with a destruction of the neighbouring tissue of the lung—these masses, softening from their fatty transformation, are the cheesy deposits commonly known as yellow tubercles. In the cases we have just mentioned either or both of these changes may have occurred.

(To be continued.)

NOTES ON DISLOCATIONS.

By J. HANCOCKE WATHEN, L.R.C.P.E., M.R.C.S. Eng.

Two cases of rare dislocations—viz., those of knee and sternal end of the clavicle,—under the care of Mr. Samuel Hey, having been reported in these columns for November 2, I have thought the notes of the following cases worthy of record:—

Case 1.—Compound Dislocation of the Knee-joint—Recovery with nearly Perfect Movement of Joint.

E. T., aged 36 years, until lately an agricultural labourer, healthy, came under observation on January 26, 1868, when he gave the following history:—He was present at the Gadley's colliery explosion, which occurred in the first week in October, 1867. A huge block of coal fell on him, striking the left thigh on the outside just above the knee. When brought to the surface it was found that his thigh-bone protruded through a wound on the inner aspect of knee-joint, the limb being flexed. The three centre toes of the same limb were crushed, which necessitated their being amputated. The state of the patient at the time of observation was the following:—He had lost the three centre toes of left foot; on the inner aspect of knee of same side was a cicatrix about three inches and a half long, extending, from a point immediately above the internal condyle, downwards and outwards, terminating just below the patella. Over the outer condyle there were three or four small irregular cicatrices.

The patient further stated that the surgeon in charge was able to pass his finger across the joint from inner to outer wounds. Reduction was effected, the limb placed on a back splint, three sutures introduced along the inner wound, and cold water dressing kept constantly applied. Considerable suppuration took place, discharging principally through the wounds on outer side of knee. At the end of six weeks all support was taken off, and the patient directed to commence passive movement of the joint; and now (January 26), three months after the receipt of the injury, he has nearly complete movement of the joint. Extension is perfect, and flexion can be made up to a right angle. From the patient's description further flexion is apparently prevented by the anterior aspect of the joint being bound down by adhesions.

On applying for information in this case to Mr. D. Davis, of Aberdare, under whose care the patient made such a satisfactory recovery, he writes that he perfectly recollects the case, and that the patient's description of his state is correct. Mr. Davis adds that his experience of compound dislocation of the knee-joint is considerable, ten such cases having occurred to him, eight requiring amputation; two only out of the ten recovering, of which the present case is one. (Mr. Davis does not mention whether the remaining case of recovery was one in which amputation had to be resorted to, or not.)

Case 2.—Simple Dislocation of Knee-joint—Recovery, with Fibrous Anchylosis.

This case occurred in the person of Mr. ——, aged 47 years, a medical man, a near relative of mine, whose horse, while driving, became suddenly restive, and bolted. Mr. ——, who was driving in a two-wheeled dog-cart, finding the horse's feet come into uncomfortable proximity, determined to jump out. He alighted with his left foot partly on the raised foot-path on the roadside; the ankle being forcibly driven backwards, the tibia became dislocated from the femur in the direction of forwards and outwards; the limb was somewhat flexed. Some passers-by, under Mr. ——'s instructions, made extension, by which reduction was easily effected.

The case was at first seen by my friend Mr. E. P. Phillips, of Haverfordwest, who kindly undertook the care of it during my absence from home. The limb was placed on pillows, with lateral splints, which were changed after some days for a M'Intyre, and swung in a Salter's cradle. This patient was a martyr to ill-developed gout, which very much influenced the case; considerable inflammatory action came on in the knee-joint; this was relieved by poppy fomentations. Without going into a detailed account of the case, I may state that, after running the gauntlet of an attack of hæmaturia and cystitis, together with two or three little accidents when just convalescent, which set up secondary inflammatory action in the joint, the patient recovered with a stiff knee. At present, five years after the accident, there is some little mobility in the joint, but Mr. —— walks, with a straight leg, at a pace that few with free movement of joint can outdo.

Case 3.—Dislocation forwards of the Sternal End of the Clavicle.

David J., aged 16 years, presented himself on August 20. He stated that some three hours before he had tumbled off a load of hay, falling on his left shoulder. On being stripped the left shoulder was seen to be approximated towards the mesial line. Over the sternal end of the clavicle there was a considerable prominence, which was easily made out to be the dislocated end of the bone. Some tumefaction was present. The bone was brought into position by drawing the shoulders outwards and backwards, and a posterior figure-of-eight bandage applied. As the bone became displaced very readily, a large pad and a similar bandage were applied anteriorly over the displaced end of the clavicle. The difficulty of keeping the bone in position, and the fact of the boy living some seven miles away, as well as his inability to obtain perfect rest, did not lead me to anticipate a satisfactory result. Every time the boy visited me the whole affair was found out of gear. I saw him a couple of weeks ago, when I found the end of the clavicle somewhat prominent, but of no inconvenience, as he could use his arm as well as ever.

Remarks.—The case of E. T. was evidently one of dislocation of the tibia backwards and outwards, with protrusion of the femur through the wound on the inner side. It is of interest as affording a sample of so complete a recovery after compound dislocation of this articulation, even when treated, as I believe, on simple antiphlogistic principles. These cases have hitherto too frequently called for amputation, the soft parts being, as a rule, so much lacerated; but, armed as we now are with the principles of antiseptics, we may, I think, look for more satisfactory results than were obtained before. The influence of the state of health on the ultimate result is shown by a comparison of Cases 1 and 2. On account of the shallowness of the articulation, it is nearly impossible (according to Professor Erichsen) to prevent a return of the displacement in cases of dislocation of the sternal end of the clavicle. Should we be unsuccessful, it does not appear to make any appreciable difference to the patient, except it be a female, who would hardly forgive one for allowing such an irregularity to exist. In these cases it would be advisable to insist on the patient keeping her bed, as has been recommended in fracture of the clavicle in women.

Retirement of M. Bazin from the Hôpital St. Louis.—The period having arrived when M. Bazin's age necessitates his retirement from the post he has so worthily filled at this Hospital, many of his present and former pupils, who have benefited by the clinical lectures which he rendered so celebrated, have determined to subscribe for a bust to be placed in the theatre wherein these were delivered. Any of our readers who have formerly attended these lectures, and may wish to join in the testimonial can forward their subscriptions to Dr. Constantin Paul, 29, Rue de l'Université.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

LONDON HOSPITAL.

A SERIES OF CASES ILLUSTRATIVE OF CEREBRAL PATHOLOGY.
CASES OF INTRA-CRANIAL TUMOUR.

(Under the care of Dr. HUGHLINGS-JACKSON.)

Continued from page 542.)

Remarks on Case 1.—This case is a valuable illustration of the symptoms producible by an adventitious product within the cranium. When I first saw her, the girl looked so well that the diagnosis of serious disease of any kind seemed strange. But a careful examination left no doubt that there was an adventitious product in *some part* of the intra-cranium. What was doubtful was its position. This is remarked on in the report.(a)

The most striking *clinical* feature of the case is the remarkable intermission in the symptoms. Now and then the girl seemed to be so well that the inexperienced might easily have supposed that there *could be* no such *organic* disease as tumour. Those who have made many post-mortem examinations, however, know that adventitious products within the cranium need not produce any symptoms (no obvious symptoms, at any rate), and are *not* surprised when symptoms of cerebral tumour disappear for a time.

The case shows what I have years ago insisted on (Royal London Ophthalmic Hospital Reports, vol. iv., 1865), that double optic neuritis may exist when a patient can read the smallest type. I continue to insist on this point (see Cases 2 and 3), as the statement is, not unnaturally, received with more than incredulity by some. The discovery of double optic neuritis was, as the report shows, of extreme diagnostic value as to the *nature* of the lesion in this case. The optic neuritis is not peculiar to tumour of the cerebellum; it occurs from tumour in many parts, if not in any part, within the cranium; it is not a localising symptom.

We do not, I think, attach sufficient importance to negative facts. The absence of deafness in this case is noteworthy. I do not mean that its absence in such a case is uncommon; on the contrary, adventitious products of the cerebrum or cerebellum seem never to produce deafness, notwithstanding the large connexions of the auditory nerves with the cerebellum. But, however familiar we may be with the fact, we should not cease to bear it in mind in juxtaposition, so to speak, with another fact—viz., that adventitious products in the cerebrum or cerebellum nearly always produce blindness, partial or total, although by an indirect process—viz., by producing inflammation of the optic nerves. Of course cases are excepted where the adventitious product involves or directly squeezes the auditory nerve, and of course cases of cerebral or cerebellar abscess in association with organic disease of the ear have no bearing on the question.

It is not nowadays considered very remarkable to find an adventitious product in the *cerebellum* of a patient who had no disorder of *locomotion* at any time before death. We have recently had two cases of abscess of one lobe of the cerebellum without any difficulty of locomotion—one under Mr. Maunder's care and one under my own. Besides, if in Case 1 there *had been* any trouble of locomotion, the case would have supplied no trustworthy evidence in support of the hypothesis that the cerebellum is the organ for co-ordination (of the most complex movements of locomotion, etc.), for the simple reason that other parts—pons and medulla—were squeezed. Nevertheless, I may remark in passing that I believe the cerebellum *is* the organ by which the co-ordination of the most complex movements of locomotion is effected (co-ordination of co-ordinations). The fact that *slow* destruction of *part* of it leads to no irregularity of gait no more shows that the cerebellum is not the part where are groupings of

(a) I have now under my care in the London Hospital a patient who has *exactly* the same symptoms—viz., double optic neuritis, headache, and vomiting; the headache comes on in attacks. There is also paralysis of both sixth nerves; there is no deafness; her gait is perfect: she, also, is a healthy-looking woman, and her age is 25, too. That she has an intra-cranial tumour is, I think, certain, but that it is of the cerebellum is only probable. There is only one other part in which it is at all likely to be—viz., in the cerebral hemisphere—so that guessing would not be difficult.

nerve-fibres and cells, serving in co-ordination of movements of locomotion, than the fact that destruction of part of the cerebrum, without affection of mind, shows that the cerebrum does not serve in mental operations. A more striking example is that a considerable part of the corpus striatum may be permanently destroyed when there is no permanent palsy of the face, arm, and leg. I have tried to show the bearing of these facts on "localisation" in papers in this journal, December 14 and 21, 1867.

The patient died suddenly. She was apparently as well, or only as ill, as usual three-quarters of an hour before death. I have known several cases of sudden death from tumours of different parts of the encephalon, but I cannot explain how it happens except in cases where there is hæmorrhage from the tumour, and here there was none.

As to the treatment of the case, iodide of potassium was given. Of course, so far as we know, this drug would do no good for glioma, nor for a cyst. But there could be *no certainty* that the tumour was not syphilitic. Besides, we have to treat changes in the *nervous* substance *induced by* tumour and other foreign bodies. Many of the "symptoms of tumour of the brain" are really symptoms due to secondary changes in nerve-tissue—changes which, in their grossest and latent form, constitute the softening we see post-mortem about a tumour. (Optic neuritis is a secondary change, although the manner of its production is unknown.) Since a cerebral tumour need not produce these secondary changes (since it may lie latent), it is reasonable to suppose that it may, after it has provoked these disturbances, become latent again. In short, although we may not be able to do anything towards removing the tumour, we may do something for the reversal of the changes it induces in the brain-matter round about it. I always give iodide of potassium in such cases. For the relief of the intense headache I once applied a few leeches, and this seemed to dissipate her pain; but what relieved her most was the ice-bag. This is of great service in such cases. I have now under my care a man who has double optic neuritis and severe headache, who goes to bed simply because he can then adjust the ice-bag, and thus get prompt relief from pain.

(To be continued.)

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

A CHIP OF IRON LODGED IN THE EYE—EXTRACTION OF THE LENS WITH THE FOREIGN BODY EMBEDDED IN IT—RECOVERY.

(Under the care of Mr. GEORGE LAWSON.)

A BOILER-MAKER applied to the Royal London Ophthalmic Hospital on the morning of September 8, stating that on the previous day, whilst cutting a piece of iron with a hammer and chisel, a minute fragment of the chisel flew off and struck the left eye. He was unable to say whether it had penetrated the globe; all that he could tell was that the piece of iron was very small. Since the accident the man had been in constant pain, and the eye was red and irritable. On close examination a minute mark was visible on the cornea, showing where the foreign body had struck; and, on dilating the pupil with atropine, the lens was seen to be growing rapidly cataractous, and a small rent could be detected in the lens capsule.

It was thus evident that the chip of iron must have penetrated the globe, for it was too small to inflict such a blow on the eye as would cause, from contusion only, a rupture of the lens capsule and cataract. The important question now to decide was, What was the best mode of treatment to be adopted? The sight of the eye, considering the diffused opacity of the lens, was good, the pupil acted well, and the field of vision was complete. It was very desirable to save the eye if possible; but at the same time it would be better to sacrifice the damaged eye rather than run the risk of losing the sound one from sympathetic ophthalmia, a result which might be predicted almost with certainty if the foreign body were allowed to remain in the globe.

The man at the time was not prepared to come into the Hospital, but he agreed to do so on the following Friday (September 10), when he was accordingly admitted. The eye was then less irritable than when first seen, but the lens was more opaque.

Before operating, Mr. Lawson remarked that it was quite possible, and, from the small amount of irritation present, it was probable that the foreign body was embedded in the lens. He proposed, therefore, to extract the lens by a free corneal section; and, if he failed to remove at the same time the chip of iron, he would conclude that it was lodged in some deeper part of the eye, and at once excise the globe. Fortunately for the man, the result proved that the foreign body was embedded in the lens, for on completing the corneal section—the lens capsule having been already ruptured by the accident—the lenticular matter immediately began to escape through the wound, and the chip of iron was seen in the anterior chamber surrounded by soft lens substance. A pair of fine forceps was then introduced through the section, and the foreign body drawn out. The rest of the lens was then gently pressed through the corneal wound, and the operation thus satisfactorily concluded. After the operation the patient did well, and left the Hospital on September 20 with the prospect of a good and useful eye.

BIRMINGHAM GENERAL HOSPITAL.

CASES UNDER THE CARE OF DR. RUSSELL.

Case 1.—*Severe Hysterical Development, with Chorea—Failure of Chloral.*

THE present case may be opposed to one which I reported in this journal, in which chloral acted with great power and much advantage in a severe case of maniacal chorea. Other similar cases have presented themselves to me since. In the present case the failure of chloral seems to connect itself with the hysterical nature of the mental disorder, and thus affords an illustration of one of the varied forms of mental disturbance with which chorea is liable to be associated. Though the mental disorder was very violent, the intellectual functions were little affected. The symptoms related solely to the emotions. The determining cause of the continued violence after the patient had been subjected to treatment appeared to be objection to being in a hospital, though the history of the patient plainly indicated that the entire mental attack was connected with some change in the patient's nervous organisation. A case of violent epileptic mania—apparently provoked, certainly maintained, by removing the patient to the Hospital—which has happened to me, affords a parallel to the present instance.

The alleged cause of the illness in this case—namely, fright—will also be noted. As in many other forms of nervous disorder in which fright is the assigned cause, so in chorea, some pre-existing cerebral defect has doubtless been present to subject the nervous centre to injury from emotional excitement. The analogy of the general history of chorea suggests the rheumatic attack as the fundamental condition on which the chorea was founded in the present instance; and with this view of the connexion between the different elements of the case, it is interesting to observe that, whilst an interval of three weeks intervened between the occurrence of the fright and the commencement of the chorea, the change in the patient's emotional state followed immediately upon the excitement produced by the alarm.

The patient was a fine-made, healthy-looking girl, aged 20. Her family history was unknown. The dates of her illness are indefinite; but it appeared that she had been confined to bed for nearly a month with acute rheumatism. On the occasion of her second walk out of doors after her recovery, a large dog flew at her, and though he did not wound her he tore her clothes. She screamed for help, and was so violently affected by the fright that she had to be assisted home. She was at once greatly changed. She screamed violently in the night about the dog, not being at all aware in the morning of having done so. She became very excitable, flew into violent, causeless passions, and it was difficult for her mother to manage her; occasionally her violence occasioned considerable alarm. It was not, however, till three weeks afterwards that the choreic movements developed themselves, commencing gradually in the face and arms. Four days before admission—a month after the movements had been first perceived—the chorea increased greatly in severity.

She presented the usual characters of a severe case of chorea, all her limbs being in violent movement. It was, however, noticed throughout her stay in the Hospital as a remarkable circumstance, that notwithstanding the severity of the agitation, she not only took food easily and retained it in her mouth, but was always able to guide her arms so as to carry her food to her mouth. The sounds of her heart were believed to be pure. No worms were seen in her stools.

On September 27 she was ordered chloral gr. xxv., potassii bromid. 3ss., to be taken every four hours. After the fourth dose the quantities were raised on the 28th to chloral grs. xxxv., potassii bromid. grs. xv. On September 29 the patient had taken four doses of the second prescription. During the night of the 27th she had slept for three hours, during that of the 28th for five hours, but with frequent intervals of awakening. During the day, though she was placed under the most favourable circumstances, she had no sleep, but was tossing about and crying out in a highly emotional condition. She offered most violent resistance to whatever did not please her, and was especially angry at the intention expressed of padding the wall around her bed, and declaimed violently against having been brought into the Hospital. She believed herself to be regarded as a lunatic, cried out that she had her senses, and would take good care never to enter a hospital again. Just before my visit on the 29th she fell into a violent paroxysm of passion by overhearing a foolish remark about cutting off her hair. Yet she remained amenable to remonstrance, and was quieted after a time. She complained greatly of severe headache after the chloral, and it was distinctly stated that she was always more excitable for half an hour after its administration.

On the 29th tincture cannabis mxxv., to be administered every four hours, was substituted for the chloral. This change in the medicine was followed by three good nights in succession, seven and eight hours' sleep having been obtained in each. Her appetite also greatly improved. The night of October 2, however, was greatly disturbed by an alarm from an epileptic patient in a neighbouring ward, and on the morning previously she had been greatly excited by hearing that operations were going on in the theatre near her ward. As a consequence during October 3 the movements were again violent, though she fed herself easily, and protruded her tongue well. She was removed from the Hospital in the evening of the same day; threatening to become again violent if retained. She is now at home, but by no means recovered.

Case 2.—*Sudden Paroxysms of Vertigo, both in the erect and horizontal posture, with peculiar Headache—Deafness in One Ear—Optic Neuritis.*

I have thought a notice of the following case worthy of insertion on account of the suggestion first made to my own mind by the patient's history, that the attacks of vertigo and headache were connected with the deafness in the right ear, referring to Dr. Hughlings-Jackson's paper on this subject in the *Medical Times and Gazette* for August 17; and on account of the correction my hypothesis received from the result of ophthalmoscopic examination. The diagnosis will now point to the probability of cerebral tumour.

C. C., a labourer, aged 40, of temperate habits, has been subject since last May to frequent attacks of half an hour's duration, which he describes as consisting of sudden indefinite pain, extending from the back to the front of the head; with the pain occurs a sense of stiffness in the neck, and he becomes very giddy, though he has never fallen. When the attack occurs in bed he feels as if he were falling off some high place, and clings to the bed for support; during the day he is obliged to sit down and clasp his head till the paroxysm passes off, when he resumes his occupation. He never loses his senses, but experiences a tight feeling in his throat, becomes hysterical, and gnashes his teeth. He can give no clear description of the headache, which is evidently a sensation rather than pain. His nights have been very sleepless since his illness began, and when admitted there was something of wildness in his aspect, but intelligence was perfect. There was not the least evidence of paralysis or of spasm, nor any nervous abnormality excepting a condition closely resembling hypochondriasis. I found that he had been perfectly deaf with the right ear for twenty years; hearing was good with the left ear, though not perfect. He had never suffered from discharge from the ears. At my request Mr. J. P. Smith, House-Surgeon to the Eye Hospital, examined the patient's eyes with the ophthalmoscope; he found double optic neuritis to be present. Bromide of potassium failed to give the patient relief, and he left the Hospital at his own request.

A MUNIFICENT FEE.—Professor Pitha, of Vienna, it is stated, has just received a fee of 100,000 florins (£10,000) on the recovery of the young Baron Todesco, the only son of a millionaire. The case entailed an attendance of about two months, and the patient remained entirely unconscious during twenty-three days. Professor Pitha's assistant also received a very large sum of money.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
"	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
"	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 23, 1872.

PROFESSIONAL ETHICS.

THE law of Great Britain places in the hands of the General Medical Council the power of removing from the Medical Register the name of any registered Medical Practitioner who "shall after due inquiry be judged by the General Council to have been guilty of infamous conduct in any professional respect." The law therefore recognises the existence of such a thing as professional morality apart from, and not to be confounded with, civil morality, commercial morality, or social morality. Conduct "infamous in any professional respect" need not necessarily be infamous in any civil, social, or commercial respect. The law, we take it, allows that the Profession of Medicine has its own code of ethics, and it constitutes by the 29th clause of the Act of 1858 the General Medical Council the judge of what that code requires, and gives that Council the power of expelling the offending member from the Profession he has disgraced.

It would be easy to show that such a code has always been recognised, and its restrictions acknowledged by all who followed the paths of legitimate practice. From the time when the famous Oath of Hippocrates was first committed to writing to the present there has been a clear distinction between the practices of the quack and of the regular physician or surgeon, and the value of such a distinction both to society and the Profession has been one of the great reasons why kings and governments have granted charters and privileges to Medical Corporations and Colleges, and why in later days the Legislature of this country has vested the large power of registration, and of refusal to register, in the General Medical Council. The Council has on several occasions, as our readers know, exercised its power of removal from the Register. But in most, if not all, of these cases the persons whose names have been so removed have been found guilty of offences in one of the law courts. We repeat, however, that, apart from felonies and offences against the criminal law, the Council possesses, and ought to put in force, a distinct power of removing grave offenders against professional ethics from the Register.

Having said thus much on the powers possessed by the

General Medical Council, we may notice that the two Royal Colleges possess similar powers, and that in recent times the Royal College of Surgeons has shown on several occasions a praiseworthy determination to remove from its Membership persons who were using its diploma for questionable purposes.

Our attention has been again called to the subject of professional ethics by a string of advertisements occupying a column of the *Times* of last Friday, apparently inserted by a gentleman who signs himself "M.R.C.S. and L.S.A.," to which advertisements we now call the attention of the General Medical Council and the Royal College of Surgeons. It is for those bodies, and not for us, to decide whether such a publication is or is not an offence against the code of Professional Ethics. We may say that this gentleman has been known as a writer on the use of galvanism and electricity in the treatment of disease, and that some of his works have obtained acknowledgment from the medical press. The advertisements to which we now call attention seem to us the more to require the notice we ask, inasmuch as they quote from the opinions formerly pronounced on the author's works by our contemporaries and ourselves, and boast of the authentication of the cases by several of the leading surgeons and physicians of London. As a sample of the advertisements filling a column of the *Times*, we publish the following, of which we must leave the General Medical Council and the Royal College of Surgeons to form their own opinion:—

Price 2s. 6d.

HYPOGASTRIA in the MALE, treating upon those symptoms accompanying and resulting from a prematurely debilitated constitution, and suggesting a rational and successful treatment.

Contents.

1. Incontinence of urine in childhood.
2. Hysteria in the male.
3. Stammering.
4. Spinal debility; spinal irritation.
5. Loss of tone.
6. Varicocele.
7. Enlargement of the prostate.
8. Nervous exhaustion.
9. Tabes dorsalis; progressive locomotor ataxy.
10. Hypochondriasis—i.e., certain symptoms hitherto classified under this head, but which I have detached from it and defined Hypogastriacis.

ALMOST without exception patients affected with hypogastria complain most of their symptoms in the morning; as the day advances they improve, and after dinner is their best time. Instead of waking up refreshed, ready to turn out of bed immediately, the hypogastriac is languid, dull, heavy, disinclined to move, desirous again to sleep; the limbs are heavy, sometimes even stiff, the back feels weary, and altogether he feels worse than when he retired to rest, unrefreshed and more tired, apparently, than when he went to bed.

HYPOGASTRIA

SHOULD be read by all interested in the welfare of youths; it rescues from quackery a subject seldom adverted to by medical authors, and universally tabooed by the profession.

HYPOGASTRIA is CURABLE.

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

No. IV.

Of necessity the Medical Officer of Health will frequently be called upon to advise as to the best measures to be taken for the prevention and check of infectious and contagious diseases; and he will have not only to counsel the local authority as to the best means which lie within its power for the prevention of disease, but he will also be required to furnish all needful instruction to his subordinate officers, the Sanitary Inspectors, as to the detailed measures which are to be adopted. Here the Medical Officer is supreme. In the eyes of the law a medical man can alone be competent to furnish advice as to disease, and he will find his suggestions readily adopted by those who have to administer the law. The chief diseases that he will thus have to deal with are—scarlet fever, diphtheria, enteric fever, typhus, small-pox, measles, hooping-cough, diarrhœa, cholera, and relapsing fever.

Of these we may at once dismiss measles and hooping-cough from our consideration, as at present we know of no practicable means of checking their spread among the general public by any measures available through the action of the officials of the sanitary authority. We are not referring, of course, to public establishments, for these will have their own medical visitors, who will doubtless do all in their power to limit these diseases by proper isolation, and the interference of the Medical Officer of Health will be rarely evoked. The advent of the first cases of the other diseases will be at once noted by the Health Officer, and their history carefully gone into. At the same time he will act promptly in applying preventive measures. One of his greatest difficulties will be to secure proper isolation for early cases; but he will use every endeavour to isolate the cases, and, where necessary, advise the local authority itself to furnish the necessary accommodation, by hospitals or otherwise. On the promptitude, energy, tact, and skill of the Medical Officer it will in a great measure depend whether a disease shall spread or not. At the same time we must warn him against becoming an alarmist. If a Medical Officer once cries "Wolf!" and no wolf comes, his advice is liable to be thought of little account when he again raises the alarm of an impending epidemic. The prognosis of an epidemic must be given with great caution and reserve.

As regards the detailed measures to be taken to check infectious and contagious diseases, our own practice, which works well, is to instruct the Sanitary Inspector to visit and keep under surveillance every house in which enteric fever, typhus, relapsing fever, scarlet fever, diphtheria, small-pox, or diarrhœa has appeared, and to report to us on the sanitary or unsanitary condition of the premises. No difficulty is experienced in gaining access to even the best class of houses if the Sanitary Inspector exercises tact and discretion. Let it be known that the object is to advise the inmates as to the best course to pursue, and that no officiousness or interference with the treatment of the patient is intended. In cases of difficulty, or where several cases of the disease have existed in a house or neighbourhood, it will be requisite that the Medical Officer should himself visit. Care should be taken to insure as far as possible the use of disinfectants—and where the sanitary authority sanctions the practice, it is a wise economy to furnish disinfectants gratuitously to those who are very poor; but this should not be done without the authority of the Board under whom the Medical Officer of Health acts. All defects of construction in the infected house must be remedied as far as possible, and all unsanitary influences at once removed where practicable. As soon as the patients are convalescent or removed into hospital, or at the earliest practicable moment after a death, due care must be exercised by the Inspector acting under the direction of the Health Officer to have the infected house disinfected and cleansed.

In urban districts the Medical Officer of Health will advise the erection of an efficient apparatus for the disinfection of clothing, bedding, etc., and in many instances a mortuary will also be a necessity.

In all cases where local outbreaks of enteric fever occur, it will be the duty of the Health Officer to thoroughly investigate the cause of the outbreak; and with this view the water-supply will demand close attention. Very frequently this will be found exposed to contaminating influences, often of an easily remediable nature. The same remark applies in a lesser degree to outbreaks of diarrhœa among adults.

It is necessary that a Health Officer should have an exact knowledge of the nature of the actions of particular disinfectants. Were the *rationale* of the action of these more generally known, we should not find, as is too often the case, messes made of mixtures of sulphurous acid and chlorine, carbolic acid and chloride of lime, Condy's fluids and carbolic acid, and chloride of lime used for the disinfection of urinals, etc. Too frequently it seems to be thought that to create a stink is the main object of disinfection. We ourselves chiefly rely upon sulphurous acid, carbolic acid, and green vitriol as efficient and cheap disinfectants.

In ascertaining the *habitat* of, and in dealing with, infectious

and contagious diseases, the Medical Officer of Health will put himself in communication with the registrars of deaths of his district, the poor-law surgeons, the relieving officers, and the medical officers of public institutions. He will also, we presume, receive from the Registrar-General returns of all the deaths in his district. It is advisable, too, that he should cultivate friendly relations with private medical practitioners, ministers of religion, and all those concerned in the charitable relief of the sick and destitute.

In connexion with this subject we may point out that it will be the duty of the Medical Officer of Health to search for infectious disease in order to provide a remedy—not officiously, but so that he may become aware of all influences injuriously affecting the health of his district. It is not, however, his duty to search for nuisances—that is the duty of the Sanitary Inspector. Those Medical Officers who are for ever prying about searching for nuisances by no means maintain the dignity of their office. They lose caste by being esteemed mere superior Inspectors of Nuisances. Let the Medical Officer of Health by all means make an inspection whenever necessary; but it can rarely be requisite that he should make a primary inspection of a nuisance. He should first receive a report from the Inspector of Nuisances, and then view the nuisance himself, or act as he (the Health Officer) thinks fit. There is a still greater objection to the Medical Officer of Health instituting legal proceedings. This should never be done except by the order of the Sanitary Committee, and the Inspector of Nuisances is the informing officer who takes out the summons and acts the part of public prosecutor. The Medical Officer of Health is the medical adviser of the sanitary authority, and when he appears in a police-court it is as a medical expert deposing as to the influences on health exerted by the nuisances to the existence of which the Sanitary Inspector testifies.

MEDICAL PHYSICS.

We find that in the last number of *Nature* Professor Adams returns to the charge, and endeavours to defend the practice of the examiners of the University of London of examining medical students in physics, and expecting them to answer very difficult questions—nay, questions which many a professor would find it a by no means easy task to answer fully and satisfactorily. The fact is, this examination is only a part of a still wider question. It is well known that during the last few years the most powerful efforts have been made by many physicists to make us believe that Physiology and Medicine are simply and entirely mechanical and chemical. As has been many times pointed out, there is really no true analogy whatever between a body and a boiler. The heat in the body is not analogous to or produced in the same manner as the steam in the boiler,—as Professor Adams seems to desire we doctors should believe. Nor does the heat escape from the body as the heat escapes from a boiler. The question is a very complex one, and not to be accurately determined by physical formulæ. Neither do we believe that the solution of such a question is in any way facilitated by looking upon man as a "molecular body," as Professor Adams seems to think that even Dr. Beale will be ready to do. If a piece of coal or iron is a "molecular body," we think Professor Adams will admit that man is a very different kind of "molecular body." We have not the slightest doubt that physical principles have been pushed by physicists, ignorant alike of medicine, anatomy, and physiology, a good deal too far. We shall have to retrace our steps somewhat, for the time of physical physicians has not yet arrived; and if our students are taught to look upon sick men as "molecular bodies" in which the molecular vibrations are more or less disturbed, or as boilers with an accumulation of crust upon their inside, or in danger of blowing-up from some other physical defect, we shall have some very odd diagnoses and still more extraordinary suggestions as to the appropriate treatment upon which the patient, according to physical principles, should be placed. We hope the committee appointed to consider the questions in physics will not only spare the "chemic labours" of the medical students' brain-cells, by insisting that the questions proposed shall be of an elementary character only, but that they will no longer permit their examiners in physics to expect answers from those who have worked in hospitals and dissecting-rooms in favour of regarding living beings as closely allied to machines, and batteries, and boilers. For every man knows that he is neither a machine, nor a battery, nor a boiler.

THE WEEK.

TOPICS OF THE DAY.

We publish in another column a paper from a correspondent pleading for a more systematic plan of teaching clinical surgery in the Edinburgh Medical School. We fear that some reform in this most important department of professional instruction is needed in many of our schools south of the Tweed quite as much as in the north. It cannot be doubted, we think, that the art of teaching clinical surgery has not been as much cultivated as the art of teaching clinical medicine. Cynics might suggest that it is because physicians have so much more to talk about, surgeons so much more to do. We do not admit the validity or truth of the plea; but even if it were so it is surely desirable that the students should have practical and systematic instruction in surgical manipulation in classes at the bedside, besides the mere lectures on operative surgery and the teaching of bandaging by the juniors of the surgical staff. In too many of our hospitals the clinical teaching of surgery is merely a rush of a crowd of students after some distinguished surgeon as he makes his visit to the wards, a crowding round the bed of the patient—a large number of the students being unable to see or hear half of what passes,—and the few remarks which may fall from the lips of the surgeon on the case in the theatre. We believe that the clinical teaching of surgery might be as advantageously—both to pupil and professor—systematised as the clinical teaching of medicine.

The Swiney Lectureship on Geology is vacant by the retirement of Dr. Cobbold. The appointment of Dr. Cobbold's successor will be made in February next. The Lectureship is only open to Doctors of Medicine of the University of Edinburgh. It is held for five years.

After a long series of years of service Dr. Sharpey resigns his Secretaryship to the Royal Society. We believe we are only expressing an opinion universally held by scientific men, when we say that during his long term of office the distinguished Professor of University College has rendered great services to the Society, which has been constantly indebted to his great scientific erudition and acumen. The Council of the Society has nominated Professor Huxley as his successor. Professor Wöhler, of Göttingen, receives the Copley Medal in recognition of his chemical researches, especially those on the products of the decomposition of cyanogen by ammonia; on the derivatives of uric acid; on the benzoyl series; and on boron and silicon; and on meteoric stones. To Professor Thomas Anderson, M.D., a Royal Medal has been awarded for his investigations in physiological and agricultural chemistry, and his observations on the organic bases of Dippell's animal oil; on codeine and the crystallised constituents of opium; and on piperin and papaverin. Another Royal Medal has been awarded to Mr. Henry John Carter for researches in zoology, and especially into the natural history of the *Spongiadæ*; and the Rumford Medal has been given to Anders Jonas Augström for researches on spectral analysis.

Mr. Darwin, Dr. Lyon Playfair, and Professor Huxley have been proposed as possible candidates for the Lord Rectorship of the University of Aberdeen.

The very exceptional circumstance of a man being frozen to death from sleeping in the open air in England in November is reported in the *Times* of Wednesday last. An inquest was held at Maidstone on Monday on the body of a man named Thomas Pain, who was found lying by a policeman near Maidstone Gaol on Saturday night last. The policeman roused him, when he answered that he had to walk to London and would start. He tried to get up, but died in a few minutes. Dr. Leney said he was frozen when he saw him, and that he died from lying on the damp stones. Such a case is so exceptional that a post-mortem examination ought certainly to have been made.

It is rumoured that Sir William Jenner is to be the next President of the Pathological Society.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE object of the motion lately made by Dr. Williams at the College of Physicians was to draw attention to the anomalous status of its members, and also to the remarkable fact that a large number of the physicians practising in England, and many of them of great eminence, have no connexion with the College. The College list of the present year comprises 254 Fellows, 535 Members, 54 old Licentiates (equivalent to members), and 131 *extra-urbem* Licentiates. The number of physicians unconnected with the College practising with a degree of M.D., and (not being L.S.A. nor officers of unions) presumed not to be general practitioners, is 682. One of the principal reasons why so many physicians thus stand aloof from the College is the anomalous and barren nature of the membership. Although the members form the main bulk of the constituency yet they have no actual privileges as members; having neither vote nor voice, nor *locus standi* in the College. True they are admitted to the lectures and library; but this is no more than is accorded to the new licentiates who are not members. The one sole advantage of the membership is the prospect of being elected to the fellowship; and that advantage has hitherto been kept at a minimum by the sparing and partial manner in which the selection has been made in favour of a few—some comparatively junior men—while many seniors of equal or superior merit have been passed over, and the great body of members have grown grey in the cold shade of exclusion. Dr. Williams contends that the members are entitled to a larger share in the fellowship, which ought to be regarded, not as an exceptional distinction to be conferred only on a favoured few, but as the full and proper completion of the membership, to attain which all may look forward when, by a sufficient standing, and by an honourable and eminent career as physicians, they prove themselves worthy of it. By the adoption of this and other liberal measures the College would do justice to the present members, and induce other physicians to join its ranks; and thus it may eventually become a truly national institution, entitled to stand at the head of the medical corporations of the country, and to acquire the influence and authority which should properly belong to the representative head of the most learned and scientific branch of the Profession.

OPENING OF THE MEDICAL SESSION IN CANADA.

THE session opened in the different medical schools in Canada on October 1. The *Canada Medical Record* informs us that, as regards the Montreal schools, "we believe all are satisfied with the number of students. The older school, McGill, has, we understand, about the same number as last year, there being, however, a larger number of freshmen than usual. The Montreal School of Medicine has about ninety, while the new school, Bishop's College, for its second session, has close on forty students. In Toronto, we have been informed, Victoria has received considerable augmentation to its number, compared with last year."

EPIDEMIOLOGICAL SOCIETY.

THE first meeting of the Epidemiological Society this season was held on the 13th inst., when the President, Inspector-General Lawson, after some preliminary remarks, gave an outline of the epidemics in various parts of the world during the past twelve months.

The great diffusion of small-pox in 1871-72 was noticed, there having been epidemics at various points in Africa and Europe from south of the Equator to the Arctic Ocean; in Asia from Southern India to Siberia; in America from Chili to Canada. The hæmorrhagic form had been met with extensively through Europe, in Siberia, and in the western hemisphere from Trinidad to Canada. It was suggested as a subject for inquiry whether this might be connected with the influences which of late years have led to cerebro-spinal fever. It was shown that the epidemic which recently passed over this country and the North of Europe and Canada was met with in Southern India in 1868, in Northern India in 1869, in South of France in 1870, and in London at the end of that year.

The course of measles and scarlatina in this country was traced, and the remarkable frequency of diphtheria in Scotland noticed. In Edinburgh the ratio of mortality from this disease alone for 1871 amounted to 7·6 in 10,000 living. Its presence in other countries was also referred to. The epidemic of hooping-cough at the end of 1871 and in the early part of 1872 in this country was next considered; and it was mentioned that it had been experienced at Shanghai and Formosa in 1871; at the Cape, Mauritius, and in the West Indies and Nova Scotia early this year.

Fever, with a few local exceptions, had been low since the middle of 1871 in Great Britain and Ireland. Typhus became less frequent, enteric more restricted, and within the last few months relapsing had nearly disappeared. Cerebro-spinal fever had attracted considerable attention in New York and Canada since January. Yellow fever had appeared, though nowhere in very great activity, from Monte Video along the Brazilian coast to the West India Islands and Spanish Main. A febrile disorder, described as typhus and as plague, had been very extensively diffused in Persia since 1871; and dengue had shown itself at Mecca, in many parts of India, in Burmah, and even in China.

Cholera resumed its activity in India at the end of last and early this year, and there have been outbreaks on the east coast, in Western Hindostan, and in the country south of the Himalayas, from the delta of the Ganges to near Peshawur, and in the districts of Nepaul and Cashmere. In the middle of April, 1872, it broke out in Turkestan, and by July was in Samarcand and Bokhara on the one hand, and on the other passed down the Amou Daria to the Sea of Aral and the north-east of the Caspian. In Russia cholera prevailed from the Black Sea to Finland with varying intensity in different localities; it crossed the frontier into the neighbouring districts at various points in the course of the summer, and still remains in Poland, though decreasing greatly in Russia. It has lately appeared at Buda, and single cases or small groups have shown themselves at various points more to the west, indicating a disposition to occupy fresh ground, but it is not likely to display much activity until the return of warmer weather.

THE VACCINATION QUESTION AT SHEFFIELD.

WE noticed last week that Mr. Robertshaw, a member of the Board of Guardians of the Sheffield Union, had given notice to rescind the resolution passed by the Board in July last. This resolution had the effect of completely paralysing the efforts of the registrars to compel recalcitrant persons to have their children vaccinated. We are glad to announce that at the last meeting of the Guardians Mr. Robertshaw's motion was carried, and the obnoxious resolution rescinded. So strong an anti-vaccination feeling, however, appears to prevail in

Sheffield, that the Guardians divided equally upon the motion referred to: it was only carried by the casting vote of the chairman. Who can wonder, in the face of these facts, that the agitation against vaccination is carried on with a certain amount of success in some of the large towns of the kingdom? George Cruikshank used to say that "Jurors are not *con*jurors." Is is very evident, in some cases, guardians are not protectors.

THE NEGLECTED SAILOR.

THE soldier's dress is continually a subject of observation, but that of the sailor is almost overlooked. The following remarks by the Surgeon of the *Bellerophon*, which appear in the medical statistical returns of the Mediterranean station for 1870, just issued, deserve attention. Speaking of cases of sore throat which prevailed in that ship, "I have said before," he remarks, "and I am of the same opinion now, that the ridiculous dress which is continued to be used by the sailor, exposing the throat and upper part of the chest, has a good deal to answer for in regard to this disease and the three preceding ones (catarrh, bronchitis, and pneumonia). It is neither elegant, nor useful, nor convenient, and the sooner it is made to give place to a costume more in accordance with the enlightenment of the present time the better. The dress of soldiers has undergone many changes to meet the enlightenment of the age, while the poor sailor is robed as he was in Benbow's time. Surely we should know better what is suitable for a man to wear now than was known then, and no doubt we do, but there is a degree of prejudice to be got over which appears insurmountable. However, it does seem clear to me that the trousers as now worn, tight about the hips and thighs, must be an impediment to a man going aloft, and, being so very loose at the ankles, they are always flapping about to his annoyance. The throat and chest being so uncovered must meet with sufficient condemnation in a sanitary point of view, not to say one word of the effeminate nature of the fashion." The attention of Mr. Goschen should be directed to this subject. He is a great reformer, and will no doubt see the importance of issuing a regulation that may tend to remedy the evils complained of by the Surgeon of the *Bellerophon*. If the First Lord of the Admiralty has any doubt upon the subject we should recommend him, in this dreary month of November, to expose his neck and chest only for one week to the condition to which the guardians of our coast and the fighters of our naval battles are subjected. If this be not sufficient to convince him that the present dress of our sailors is not conducive to their health and strength, we shall admire his courage—but not his discretion.

UNREGISTERED PRACTITIONERS.

CASES are constantly occurring which show the necessity of every duly qualified practitioner being registered. Registration should be regarded as the only proof of his legal right to practise his profession in any way whatever. The public is apt to conclude that if a man holds a foreign diploma, however worthless it may be, it is a hardship upon him to prevent him following his calling. The following case will probably be classed among this number by those who are unacquainted with the fact that there are many diplomas of foreign colleges and universities which afford no proof that the persons possessing them have ever passed an examination. We do not say that this is the case with respect to Mr. Protheroe, as here detailed. Mr. John Edward Protheroe, of Pembroke-square, Kensington, was summoned on Saturday by the Kensington Board of Guardians for falsely taking and using a certain description implying that he was a registered medical practitioner, whereby he had incurred a penalty of £50. Mr. Draper, the Clerk of the Board, attended in support of the summons. Mrs. Annie Reeves said the defendant vaccinated her child and signed a certificate which she received from the registrar of births. She sent it to the vaccination officer. The certificate was produced, and bore the printed words "Medical practitioner, duly registered." Mr. Draper said it also represented that the defendant was a public vaccinator for the parish. These words were struck out when the vaccinator was not a public vaccinator. Mr. Claydon, who defended, produced a diploma which had been granted to the defendant by a German university. He said what he had done was to call himself a Doctor of Medicine. He was a Doctor of Medicine, and therefore it was not false in describing himself as Doctor of Medicine. The words "Medical practitioner, duly registered," were not struck out, and that was an omission on his part. Mr. Ingham thought the certificate represented that the defendant was a medical practitioner, duly registered. He was about to impose a reduced penalty when Mr. Draper interfered and asked for the infliction of the full fine. The summons was adjourned to enable Mr. Draper to prove a prior conviction.

PREVENTION BETTER THAN CURE.

ABERDEEN, we believe, has furnished some good soldiers, who have earned their spurs not more from their courage in the field than for their strategy and skill in preventing surprise, and consequently disaster. The Town Council of Aberdeen are no doubt very "brave" men, but are they judicious leaders against an enemy? They make no provision against his entrance into the camp, but propose to deal with him when he is in possession of their ammunition and all their resources. The Aberdonians may find that their tactics are not consistent with common sense or common prudence. "Forearmed is forewarned." They are in the peculiar position of being "forewarned" and not "forearmed." The Council, as local authority for the burgh of Aberdeen, agreed on Monday—the Treasurer dissenting—that a Medical Officer should not be appointed till the breaking-out or the approach of an epidemic.

MEETING OF IRISH POOR-LAW MEDICAL OFFICERS.

A MEETING of the Medical Officers of the South City Dispensary District of the South Dublin Union was held on the 18th inst., Alderman Ryan, M.D., in the chair. Dr. Maunsell acted as secretary. The following resolution was unanimously adopted:—

"That, owing to the increased duties in connexion with the various dispensaries, the steady and continuous rise in the price of every article of domestic consumption, house-rent, etc., the present salaries are wholly inadequate to meet the various and increasing demands upon us, and enable us to maintain the position we occupy in our profession; it is, therefore, respectfully requested that the Board of Guardians of the South Dublin Union will favourably consider this resolution, and raise our salaries to £150 a year each."

The salaries of all the Medical Officers of the Athlone Union have been increased from £100 to £120 per annum.

DOING ONE'S DUTY.

THE following extract from a paper in the far, far South deserves to be recorded in our pages. It is conduct such as Dr. Mansfield's that ennobles our profession. It is the right way to do one's duty. The *South Pacific Times* says, in reference to the epidemic of small-pox at Callao—

"We must not fail in doing our duty on behalf of the public to a gentleman of very high attainments in his profession who in two or three days will leave us. We allude, as our readers will at once understand, to Dr. Mansfield, of the British war ship *Reindeer*, which is about to quit our bay for Mexico. During his stay here he has shown a regard for the public that will long be remembered with gratitude. His unselfishness in the interests of the community has elicited general admiration; and although his warnings have not been heeded as they ought to have been, still he has as a stranger to us, but as a friend to humanity, shown a devotion to the public that cannot be too highly appreciated."

SELF-GOVERNMENT IN THE ASCENDANT.

The Birmingham Town Council have declined the offer of the Local Government Board to pay one-half of the salaries of the Medical Officer of Health and Inspector of Nuisances on condition that such officers were appointed under the 10th section of the Public Health Act. The Council preferred to exercise their power over the appointment of the salaries and duties of their own officers, independently of that department. Provided that the Town Council of Birmingham elect competent officers we do not complain of their resolution; but if they fail in doing so, there is an appeal to the Local Government Board, which no doubt will set them right.

CHOLERA.

Five fresh cases have been observed amongst the garrison at Prague, none of them proving fatal. The patients were Polish soldiers recently removed from their home to that place, bringing the disease with them. The epidemic which has just swept over Austria has likewise been imported by soldiers of that nationality, first to Buda, whence it rapidly spread in different directions. We hope that we shall not have to announce any other news this year under this head.

THE VOLUNTEER MEDICAL REGULATIONS.

We are happy to hear that the Secretary of the Volunteer Medical Association has received a communication from the Secretary of State for War stating that the subject of the allowance for medical attendance on the permanent staff of Volunteers is under his consideration, and that further instructions will in due course be issued.

FROM ABROAD.—M. HERVIEUX ON THE ELIMINATION OF THE PUERPERAL POISON.

M. Hervieux read last month at the Académie de Médecine an interesting paper upon "Elimination of the Puerperal Poison." He observed that, while there are but two channels for the introduction of this (the uterine in a few cases, and the pulmonary in the vast majority), the channels of elimination are numerous. First among these is the gastro-intestinal. Vomiting is, in fact, one of the earliest symptoms of this poisoning; and M. Hervieux has seen many cases in which all danger seemed to have disappeared after spontaneous vomiting. Diarrhœa acts in the same way, and is *solidaire* to the vomiting; so that, if one of these becomes suppressed by medicinal agents, the other takes its place. It is true that vomiting and diarrhœa often aggravate the patient's condition; but this only shows that the economy becomes exhausted during the immoderate efforts which it makes to deliver itself of the poison. The biliary secretion concurs also most powerfully in the eliminatory action, and especially during epidemics. During these we find patients who, after having rejected by regurgitation, without effort and almost incessantly, an inspissated bile as green as boiled spinach, present after death nearly a litre of the same matter in the stomach, intestine, and gall-bladder. Orfila established the fact that the liver is the place of refuge by predilection for mineral poisons, the organ in which they are accumulated in the largest proportions. Such accumulation of the puerperal poison has probably something to do with the fatty change of the tissue of the organ met with in lying-in women.

The lochial discharge is of scarcely less importance in this elimination. The ancients exaggerated its importance by explaining all puerperal affections by its suppression. They, in fact, mistook the effects for the cause. But that the lochia serve as a vehicle for the deleterious principle is shown by the fact that their fetidity and abundance attain proportions in some cases that neither the general or local condition of the patient explains, and that such fetidity and abundance coincide with diminution of temperature and pulse, with an improved countenance, a return of sleep and appetite, etc. The skin participates less often and less actively in the elimination, its intervention taking place especially in the severer cases, when it may be manifested either by profuse sweating or miliary eruption. M. Hervieux has had some cases in which the profuse sweats have persisted uninterruptedly for several days, and have thus conjured the most serious dangers. In these cases the secretion loses its acidity and becomes alkaline. Instances of miliary eruptions preceding a favourable termination of dangerous cases are too well known to require to be insisted on. But both these and profuse sweats are too often also accidents of the ultimate stage of the disease, and, occurring then under desperate circumstances, we cannot expect that they would operate a cure. The surface of blisters may in some cases, also, open an issue for the puerperal poison; and M. Hervieux refers to cases in which, without anything existing in their condition to account for it, blisters exhaled a horrible fetidity. In these, apparently under the influence of such exhalations, sensible improvement took place, the pulse approaching its normal condition, etc.

We have thus far had to deal with the natural channels; but in other cases, to use a term of M. Ricord's, an "effraction" may be advantageously established. This results from the spontaneous or artificial opening of purulent collections, and especially when these are peripheric. Every accoucheur knows that the development of an abscess of the breast may often arrest peritonitis, uterine phlebitis, or diffuse phlegmon; that abscesses of the limbs possess the same power of diverting a serious inflammatory menace from the viscera; and that even arthritic manifestations in like manner determine morbigenous action upon organs which are at a distance from the pelvi-abdominal sphere. The practice of a maternity cannot be long followed without its being discovered that these different affections are not merely local, but that they are the expression or result of the efforts made by the economy to repel the evil from the centre towards the periphery, rendering the elimination of the toxical principle more inoffensive at those remote points. The success of such efforts is subordinated to the intensity of the epidemic movement; for if it were otherwise, how comes it that in certain years the most painful chaps, or the deepest fissures, never give rise to abscess of the breast, while at certain epochs this organ becomes the seat of purulent formations in the greater number of puerperal women, whether they have chaps of the nipple or not? Experience has taught us that we should regard these peripheric manifestations with satisfaction—first, because they are an indication of the amelioration of the sanitary condition of the establishment; and next, because they provide in the individual cases an additional chance for the elimination of septic matter.

The knowledge of the above facts is not a mere matter of scientific curiosity, but has its bearing on therapeutics, for we are led to imitate nature in seeking to produce elimination. For this we have four means. 1. *Emetics.*—The important part played by vomiting, whether at the commencement or advanced stages of puerperal poisoning, leaves us in no doubt as to this indication. Thus M. Hervieux has laid it down as a rule in his service that every newly-confined woman who falls ill, whatever may be the lesion she seems menaced with, must at once be submitted to the action of ipecac. In those women who are seriously attacked we do not thus prevent ulterior accidents, but we frequently succeed in the slighter forms of disease and in mild epidemics. In any case, it is rare for the general symptoms not to undergo some mitigation. 2. *Purgatives.*—These have never enjoyed the same favour with French practitioners as emetics, and yet they are one of the most certain and most active means in eliminatory treatment. But they must be employed with much tact and great lightness of hand, under pain of doing great mischief. The genius of the prevailing epidemic must be borne in mind, or we may

risk the production of an incoercible diarrhœa and of hastening on the fatal termination. We may have an epidemic in which we may purge day after day without incurring any danger and with great advantage, while in another a single purgative may determine a choleriform diarrhœa. In proportion as experience has initiated him into a more exact knowledge of the conditions favourable for the employment of purgatives, M. Hervieux has become more bold in their administration, and every day he finds them rendering him great service. It might seem from what is stated above that we should always respect vomiting and diarrhœa occurring in puerperal women. But to this there is some reservation to be made. Vomiting should be respected at the commencement when it is not very abundant, and tends to stop of its own accord; and Nature's efforts may even be supplemented by a dose of ipecac. But when it takes place insufficiently, and is purely bilious, and especially when it takes the form of regurgitation, it should be repressed, if this can be done, by the ordinary means—ice, seltzer-water, citrate of potass, but especially by diverting the eliminated matters towards the intestinal canal by purgative enemata. As to diarrhœa, it is salutary in the immense majority of cases, and it should only be arrested when, by its serous character and its persistence, it becomes dangerous. 3. *Bleeding.*—This is an eliminatory agent of the first order, acting on the mass of the blood charged with the poisonous principle, time not yet having been sufficient for its deposit in the eliminatory organs. The fear, however, of adding to the debility caused by the natural loss of blood in parturition prevents one having recourse to it. The soundness of the principle of abstracting it is, however, shown every day by the excellent results which follow leeching, and especially cupping. These never fail to give great relief to women suffering from pelvi-abdominal affections, and in some conditions they suffice to arrest the progress of puerperal accidents. 4. *Blisters.*—Although the revulsive action of these is that which is best demonstrated, yet they deserve great consideration as a method of elimination. But to this end it does not suffice for the epidermis to be partially raised at some points. The blister must be applied quite exactly, and kept on sufficiently long to give rise to a voluminous ampulla and an abundant secretion of serum. The evacuation of this may contribute to the elimination of the poisonous principle. At all events, blisters constitute one of the most powerful resources at our disposal for combating the local manifestations of pathological puerperality.

CLINICAL TEACHING IN EDINBURGH.

(*From a Correspondent.*)

During the past few years many important changes have occurred in the Edinburgh Medical School. Several eminent teachers whose names were universally known have been removed by death, and others, by a complete or temporary withdrawal from University work, have exposed the School to the dangers resulting from change and substitution. Syme and Simpson, rivals in the struggle for fame, no longer exercise their genius in throwing a romantic interest around the study of Surgery and Medicine. Goodsir, less noted but equally great, having spent the latter part of his life in a state of physical deterioration, has been removed from the chair of Anatomy, the fame of which was maintained and enhanced by his painstaking and brilliant researches. Dr. Bennett, whose name will remain honourably associated with the abolition of indiscriminate bloodletting and salivation, the introduction of cod-liver oil into Scotch practice, and the philosophical teaching of clinical medicine, has for a considerable time been so continuously indisposed as to render necessary the performance of the greater part of his duties by proxy. It is quite natural that circumstances testing so severely the resources of the Edinburgh School should give rise to a general opinion that Edinburgh could not sustain without irretrievable damage the loss of teachers whose fame has been co-extensive with that of the University itself. However feasible such an anticipation may be, it is highly gratifying to think that there is no likelihood of its being realised. The reputation of the Edinburgh School rests upon too broad a foundation to suffer severely from the loss of one or two even of its greatest teachers; and the Edinburgh University has now reached that enviable period in its history, when even the decease of its famous teachers yields an additional lustre to its reputation, by adding to the number of those whose names have made the institution venerable.

Not only has the Edinburgh University not suffered in any apparent manner by the important changes of the past few years, but, even since the occurrence of those events which might have been disastrous to it, the number of its students has considerably increased. Every available corner of class-room space has been economised, and plans for extension have been earnestly canvassed. We look upon this as sufficient proof that the new Professors of Anatomy, Clinical Surgery, and Midwifery are by no means unworthy successors to Goodsir and Syme and Simpson; and we think with pleasure of the numbers attending the classes of Chemistry, Pathology, and Natural History as indicative of the acceptance with which the teaching of the respective new professors is received. Though we hold the opinion that the standing of Edinburgh as a medical school is secured by a multiplicity of conditions, we are certain that her great present strength lies in her reputation for the clinical teaching of Medicine. It would be invidious to adduce individual names unnecessarily, but we feel assured that all who have studied at or visited the Edinburgh Hospital will agree with us that Clinical Medicine is taught in that institution in a manner combining the precision of science with the order and realism of business. We wish sincerely we could speak in terms of equally unqualified praise regarding the teaching of Surgery in the numerous surgical wards of the Edinburgh Hospital. We object not to the kind but to the method of teaching; and we are afraid that our objections will apply equally to almost all the other large surgical schools.

Passing from the medical to the surgical side of the Edinburgh Infirmary, one notices at once a totally opposite method of procedure. In the medical wards each student is, to a great extent, compelled to investigate for himself individual cases. He examines each patient practically, and is himself questioned as to his opinions regarding diagnosis, prognosis, and treatment—he rehearses, in short, for private practice. In the surgical department, on the other hand, the student occupies no relation to the patient. He diagnoses nothing, is not called upon to suggest a line of treatment, and, unless he holds the position of dresser or clerk, his first exercise in surgical practice is during his clinical examination for a degree. Surgical hospital practice consists of a number of daily attempts to obtain standing-room around the bed of a patient during the visit of the hospital surgeon. These attempts yield little beyond discomfort to the patients, disappointment to the students, and utter delusion as to the acquirement of surgical knowledge. Professor Lister's spores cannot crowd with greater avidity around the beds of his patients than do his enthusiastic group of admirers, and one cannot but regret that owing to an utter want of system the important truths which he and others dispense amongst the impacted students should to a great extent fall upon unproductive soil. Cannot the method of teaching which has long been employed in the medical hospital be, with certain necessary modifications, introduced into the clinical teaching of Surgery? Surely every student can be compelled to maintain a certain distance from the bedside, so that all may have an equal opportunity of seeing and hearing whatever is to be seen and heard. It would be an easy matter to form voluntary examining classes

for improvement in practical surgery, similar to the examining classes in clinical medicine, and, if the authorities would make it absolutely necessary that every student should for a certain limited period act as a dresser or clerk to an hospital surgeon all would have an equal opportunity of preparing themselves for surgical work, and each surgeon could superintend the teaching of his own entire proportion of the students at the hospital. We have no space for further suggestions, and would only reiterate the observation that surgical clinical teaching ought as far as possible to be made as practical as the teaching of clinical medicine already is.

The general tendency of medical instruction in Edinburgh to assume a pre-eminently practical form leads us to hope that an improvement in the method of surgical teaching may soon be realised. In the hands of Professor Bennett, Dr. McKendrick, and Dr. Stirling, practical physiology has during the past year become one of the most popular and successful branches of study; and, though an Edinburgh daily paper recently lamented the small amount of attention paid in Edinburgh to the teaching of practical psychology and lunacy, the true state of matters is that Professor Laycock's weekly clinique at a Musselburgh asylum has for some time been the largest clinical class ever instructed in mental diseases.

When Edinburgh teachers and students are alike appreciative of the necessity for conducting medical education on inductive and practical principles, we need not fear that the unavoidable removal of a few men of mark can exert any lasting influence prejudicial to the interests of the Edinburgh Medical School. The events of the last few years have shown that in Edinburgh the rising can take the place of the setting sun, and that in Edinburgh society there are many men to whom the opportunity alone is wanting for the attainment of acceptance and distinction in the teaching of medical science.

THE DRUITT TESTIMONIAL FUND.

The following names have been added to the General Committee:—Sir Henry Holland, Bart., Sir William Jenner, Bart.; Drs. Sturges, Graily Hewitt, Tyler Smith, Owen Rees, Radcliffe, Peacock, Basham, Jno. Ogle, Tilbury Fox, Hawksley, Pavy, Kingston, Habershon, Priestley, Murchison, Geo. Johnson, Francis Hawkins, Sydney Ringer, Silver, Andrew Clark, Edward Clapton, and Wiblin (Southampton); Messrs. Arnott, Tomes, Barnard Holt, Erichsen, Sydney Jones, Bellamy, Curling, J. B. Walker, Cartwright, Brodhurst, Maunder, Soelberg Wells, White Cooper, Cæsar Hawkins, Wm. Bowman, Arthur Durham, Edward Cock, and Robert Bentley.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions since Wednesday, the 13th inst:—

	£	s.	d.
Mr. Noble	21	0	0
Mrs. Henry Baker ...	21	0	0
Mr. Alfred Denison ...	20	0	0
Master G. Elliott (John Jouasson) ...	20	0	0
Sir Thomas Watson ...	10	10	0
Dr. C. J. B. Williams ...	10	10	0
Dr. Priestley ...	10	10	0
Mr. C. F. Maunder ...	10	10	0
Messrs. W. and A. Gilbey (by Mr. J. F. Clarke) ...	10	10	0
Mrs. Noble	10	10	0
Mr. Riddell	10	0	0
The Lord Chief Baron ...	5	5	0
Sir Wm. Fergusson ...	5	5	0
Mr. Tomes	5	5	0
Dr. Greenhalgh ...	5	5	0
Mr. Henry Lee ...	5	5	0
Mr. Spencer Wells ...	5	5	0
Dr. J. W. Begbie, Edinboro'	5	5	0
Dr. W. Woodham Webb ...	5	5	0
Mr. Savory	5	5	0
Mr. William Adams ...	5	5	0
Dr. Pavy	5	5	0
Dr. James Wakley ...	5	5	0
Mr. John Simon	5	5	0
Mr. John Sanders ...	5	0	0
Mr. Erichsen	3	3	0
Mr. Christopher Heath ...	3	3	0
Dr. John Ogle	3	3	0
Dr. Fuller	2	2	0
Dr. Walter Fergus... ...	2	2	0
Dr. Walsh	2	2	0
Dr. Edward Clapton ...	2	2	0
Dr. Wiblin (Southampton)	2	2	0
Mr. Arthur Durham ...	2	2	0
Mr. J. F. Clarke	2	2	0
Professor Bentley	2	2	0
Mr. Thomas Lynch	2	0	0
Mr. Norman Wilkinson... ...	1	1	0
Dr. Hunt	1	1	0
Dr. Graily Hewitt	1	1	0
Mr. Stone	1	1	0
Mr. James Jago	1	1	0
Mr. John Chatto	1	1	0
Mr. Hinton	1	1	0
Mr. White Cooper... ...	1	1	0
Mr. Edward Cock... ...	1	1	0
Mr. J. B. Walker	1	1	0
Dr. Habershon	1	1	0
Dr. Kingston	1	1	0
Dr. Sydney Ringer	1	1	0
Dr. Harley	1	1	0

Subscriptions may be sent to the Treasurer, Mr. H. Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. Norton, 6, Wimpole-street; or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-street, Regent-street. Subscriptions will be acknowledged weekly in one or more of the medical papers. In the list of subscribers published last week the name of Dr. Fayrer was inadvertently printed *Mr.* Fayrer.

URBAN SANITARY AUTHORITIES.

The following are the principal portions of a circular letter which has been issued by the Local Government Board to urban sanitary authorities with reference to the qualifications, appointment, duties, etc., of Medical Officers of Health and Inspectors of Nuisances:—

"Local Government Board,
"Whitehall, S.W.,
"November 12, 1872.

"Sir,—Referring to the circular addressed to you on August 19 last, relative to the provisions of the Public Health Act, 1872, I am now directed, by the Local Government Board, to enclose a copy of the orders which the Board have just issued with respect to the appointments and duties of Medical Officers of Health and Inspectors of Nuisances in those cases where a portion of their salaries will be repaid from moneys voted by Parliament.

"It is scarcely requisite that the Board should impress upon urban sanitary authorities the necessity of selecting for these appointments persons who are thoroughly qualified to discharge the important duties which will devolve upon them; but the Board think it right to point out that this object will not be attained unless the salary which the authorities are enabled to offer is such as to afford an adequate remuneration for the services required.

"In order to promote the appointment of competent officers, the Act has empowered sanitary authorities to unite in making joint appointments; an arrangement which will, in many instances, have the advantage of enabling the authority to obtain the services of persons specially qualified for the work at a saving of cost to each locality.

. . . . . .

"I am, Sir, your obedient Servant,
(Signed) "John Lambert, Secretary.
"To the Clerk to the Urban Sanitary Authority."

We cannot give the order *in extenso*, but may refer briefly to its principal provisions. The qualifications for Medical Officer of Health are the same as those required for the Medical Officer of a poor-law union or parish, but the Local Government Board reserve to themselves the power to dispense, when they deem it necessary, with a compliance with the requirement that the officer shall be qualified to practise both Medicine and Surgery, provided that he be duly registered to practise either Medicine or Surgery. The tenure of office in the case of the first appointments made under the order is to be for a period not exceeding five years; but, in the case of subsequent appointments, the officers are to continue until death, resignation, or removal by the Local Government Board, or by the sanitary authority with the consent of the Local Government Board. The salary will require the approval of the Local Government Board, as will also the apportionment of the salary when the officer is appointed for two or more districts under a joint or several appointment by two or more sanitary authorities. Provision is made for the payment by the sanitary authority of reasonable compensation, in addition to the salary of the officer, for extraordinary services connected with his duties or with the necessities of the district. Generally, however, it must be borne in mind that, although the Public Health Act of last session renders it the duty of the sanitary authority to appoint a Medical Officer of Health and an Inspector of Nuisances, it is optional with the authorities whether the appointment shall, or shall not, be made in accordance with the orders of the Local Government Board. If, however, the appointments are not so made, the claim to a repayment of a moiety of the salaries from the Parliamentary grant will be forfeited.

The duties of a Medical Officer of Health for an urban sanitary district are the following:—

"1. He shall inform himself as far as practicable respecting all influences affecting or threatening to affect injuriously the public health within the district.

"2. He shall inquire into and ascertain by such means as are at his disposal the causes, origin, and distribution of diseases within the district, and ascertain to what extent the same have depended on conditions capable of removal or mitigation.

"3. He shall by inspection of the district, both systematically at certain periods, and at intervals as occasion may require, keep himself informed of the conditions injurious to health existing therein.

"4. He shall be prepared to advise the sanitary authority on all matters affecting the health of the district, and on all sanitary points involved in the action of the sanitary authority or authorities; and in cases requiring it he shall certify, for the guidance of the sanitary authority or of the justices, as to any matter in respect of which the certificate of a Medical Officer of Health or a medical practitioner is required as the basis or in aid of sanitary action.

"5. He shall advise the sanitary authority on any question relating to health involved in the framing and subsequent working of such by-laws and regulations as they may have power to make.

"6. On receiving information of the outbreak of any contagious, infectious, or epidemic disease of a dangerous character within the district, he shall visit the spot without delay, and inquire into the causes and circumstances of such outbreak, and advise the persons competent to act as to the measures which may appear to him to be required to prevent the extension of the disease, and, so far as he may be lawfully authorised, assist in the execution of the same.

"7. On receiving information from the Inspector of Nuisances that his intervention is required in consequence of the existence of any nuisance injurious to health, or of any overcrowding in a house, he shall, as early as practicable, take such steps authorised by the statutes in that behalf as the circumstances of the case may justify and require.

"8. In any case in which it may appear to him to be necessary or advisable, or in which he shall be so directed by the sanitary authority, he shall himself inspect and examine any animal, carcase, meat, poultry, game, flesh, fish, fruit, vegetables, corn, bread, or flour, exposed for sale, or deposited for the purpose of sale or of preparation for sale, and intended for the food of man, which is deemed to be diseased, or unsound, or unwholesome, or unfit for the food of man; and if he finds that such animal or article is diseased, or unsound, or unwholesome, or unfit for the food of man, he shall give such directions as may be necessary for causing the same to be seized, taken, and carried away, in order to be dealt with by a justice according to the provisions of the statutes applicable to the case.

"9. He shall perform all the duties imposed upon him by any by-laws and regulations of the sanitary authority, duly confirmed, in respect of any matter affecting the public health, and touching which they are authorised to frame by-laws and regulations.

"10. He shall inquire into any offensive process of trade carried on within the district, and report on the appropriate means for the prevention of any nuisance or injury to health therefrom.

"11. He shall attend at the office of the sanitary authority or at some other appointed place, at such stated times as they may direct.

"12. He shall from time to time report, in writing, to the sanitary authority, his proceedings, and the measures which may require to be adopted for the improvement or protection of the public health in the district. He shall in like manner report with respect to the sickness and mortality within the district, so far as he has been enabled to ascertain the same.

"13. He shall keep a book or books, to be provided by the sanitary authority, in which he shall make an entry of his visits, and notes of his observations and instructions thereon, and also the date and nature of applications made to him, the date and result of the action taken thereon and of any action taken on previous reports, and shall produce such book or books, whenever required, to the sanitary authority.

"14. He shall also prepare an annual report, to be made at the end of December in each year, comprising tabular statements of the sickness and mortality within the district, classified according to diseases, ages, and localities, and a summary of the action taken during the year for preventing the spread of disease. The report shall also contain an account of the proceedings in which he has taken part or advised under the Sanitary Acts, so far as such proceedings relate to conditions dangerous or injurious to health, and also an account of the supervision exercised by him, or on his advice, for sanitary purposes over places and houses that the sanitary authority has power to regulate, with the nature and results of any proceedings which may have been so required and taken in respect of the same during the year. It shall also record the action taken by him, or on his advice, during the year, in regard to offensive trades, bakehouses, and workshops.

"15. He shall give immediate information to the Local Government Board of any outbreak of dangerous epidemic disease within the district, and shall transmit to the Board, on forms to be provided by them, a quarterly return of the sickness and deaths within the district, and also a copy of each annual and of any special report.

"16. In matters not specifically provided for in this order, he shall observe and execute the instructions of the Local Government Board on the duties of Medical Officers of Health, and all the lawful orders and directions of the sanitary authority applicable to his office.

"17. Whenever the Diseases Prevention Act of 1855 is in force within the district, he shall observe the directions and regulations issued under that Act by the Local Government Board, so far as the same relate to or concern his office."

DISEASE AND MORTALITY AT HOME AND ABROAD.

In the Small-pox Hospital at Homerton 65 patients are still under treatment. In the Stockwell Small-pox Hospital, 16 patients had been received during the past fortnight, 5 had died, and 8 had been discharged, leaving 45 at present under treatment.

The *Madras Athenæum* says: "It is gratifying to be able, at last, to state that the dengue fever is on the decrease in the Black Town of Madras. In other of our city districts south of Black Town it is, however, still prevalent, though probably not on the increase. We trust this pestilence has now worn itself out in this city, and that we shall very shortly be able to report to our readers that it has completely left us."

The report for October of the Medical Officer of Health for Islington states that "the death-rate is 2 per cent. below that of the whole metropolis, and the district is very free from miasmatic disease."

Advices from Bombay of October 28 state that cholera of a virulent type had broken out at Peshawur. Among the European community, out of a total number of 77 admissions into hospital, 64 have succumbed to the disease; and of the natives there were 38 admissions, 28 proving fatal. Fever has disappeared from Cabul, but cholera has taken its place.

During the month of October last there were registered in the eight principal towns of Scotland the deaths of 2391 persons, of whom 1206 were males and 1185 females. This number is 15 above the average mortality of the month during the last ten years, allowing for increase of population, and, with the exception of that of October, 1871, which amounted to 2476, is the highest number for any corresponding month since the commencement of the Registration Act in 1855. A comparison of the deaths recorded in the eight towns shows that during October the annual rate of mortality was 22 deaths per 1000 persons in Edinburgh and in Aberdeen, 23 in Perth, 26 in Paisley, 28 in Glasgow and in Leith, 31 in Dundee, and 34 in Greenock. Of the 2391 deaths, 1026, or 43 per cent., were of children under 5 years of age. In Edinburgh, 30 per cent. of the persons who died were under 5 years of age; in Perth, 33; in Aberdeen, 41; in Leith, 42; in Paisley, and in Glasgow, 44; in Greenock, 48; and in Dundee, 53 per cent. The zymotic (epidemic and contagious) class of diseases proved fatal to 528 persons, constituting 22 per cent. of the mortality, which is the lowest proportion of deaths from these diseases in the eight towns during any month of October since the Registration Act came into operation. Previous to this, the lowest proportion for the month was in 1861, when the percentage was 24.

In the metropolis there were last week 1183 deaths, showing as many as 539 below the average number. Of these 13 occurred from small-pox, against 14 and 15 in the two preceding weeks.

A serious increase of typhus and typhoid fever is reported from Peacroft and Dunfields, Sheffield. There are 30 cases at present in the workhouse, and above 100 cases had occurred in the house within the last few months, 15 of which had terminated fatally.

REVIEWS.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition, brought down to the present time. By Samuel A. Lane, Consulting-Surgeon to St. Mary's and the Lock Hospitals, etc. Vols. I. and II. London: Longmans.

At the present moment, when its author has been forced for a time to seek health on other shores, it may not be amiss to direct special attention to the article "Inflammation" in the columns of Cooper's "Surgical Dictionary," just issued. This, the latest offspring of Dr. Druitt's fertile pen, is certainly not the least valuable contribution he has made to the literature of our profession. In many ways the article is unique. It is the result of much labour and of much research, all distilled through a mind imbued with learning in the highest sense of the word, and of a comprehensiveness of grasp rarely equalled.

Though no portion of the article is commonplace, nevertheless it is that part of it which deals with the history of the doctrines regarding inflammation which seems to us of the highest value, both now and hereafter. In it the candid fairness of the author stands pre-eminent; he has striven to give each man his due meed of praise or blame, at the expense of labour few would care to undertake. In such a volume space is everything, and an article like that on inflammation must be condensed to the uttermost. Hence it is that here days and weeks of labour are represented by a few lines of what, were it not for its comprehensiveness, might seem commonplace matter. This labour was greatly enhanced by the desire of the author to take nothing at second hand when the original could be obtained. But if this added to the labour it has also added to the freshness and clearness of the article. Not a few who read it will be surprised to find men whom we have been accustomed to look to as great originators of ideas merely reproducers of work done long before.

It is, indeed, to the compilers of systems, rather than to the original writers, that men have been most apt to turn. Undoubtedly it saves time; but then the knowledge filtered through so many minds is ultimately apt to assume a different complexion from what it did in the original. It was from an idea that this had been too long the custom that Dr. Druitt was impelled to seek in the original authors themselves, rather than in hackneyed quotations, for a true exposition of their ideas; and the results, as we have said, are somewhat different from what would have been expected.

It was the author's desire to bring the work down to the latest date; to lay open the doctrines of all schools, whilst condemning none; to trace the history of the treatment of inflammation, especially the rise and fall of the practice of blood-letting; and to show the influence of current modes of thought or of received doctrines on the plans employed for overcoming the malady. To this task he brought rare scholarship and a well-exercised judicial faculty, with the results we have already mentioned. But the work will have another value to inquirers. It constitutes a perfect mine of reference, almost invariably, as we have said, drawn from the original sources. Every one of these references has been verified; so that in them the investigator has a sure guide to the original authority, which is not unfrequently of the utmost value.

The article "Inflammation" differs from most others in the volume, and especially from other treatises on the same subject, in its manner of treatment. The author has no views of his own to advance. It is no independent treatise, but is what not unfrequently is better, and certainly far more difficult to procure of good quality,—a faithful exposition of the ideas prevalent at different times regarding this important subject, which, it may be observed, gives the keynote to the treatment of all other maladies at a given date. For says the author:—

"No branch of medical study is more instructive. The errors into which various sects and schools have fallen, arose not from causes peculiar to them, but from certain propensities inherent in the human mind. Hence, though the details may vary, errors of the same kind are incessantly coming to the surface in different ages. Such a study furnishes a refutation both of those who despise Medicine altogether, and of those who despise all before our own time. It shows that unbiassed observation has led shrewd and able thinkers to virtually the same conclusions in all ages; thus proving that the practice of Medicine is based upon truth, and that in every age sensible physicians have practised nearly in the same way. Be it observed that the word theory is used in two senses. In the first sense, every rational being must have a theory,—that is, must devise some such way of viewing any given facts as will connect them with other facts. The other kind of theory signifies a set of doctrines, borrowed from the physical and physiological doctrines of the day, which professes to account for disease and dictate treatment *à priori*. Such were the theories of Boerhaave, Cullen, Broussais, and Rasori. But there is this cardinal doctrine to be observed with respect to medical theories. Inquiries into the nature of disease, and observations on the effects of remedies, constitute two independent lines of study, the results of which may often seem contradictory. But the rational man will rather bend theories to suit the effects of treatment than make treatment suit theory.

"Theories of disease cannot be perfect or final till physiology is an exact science. But the propensity to base treatment upon uncertain and fluctuating theory, which renders every age of physic ridiculous to the succeeding ones, arises from one of the chronic imperfections of the human mind. The three leading medical sects of the ancients after Hippocrates flourish to this day. There are the Dogmatists, or Rationalists, each with his 'sound pathological theory,' which he affirms to be a necessary guide to 'successful practice.' There are the Empirics, or Practical Men, who try to find 'what will cure what,' and despise the flickering light afforded by theory. And there are the Methodists, who have a short cut, μέθοδον to practice, whether by the lancet, brandy, blisters, or globules. . . .

"It will readily occur to the reader that no age of physic is without its *methodists*—the men who lay all diseases to the door, now of plethora, now of debility—or spinal irritation, or inaction of the liver. . . .

"A minute classification of the opinions held during twenty-five centuries would be impossible. For our purpose we may make a rough division of the surgical doctrines of inflammation into seven classes. The first is that of ancient surgery, more particularly as represented by Galen, whose doctrines, classification, and very words were copied by succeeding writers, and only became obsolete in the time of Cullen and Hunter. The second began with the beginning of modern science in the seventeenth century, and adopting a vitalistic, or pneumo-pathological basis, continued down, through Cullen and Hunter, to Cooper, Abernethy, and the great surgeons of the last generation. A third may comprise the early microscopic school, by which the capillaries were chiefly studied. A fourth coincides with the development of the 'cell' doctrine. A fifth includes the later ideas of the activity and power of protoplasm, or 'germinal matter,' independently of the formation or function of 'cells' formally so called. A sixth will treat of chemical theories. A seventh of the now popular neuro-pathology."

From the days of Galen down to the time of Sydenham but little change took place in the views prevalent as regards inflammation. They were humoral, pure, and simple. An extract from Wiseman may, however, serve to give some idea of the meddlesome practice of this period. "If pus forms," said he, "it might be discharged by knife or caustic," after which the empty abscess "was to be digested, then mundified or deterged, next incarned or made to granulate, and lastly cicatrised." For each of these processes there was a copious apparatus of most complex applications—digestives, detergents, epulotics, etc.

In the school which followed, a new idea prevailed—viz., the existence of a guiding spiritual principle in the system, called by various names, but supposed to rule all actions within the body, normal and abnormal. *Apropos* of these our author makes the following sensible observations:—

"There are four main facts which have influenced the modern theories of inflammation—viz., the discovery of the circulation of the blood and the functions of the nervous system; the development of chemistry; the invention of the microscope; and, fourthly, one whose influence is just beginning to be felt, the doctrine of the conservation or correlation of force. In the seventeenth century experimental science began to flourish; the authority of 'the ancients' began to decay, and their humoral doctrines to be derided. The importation in 1649 of the 'Peruvian Cortex,' as it was called *par excellence*, gave a heavy blow to these doctrines, because it showed that a fever might be suppressed absolutely, without any of the coction and evacuation of morbific matter, which were absolutely necessary under the old theory. It is an unfortunate fact that medical theorists, like children who will not wait till fruit is ripe, are always eager to seize upon new discoveries in physical science, and to construct out of them some premature and abortive scheme of pathology. So out of the premature use of the science of the seventeenth century grew various doctrines which flourished

for a while. Out of the anatomy of the nervous system grew the notion of animal spirits, distilled from the brain, and effervescing with fever ferments in the blood, as held by Willis and Morton. Out of the chemistry were constructed the doctrines of the *iatro-chemical* sect. Out of the new doctrine of the circulation of the blood, and the invention of the microscope by which Malpighi showed the globules passing through the capillaries, grew the *iatro-mechanical* or *mathematical* or *hydraulic* school, of which I shall take Borelli, Pitcairn, De Gorter, Belloste, Astruc, Mead, and Boerhaave as representatives. This school, as regards doctrines of inflammation, was *obstructionist*, holding that the minute vessels were stopped up by their contents. Afterwards, as the functions of the nerves and nature of living parts became better known, theories began to prevail of the action of the capillaries in causing inflammation by arresting the passage of blood.

"The nature of the mathematical and mechanical doctrines may be illustrated by the way in which they were applied to therapeutics, and especially to explain the good effects of mercury in inflammation. In 1694 M. Belloste, surgeon in the Sardinian army, published an account of mercury, which he describes as the greatest gift of Providence in the whole Materia Medica. The mercury should be in the metallic form, and subdivided into the minutest globules. In this state it is taken up with the chyle, circulates with the blood, strikes against the blood globules, breaks up coagulations and obstructions in the vessels, renders the blood more fluid, insinuates itself into every place, dispersing everything not naturally united, and as its particles are spherical, they cannot irritate, like the 'pointed, hooked, and keen' particles of mercury in chemical combination."

Boerhaave, Hoffmann, and Stahl are even now great names, though the doctrines advocated by each are somewhat hazily defined in our minds. Their views on inflammation are essentially mechanical, but show a tendency to place more importance on the vessels than on the blood which they contain, whilst gradually out of these grew the idea of irritation—viz., that an irritated part has power of itself to draw the blood towards it. Thus we are brought to the time of Hunter, with regard to whom and whose doctrines our author speaks thus:—

"We must now go on to give an abstract of the doctrines of John Hunter, a task of no small difficulty. It is rendered necessary by the reputation of the man, by the position which he justly held as a profound philosopher, and by the incessant appeals which the succeeding generation made of his authority. Yet, as we have before shown, some doctrines have been ascribed to Hunter which he not only never held, but directly combated—as, for example, the doctrine of the essentially inflammatory nature of *all* repair, which was taught by the quasi-Hunterians of the Borough schools in Sir A. Cooper's time. But the difficulty is this, that in reading Hunter's works (and we refer now especially to his treatise on the 'Blood, Inflammation, and Gunshot Wounds,' etc., dated 1793; Palmer's edition, 1837) we are perplexed by meeting with two sets of incompatible opinions, which continually strive for the mastery. On the one hand, he is a great theorist, laying down laws of life, and deducing his views of the phenomena and treatment of disease from those laws. On the other, he is a practical man or empiric, who confesses that we have no *à priori* knowledge, nor anything certain which is not based upon experience, and who finds his laws no laws, so full is nature of cases which cannot be reduced under them.

"It will be obvious that Hunter took for his philosophical basis, like Van Helmont, Willis, Stahl, Mead, and De Sauvage, the assumption of a conscious and intelligent entity ruling the animal body. It will also be obvious that he ignores totally what is now known as the doctrine of 'conservation of force,' which teaches that no movement is self-generated, or can be produced save by the conversion of some pre-existing movement. Hence that no 'increase of power' can be generated by mere necessity or expediency. If we wish to realise the enormous gap which separates modern thinkers from the past, we need only refer to this idea. Yet we may remember that the doctrine of a vital spirit is held to this day, and that the venerated Prout not only believed in 'independent vital principles or agents,' but also in the power of the digestive organs to 'form azote and carbon on an emergency' ('On Stomach, &c.,' 3rd edition, 1840, p. 29). With such intelligent vital agents, and such creative powers, why, we may ask, do animals ever sicken and die?

"It is easy to point out the errors of Hunter, which were those of his time; but they do but add more lustre to the grandeur of his character and of his life-labour, which was all his own. He saw the necessity of making physic a branch of biology. Other great men had seen this, but Hunter began to do it. He saw that it was necessary, in order to understand disease, that healthy actions must be studied, and this not in man only but in the whole organic range, animal and vegetable. To acquire this knowledge he appealed to the whole animated world, and left his museum as the record of his work. He attempted to construct a theory of disease from a study of health, and his attempt has an air of grandeur, though *magnis excidit ausis* for want of the proper data. His permanent claims to respect as regards inflammation are founded, not on his philosophy nor his science, but on his great practical sagacity. He separated 'repair' from inflammation; he taught that 'immediate union' takes place without inflammation; he laid emphasis on the distinction between injuries with wounds and without, and the danger in the former 'that the blood may lose its living principle.' He thus evidently foresaw the basis of the antiseptic treatment, and, further, anticipated Sir J. Y. Simpson in pointing out that needles and ligatures tend to promote suppuration in wounds. To Hunter's teaching is due the care of English surgeons to avoid suppuration and promote healing by the first intention, and the success of ovariotomy, in which this union is the cardinal point. His observations on scabbing point in the same direction. By his influence chiefly the farrago of complex applications which disgraced the pages of the earlier surgeons was abandoned for simpler remedies."

With this quotation we for the meantime close. The author's estimate of Hunter differs considerably from that of most Hunterian Orators, but it is not the less valuable on that account. After Hunter's death little was done till the microscope was introduced. To this period—the most remarkable in the world's history—we shall next week return.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

PARIS, November 18.

M. TILLAUX ON "RESECTION"—THE FUNCTION OF THE PERIOSTEUM—OBSTETRICAL JOURNALS—THE REDUCTION OF PARAPHIMOSIS WITHOUT CHLOROFORM—THE NECKER HOSPITAL—THE WEATHER IN PARIS—SIR RICHARD WALLACE—CONCOURS FOR THE SUB-PROFESSORSHIP IN ANATOMY.

As announced in my last, the winter courses of lectures at the School of Medicine and at the different hospitals began on the 4th inst., and I must refer your readers to the *Medical Times and Gazette* of November 2 for information as to the names of the professors and the subjects to be treated of during the session.

M. Tillaux, a sub-professor and young surgeon attached to the Hôpital St. Louis, is appointed *pro tempore* to fill the chair of Professor of Operative Surgery. In his opening lecture, after paying a graceful tribute to the memory of Professor Denonvilliers, M. Tillaux entered at once into the subject matter of his lesson, and treated in a masterly manner that much abused operation known in surgery by the name of "resection." He defined resection as consisting of the removal of a portion or portions of one or more bones, either in their continuity or in their extremities, leaving the soft parts as intact as is compatible with the operation. When one or more bones are removed in their entirety the operation is designated "extirpation," which should not be confounded with resection, though some surgical writers apply the latter term to both operations. Resection, he said, was quite a modern operation—at least, no account of it could be found in any of the ancient authors except Celsus, who mentions that the practitioners of his time used to remove fragments of bones, which is only a modified form of resection. Ambrose Paré makes slight allusion to it, and it was only at the end of the last century that it was regularly introduced into practice by Moreau, and was subsequently accepted by Larrey as a great acquisition in military surgery. M. Tillaux observed that resection naturally led to the question—"Does the periosteum reproduce bone, as first taught by Flourens, and afterwards rehabilitated by Ollier, of Lyons?" To this Professor Robin, the eminent histologist, emphatically replies that the periosteum never did and never will reproduce bone, and that it can no more do this than can the skin reproduce muscular fibre, or the pia mater the substance of the brain, the periosteum being to bone what these membranes are to their respective organs, and that it is only bone that can

reproduce bone. M. Tillaux was more disposed for this latter theory, though he could not deny that in the young subject, before ossification is completed, the periosteum being then intimately connected with the bony tissue, may reproduce bone, and that this should be borne in mind in dealing with young subjects. He thought that M. Ollier had greatly exaggerated the results of his experience, but that, nevertheless, he had rendered great service to Surgery by his investigation on the subject in question. M. Tillaux then proceeded to describe the operation of resection, which he said consisted of three movements—(1) incision, (2) denudation, and (3) division of the bone—and lastly the dressing, which was not the least important part of the operation. He concluded his lecture by exhibiting the instruments employed and recommended for the occasion, amidst the applause of his numerous hearers, who filled the amphitheatre to the ceiling.

"It never rains but it pours" is an old saying, which is being realised, not only literally, but in many other ways. Among these I may mention the appearance of another obstetrical journal in Paris, and there is a talk of a third soon entering the field. I lately brought to your notice the *Gazette Obstétricale*, which had just been founded and edited by Dr. Verrier; and the second is also a gazette, with "Joulin," the name of its founder, affixed to it, and the words "Obstétrique" and "Gynæcologie", underneath the title.

On a visit to one of the Paris hospitals last week, I saw an attempt made to reduce a paraphymosis of eight days' standing, in a young man of 25, in the usual way—that is, by compressing the glans penis in an antero-posterior direction, and drawing at the same time the prepuce forward, which had been previously punctured, but without success. The patient screamed and struggled to such an extent that the surgeon was obliged to give it up, whereas if he had used chloroform he would probably have succeeded, or at any rate he would have saved the patient the torture of such a painful operation. It was decided to leave it alone, as, according to the experience of a surgeon present, such cases were cured by simple antiphlogistic remedies; or, in case of failure and adhesions having taken place, the paraphymosis becomes permanent, and is converted into a case of natural circumcision.

On the same day I witnessed the autopsy of a man who died in the Necker Hospital from chronic cystitis and secondary peritonitis, resulting from stone in the bladder. The man had been for more than a year in hospital, and M. Guyon said he did not operate because the stone (which was about the size of a common fowl's egg) was too large for lithotrity, and the state of the man's health was too unfavourable to admit of lithotomy. Add to which the man's age, which was over 76, was a serious counter-indication for either operation. Under such circumstances, would it not have been better to have had the man removed from the Hospital, the wards of which are notoriously unhealthy, and to have placed him in the most favourable condition for the prolongation of his life? I never could find out why the man had not been operated on before the stone had attained the size it had at the time of his death, although it had been detected in the bladder some fifteen years before. The patient had also an enlarged prostate, and M. Guyon took the opportunity of showing by ocular demonstration on the dead body the advantage of the long curved catheter over a short one in such cases.

Although the Hôpital Necker is a general hospital, it is more especially known for the treatment of diseases of the urinary organs from the fact of the great Civiale having been connected with it. This Hospital, which was formerly a Benedictine convent, was through the instigation of the wife of the celebrated Necker converted by Louis XVI. into an hospital. It is situated next door to the Hôpital des Enfants, and contains 400 beds for both sexes. Its wards are lofty and cheerful, one of which is devoted specially for calculous patients, and contains twelve beds, maintained by a legacy from M. Civiale. This ward is now under the charge of Dr. Guyon, referred to above, who is a promising surgeon and Sub-Professor of the Faculty of Medicine. A neat pathological museum of the genital organs, also founded by M. Civiale, is attached to the latter ward, in which specimens of calculi and an interesting collection of instruments of this department are to be seen. Those who knew the veteran surgeon will recall to mind with a certain degree of pleasure his clinical lectures on his specialty; and it is in this Hospital, it will be recollected, M. Desormeaux, another distinguished surgeon, first employed the endoscope for the examination of disease of the urinary organs.

As had been predicted, the winter has set in early and threatens to be very severe. We have already had a slight fall of snow in Paris, which, however, disappeared as fast as it came down. At this time of the year appeals are made to the public for aid to enable the suffering poor to withstand the effects of the winter, and M. Rothschild, who is always foremost as a donor, is most generously seconded by Sir Richard Wallace, whose good works are so well known and appreciated that the Municipal Council of Paris have voted him their unqualified thanks. This time Sir Richard's donation consists of warm clothing—20,000 articles in number—to be distributed to each of the twenty arrondissements of this city in proportion to the number of its inhabitants.

A *concours* for Sub-Professorship in Anatomy and Collateral Medical Sciences was opened on the 15th inst. M. Bouchardat, son of the illustrious Professor of that name, is a candidate for Chemistry; MM. Duval, Faraberg, Fork, Gillette, and Legros for Anatomy.

GENERAL CORRESPONDENCE.

SEA-VOYAGES IN PHTHISIS.

LETTER FROM DR. JOHN C. THOROWGOOD.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read with interest the letter of Dr. Hermann Jones describing the effect of the voyage to Australia on a patient in a stage of advanced consumption.

It happened that last week I was consulted by one of my patients, at the Victoria-park Hospital, as to whether it would be well for him to take a voyage to Australia.

The young man had been for some months under my observation, and had a considerable cavity in one lung, as well as chronic laryngitis, and I decidedly told him that the best place for him was home, as there he was properly cared for in the way of nursing and feeding.

I have usually given similar advice to those who, being in an advanced stage of pulmonary disease, have been led to contemplate leaving their friends and their home for the sake of experimenting on the doubtful results of a sea-voyage or a long journey to some foreign health-resort. I cannot recall one single instance where I have had reason to regret having followed this course, while I have seen very unhappy consequences befall some who have not cared to follow my recommendation to remain at home, and who, when more fit for bed than any other place, have been induced to drag themselves abroad in the hope of a new climate enabling them to grow new lungs. These cases of advanced phthisis seem to me to form one class to whom foreign travel is likely to do more harm than good.

Another, much more limited, class of patients who are at times taken on their travels with very injurious consequences, is formed of those who are attacked with phthisis in an acute form—cases of "galloping consumption," as they are popularly called.

Last summer I saw, for a short period, a young gentleman aged 19 years, who had a pulse of 120, with temperature ranging from 101° to 102°, and crepitant râles in his lungs. The history was that he came of a phthisical family, and during the last two months had complained of chilliness alternating with feverish attacks; he had lost flesh, and in the morning he had a troublesome cough, with sputa often blood-streaked. A journey in Switzerland had caused him much fatigue, and certainly in no way tended to check the onset of his disease; in fact its effect had tended the other way, and the journey was undertaken contrary to the wish of the physician under whose care the youth had been at his home in the country.

I formed from the first a most unfavourable opinion of this case, and the patient, though kept very quiet, passing much of his time at rest in his own garden at home, with excellent attendance in every way, died about two months from the time of my last seeing him in June.

I regard it as a dangerous error to send a patient in whom acute phthisis is developing, with high temperature and quick pulse, on a long, exciting, and fatiguing journey. If the invalid could be carried all the way in his bed there would be less risk and more prospect of good; but, as things go, exertion to some extent can scarcely be avoided, and anything that quickens the respiration or circulation undoubtedly tends to promote the tuberculising process. It is almost as rational to take a patient sickening with typhoid fever out for a change, as it is to hurry to foreign parts one who is ill with the fever of active tuberculisation. Rest in bed or on a sofa, milk diet, and digitalis with a saline or with quinine, may perhaps

tide the patient over the outburst of diseased action, and when things have become quiet and the acute disease has subsided, then the question of change may be entertained, with a view to prevent another acute attack.

In cases where there is very evident disease, with or without some extent of softening tubercle, but no great fever and no great prostration and exhaustion after the slightest exertion, I believe few remedies are better than a long sea-voyage, and I could easily add to the length of this letter by recording illustrative cases. To mention one—

Mr. C., aged 28, lived in London, and became the victim of unmistakable phthisis at the apex of his left lung. He got very thin, but though the disease advanced to its second stage he was able to attend to his business as a chemist's assistant.

Dr. Walshe fully concurred with me in advising a voyage to Australia for this young man. He went; and having arrived there and become established in business, he wrote back to say he was so well and had grown so stout that his friends in London would hardly recognise him.

In these cases of discrete, limited tubercular deposit, following at times on pneumonic or bronchitic attacks, change of air and scene will do much; but no climate will restore lost lungs; and in acute febrile phthisis the risks necessarily attendant on travelling are of such a kind as to tend to keep up that febrile excitement of system, the subduing of which is so all-important a point in the treatment of the case. I am, &c.,

John C. Thorowgood, M.D.

Welbeck-street, W., November 18.

ANALYTICAL TESTING AS PART OF THE DUTIES OF A MEDICAL OFFICER OF HEALTH.

Letter from Mr. R. E. Power.

[To the Editor of the Medical Times and Gazette.]

Sir,—If analysis is to constitute part of the duties of our future Health Officers,—and without analysis I do not see how they could venture to recommend measures which would frequently entail considerable expense,—it appears to me that the combined duties of Medical Officer of Health and general practitioner are incompatible. The number of hours that the most energetic man can work is limited, and already the Profession is overworked without any additional duties. Analytical processes involve a large expenditure of time, perhaps more than may be generally supposed; and if it be so with the professed chemist in a well-ordered laboratory, how much more with an amateur (for the majority of general practitioners must be amateurs in chemical manipulations)! As an example—suppose water is the suspected source of disease,—a scientific man would scarcely venture an opinion on its quality without at least applying the simple permanganate test. Yet see what this involves to approximate accuracy! There is the preparation of a test solution (for the permanganate will not keep at a constant strength, and must be frequently re-made), and the testing of this by another standard solution to ascertain its accuracy before use. Then, suppose the test ready, the suspected water must be raised to a certain temperature (testing cold water is most tedious), not by boiling in the tea-kettle, but with the aid of a spirit-lamp in a clean glass vessel—a process that occupies a good deal of time, as a small quantity of water will not be expedient to operate on. The dropping in of the permanganate follows, and is necessarily tedious; when, perhaps in the midst of the most anxious part, a peal of the bell—Mrs. Smith is in labour, and must be attended at once! No more analysis that day; and, worse, the whole must be recommenced with a new sample.

But our conscientious Health Officer may not be content with this general analysis should he have time to perform it. Comparatively innocent matter may discolorise the permanganate; and, before condemning the water-supply of a house, street, or town, he naturally is anxious to know what is this oxidisable matter which he has detected. It may be nitrites or ammonia, indicative of poisonous water; it may be of vegetable origin, comparatively innocent; perhaps some chalybeate spring is at the bottom of it. The investigation must be carried further, and evaporation, incineration, the application of other tests—and probably their manufacture—take up a great portion of the day; for be it borne in mind that these delicate testings must as a rule be completed without interruption—they cannot be taken up and put down to suit convenience.

Let anyone who has a doubt on the matter take a litre of water, and evaporate it in a glass or earthenware vessel to dryness, and note the time it takes—not, of course, requiring the constant presence of the operator, but necessitating frequent looking after.

Besides the consideration of time comes that of apparatus; and it is surprising the number of appliances such a simple analysis requires.(a)

But water, though probably the item most frequently needing investigation, is but one of a long list; and when the question involves the possible condemnation of food, implicating perhaps a tradesman's character, one would feel very chary indeed of giving an opinion unless supported by the unchallengeable evidence of scientific facts.

In making these remarks, I speak from practical experience; and every practical man will, I feel, concur with me—that, short and easy as a simple analysis appears in print, it needs apparatus, care, and time in performance.

Now, with the general practitioner apparatus is purchasable; care is voluntary; but what about the time?

Dartmoor. I am, &c., R. E. Power.

HYDROPHOBIA IN BRITISH GUIANA.

Letter from Mr. W. F. B. Pollard.

[To the Editor of the Medical Times and Gazette.]

Sir,—It may interest other subscribers to your journal besides myself to know that hydrophobia has appeared in a country supposed by its inhabitants to have been hitherto exempt from this scourge. From the statement, however, of Mosely that before 1783 it was not known in all the West India Islands, and from the remark of Larrey that it was unknown in Egypt, while Pruner found it there in 1847, it would perhaps be safer to infer that it has not visited this part of the South American continent for many years rather than accept the prevailing opinion that it is now seen here for the first time. It has undoubtedly been brought to this colony from Barbadoes. A few months ago some rabid dogs were observed in the country by a gentleman from that island, and the fact was made known in the newspapers. Unhappily, it was only read of by the majority to be ridiculed.

The first case occurring here in the human being I was the first legally qualified practitioner to see. M. G., a black woman, aged 19, received a bite from a dog on July 20, which after a while healed up. On September 7 she was beaten by some people in the street, and on the 8th aborted. About the 26th she felt pain in her ear and great irritation in the left or bitten leg. On the 29th she had a spasm after drinking a little water, and on the 30th she was brought to this institution, and referred all her symptoms to the beating she had received. She died on the 2nd instant.

I have not time to send, and perhaps you will not have space to receive, the details of the case. It has since been followed by three others. Four cases of rabies in man within a few weeks in a town of 36,000 inhabitants!

From the number of people bitten by mad dogs and mad cats we shall probably lose some more of our citizens by this awful malady. I am, &c.,

W. F. B. Pollard, F.R.C.P. Lond., M.R.C.S. Eng.,
Senior Resident Surgeon at the Public Hospital.

George Town, British Guiana, October 26.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—*Apropos* of your able leading article on "Examinations" in your last issue, I beg leave to observe that the "rejections" at the Royal College of Surgeons have of late been carried to an extent which calls forth very serious reflections. Never since the College was established have the "rejections" been so numerous and inexplicable. What is the cause of this exceptional state of things? Go into any medical society or gathering, this subject forms one of the topics of conversation and comment. It is discussed in a spirit of indignation and regret in all the medical schools and hospitals in the metropolis. The young blood of Medicine is up to fever heat. The reason of this will be obvious when it

(a) List of apparatus for the detection of impurities in water, and for ascertaining the degree of hardness according to Dr. Clarke's scale:—

Fine balance (to turn 1-20th grain).	Graduated glass measures.
Weights for do.	Glass stirring rods.
Soap test measure.	Glass filter.
Pipette for 100 test measures.	Thermometer.
Retort and stand.	Stoppered bottles.
Burette, graduated, and stand.	Water-bath.
Evaporating basins.	Spirit-lamp.
Crucibles for incineration.	

is stated that the names of the best men in these various institutions figure in the list of the rejected candidates, whilst the names of very inferior men appear in the "pass list." It is impossible that this state of things can continue without inflicting great injury on the College. Reasons have been assigned for the rejections alluded to. Some students complain that the "pickles" are occasionally anything but fair specimens of anatomical dissections, and naturally demand that they should be examined on parts of a fresh subject. Others, again, complain of the transcendental nature of the questions they are called upon to answer, not only as regards minute and useless points of anatomy, but even of microscopical queries, which, if answered correctly, would give no evidence whatever of the ability of the candidate to treat disease. If not answered I contend that it is a gross injustice to the student to reject the candidate in consequence. I must allude to another complaint which is all but universal: it is probably exaggerated, but nevertheless it has a most depressing effect upon the student. It is stated that there have been lately examinations conducted at the College in which the examiner has not exhibited that "judicial calmness" of manner which you justly say is so important. Candidates, it is said, retire from the "table" depressed and all but hopeless. It is impossible to conceive that any gentleman on the Board of Examiners would willingly inflict such an injury on young, ardent, and ingenuous minds; I do not believe it. The Court of Examiners consists of men of the strictest honour and integrity, high in the list of distinguished surgeons and able physiologists. I am sure that they will all feel indebted to me for calling their attention to a subject which so intimately concerns the Profession, and recalling to their recollection a distich with one word altered,—

"He who the sword of Heaven would bear
Should be as *gentle* as severe."

It is an aphorism that "some men can refuse a favour with a better grace than others can grant it." Look at the position of the parties in this question. A young man presents himself before what is to him a terrible presence; he is naturally nervous and excited as to the results of his examination,—not only his peace of mind, but that of others, near and dear to him, may be involved in the result. He naturally looks for forbearance, consideration, and even kindness from those who may be the means of fulfilling the hopes which he had indulged in, or of remitting him to a long study and to a future trial. These remarks do not apply to the ignorant, incompetent, lazy student, but unfortunately, in too many instances of late, they are applicable to the competent and industrious candidate. If the Council of the College of Surgeons are alive to their duty they will at once institute an inquiry into the cause of this "failure of justice" to which I have thus called their attention. I am old in the Profession,—contemporary with the Coopers, Abernethys, Brodies, and Listons,—and I can recollect no period in the long term of their career as Examiners in which so many students were rejected as there have been at the present time. I hope this communication may have the effect of instituting an inquiry into the subject.

I am, &c.,
SENEX.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 8.

SIR WILLIAM GULL, Bart., M.D., President, in the Chair.

MR. LAWSON exhibited a patient from whom he had removed a large Epitheliomatous Tumour of the Upper Maxilla, first by excising the diseased mass, and then by freely applying the actual cautery and chloride of zinc paste spread on small pieces of lint. The man was admitted into the Middlesex Hospital in March, 1872. He had then a soft elastic tumour about the size of a small egg over the superior maxilla of the left side, which was evidently growing from within the antrum. The bone over it had been partially absorbed, and the tumour was pressing upon the skin, which in places was adherent to it. He could blow through the left nostril, showing that the cavity of the nose was not encroached on by the growth. On looking into the mouth, there was a small soft tumour bulging above the alveolus, about the size of half a walnut. The patient was discharged from the Hospital in the following July, all traces of the disease having been eradicated. Mr. Lawson remarked that the cases of soft tumours of the upper maxilla which seem peculiarly fitted to this mode of treatment are those in which the hard palate has not been invaded by the disease. As a further illustration of the permanant advantages which will sometimes follow the use of the chloride of zinc paste combined with the excision of the tumour, Mr. Lawson brought forward a poor woman from whom he had in 1866 excised a large scirrhous growth from the orbit, and afterwards applied the chloride of zinc. In this patient the whole orbit became detached in one piece, and the woman had since continued quite well.

Mr. HEATH said epithelioma was rare in the antrum; malignant growths were generally medullary. In medullary disease the palate was early affected, and the only hope lay in complete removal of the jaw. This case showed that epithelioma could be well removed without cutting out the jaw.

In reply to Mr. Bryant, Mr. LAWSON said it was a specimen of true epithelioma.

Mr. HULKE considered they might doubt if the disease originated in the antrum; most probably it began rather in the jaw and penetrated into the antrum.

Dr. DUFFIN read the histories of seven cases of Hydatids of the Liver that had been treated by tapping with the fine trocar and canula. In three of these, secondary enlargement of the liver came on from ten to fourteen days after tapping, and subsided spontaneously in from two to four weeks. In one instance, not only did extensive frictions exist, but the fluid contained one-fifth of pus. Seventy-two ounces were evacuated. No bad symptoms followed. In two cases, suppuration followed the puncture; in both, the cysts were crowded with daughter-cysts. Dr. Duffin adverted to the importance of clearing out the cysts as soon as possible after suppuration by a free opening, and to the value of antiseptics. The comparative merits of the small trocar operation and of electrolysis were then reviewed. It was admitted that gradual percolation into the peritoneal cavity was generally unattended by danger. Cases were cited where recovery had taken place after large quantities of hydatid fluid had been poured rapidly into the serous cavity. An instance of alarming symptoms after gradual percolation was also cited. In half of Dr. Fagge's cases percolation was admitted. Ought we to aim at this? Might not adhesions prevent it? The author thought that simple acupuncture might account for the good results in Dr. Fagge's other cases. He gave instances showing how small an injury sufficed to destroy the vitality of the hydatid. It had, however, frequently failed. In alluding to the absence of suppuration in Dr. Fagge's cases, the age of his patients was commented on. Of fifteen cases of secondary suppuration collected by the author, in seven the number of daughter-cysts had been large; in the remainder, six had been cysts of enormous size. Much handling of the cyst at the first puncture was deprecated, and partial emptying considered usually sufficient.

Dr. GREENHOW was surprised to find fever following in so many of Dr. Duffin's cases. He had five such of his own, and all did well. He took as much fluid away at the time as possible. In nearly all the liver returned to its normal size. Dr. Murchison first brought this plan forward. Letting out the fluid, he thought, killed the hydatid. In one case the tumour after some years seemed to return, and an abscess formed. This was opened, and cysts came out.

Dr. ALTHAUS considered this a valuable appendix to Dr. Fagge's paper. His cases almost all did better than Dr. Duffin's.

Dr. BROADBENT had adopted the same plan in three instances, and the patients did very well. In one the fluid evidently drained out into the peritoneum, but the patient did quite well.

Dr. POORE asked the source of the pus in these cases—was it from the sac or from the liver?

Mr. HULKE asked what kind of a trocar was used in the earlier cases; they were almost certain to have used one larger than they would now. He once tapped a liver for Dr. Budd, and no fluid came away; but later the lady died, and a shrunken hydatid was found in her liver.

Mr. BRYANT said suppuration very greatly depended on the size of the trocar. It was needless to draw off all the fluid. He had tapped five in all; in two only part of the fluid was removed. In suppurating cysts, they ought to make a large opening to get rid of the dead hydatid. In electrolysis there was really only tapping.

Dr. BUZZARD said it was the death of the animal which caused suppuration. Last year he saw a man into whose stomach a cyst had burst; he was vomiting pus.

Dr. POORE said that after shrivelling there must be death; yet there was no suppuration.

Mr. Leach had used the aspirator in one case. The tumour did not go away, and it was tapped in the usual fashion.

The President remembered Dr. Babington using a very fine trocar to tap these cysts; he only took away a little of the fluid. In some suppuration will follow under any circumstances. In some there was evidence of death when tapped. He remembered one where hooklets and cholesterine crystals came away; these he took as a sign of disintegration. In a certain number of cases of cysts of the liver no operation was needed. He remembered a case, probably of a single cyst, where the patient had a sudden pain in the abdomen, and the tumour completely disappeared.

Dr. Duffin, in reply, said he was induced from experience to take only a portion of fluid. The fever in his earlier cases may have depended on free handling to remove as much as possible, but the temperature was not high. They used a very long and fine trocar made for the purpose. If the collection was very large then the mass might suppurate.

Dr. George Johnson related a case in which Trismus, with Facial Neuralgia and Palsy, and a Recurrence of Epilepsy, were excited by a foreign body in a wound on the cheek. H.M., aged 44, a wheelwright, was admitted into King's College Hospital on July 17. On July 4 he was cut on the cheek by a blow from an iron axle that fell against his face. The wound, having been washed, was strapped up by a chemist; it healed, but remained very painful. On the evening of the 12th he had an epileptic fit. In early life he had been subject to epilepsy, but, until the occasion mentioned, had been free from fits for twelve years. On the morning of the 13th he had difficulty in opening the mouth and in closing the left eye. This difficulty continued, and increased until the time of his admission on July 17. The left side of the face was paralysed, the features being drawn to the right. When he attempted to shut both eyes, the left remained partly open. He could separate the incisor teeth only to the extent of one-eighth of an inch. The left masseter muscle felt permanently hard and rigid. Severe pain was felt over the left side of the face, with a sense of numbness in the skin. There was a scar, about three-fourths of an inch long, an inch below the left eye; the cicatrix being hard and very tender on pressure. Asked if he thought it probable that dirt had got into the wound, he said that the iron which struck him was covered with grease and dust. Dr. Johnson then directed Mr. Birch, the house-physician, to cut through the cicatrix; and this being done, a sharp angular piece of flint, nearly as large as a grain of wheat, was discovered and removed. It weighed half a grain. Water-dressing was applied to the wound. At first no medicine was given; but after the second day, as he continued to suffer from pain which disturbed his rest, twenty grains of chloral hydrate were given twice in the twenty-four hours. The symptoms gradually passed away. The pain subsided; the muscles closing, the jaw relaxed; and the facial muscles recovered their power. When he left the hospital on the 29th there was still a trace of facial palsy; but on August 9, when he came as an out-patient, he reported himself quite well. On September 26 he again presented himself, and said that he had continued well. He appeared in perfect health. Dr. Johnson referred to a similar case which he had published (*Proceedings of the Royal Medical and Chirurgical Society* 1870-71). A boy, aged 13, was admitted in June, 1870, with trismus and tetanic rigidity of the trunk and extremities. The symptoms, which had existed for rather more than a week, had commenced about ten days after a wound on the thigh by a sharp piece of wood. The wound had healed, but the cicatrix was hard and very tender on pressure. While examining the case, Dr. Johnson remembered two fatal cases of traumatic tetanus referred to by Dr. Alfred Taylor in his book on "Poisons," second edition, p. 143. In both cases the wound had healed; but in one there was found after death, beneath the cicatrix, a piece of iron, and in the other a splinter of wood. Dr. Johnson then requested Mr. Whitmore, the house-surgeon, to incise the cicatrix; and, this being done, a piece of woollen stuff of the size of a small pea was discovered and removed. The stick which wounded the boy's thigh had pierced his trousers, and, carrying with it a piece of cloth, had left it in the wound. Fifteen grains of chloral were given every six hours for a few days. The symptoms gradually subsided, and he was discharged well on July 27. Dr. Johnson remarked that the chief interest of the two cases consisted in the fact that formidable nervous symptoms were excited by the presence of a foreign body of small size beneath the cicatrix of a recently healed wound. The two foreign bodies—the angular bit of flint and the small lump of wool—were exhibited to the Society.

Mr. E. Hart said the case illustrated the advantage of laying open wounds in tetanus. He remembered a case where Calabar bean failed; the cicatrix was opened, and the patient did well. A small wound is more likely for this reason to be followed by tetanus than a large one, except in war.

Mr. Willett said there was now in St. Bartholomew's a man with tetanus from rather a large wound on the back of his hand. The wound seemed healthy, but the patient had been greatly exposed previous to receipt of the injury.

Dr. Broadbent said peripheral irritation might be the cause of epileptic seizures. This was so in a woman who had a dead phalanx in her hand; the fits ceased on removal. In another instance the ulnar nerve was injured; all below remained tender, and, if pressed, the woman became almost insensible.

Mr. Hulke had a patient similar to Dr. Johnson's. A woman had her face injured by a clothes prop, but only a slight graze was to be seen. Some days after tetanus set in, and she died. After death a portion of wood was found deep sunk in the orbit.

Dr. Johnson said they sometimes were too late to save the patient by operation. Even here it took some days for the tetanus to subside.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 6.

J. Braxton Hicks, M.D., F.R.S., President, in the Chair.

The following gentlemen were elected Fellows of the Society:—A. H. W. Ayling, Esq.; A. F. Field, Esq.; Henry Harris, M.D.; Geo. Mendenhall, M.D.; and Joseph Szczygielski, M.D.

Mr. Worship showed a Fibro-cystic Tumour of the Uterus complicated by pregnancy. The patient was 35 years of age, and had been married two years and a half. During life she suffered acute pain over the abdomen, which had increased rapidly in size; and there was obstinate sickness during the last few weeks of life.

The President referred to a case of fibroid complicating pregnancy, attended by Mr. D. Taylor, in which the labour was quite natural.

Dr. Phillips said that large fibroid masses at the fundus uteri generally interfered materially with efficient uterine action during labour. The case was interesting as a further illustration of the difficulty of diagnosing fibro-cystic disease of the uterus from ovarian tumour. He asked whether fibro-cystic tumours of the uterus had ever been noticed to suppurate and discharge at irregular intervals. He had now at Guy's a case of uterine tumour extending high above the umbilicus; but every four or six months there was a profuse discharge of blood, and then of pus, with great diminution in the size of the growth, which again gradually increased. The patient had been under notice at intervals for five or six years.

Dr. Protheroe Smith said, in reference to the probable escape per vaginam of the fluid contents of fibro-cystic growths, he would refer to three cases. The first case was one of a large abdominal tumour which became diminished in size and tension after the escape of considerable quantities of watery discharge per vaginam at irregular intervals. In another the symptoms had existed for seventeen years. A tumour continuous with the uterus, and extending to the umbilicus, becomes at times greatly diminished in size after a profuse discharge. A third case presented the same characters in a less marked degree.

Dr. Wynn Williams exhibited a Hodge's Pessary with an Elastic Diaphragm, which he had found useful in retaining an intra-uterine pessary *in situ*.

Dr. Barnes exhibited a Fibrous Tumour, the size of a large orange, which he had removed from the anterior wall of the vagina. Its attachment began just above the meatus urinarius, extending along the course of the anterior wall, but leaving a space of an inch quite clear below the os uteri. It was removed at St. Thomas's by the galvano-caustic wire. The woman did perfectly well. It was shown as an example of a comparatively rare affection.

Dr. Barnes also showed a Modification of Neugebauer's Speculum, which he had devised to obviate one or two practical objections to Neugebauer's excellent instrument.

Dr. Meadows read a paper "On the Treatment of some forms of Extra-Uterine Pregnancy." Relating a case of the so-called ventral variety, he referred to some remarks made by him, and published in the last volume of the *Transactions*, in which he advocated more frequent resort to the operation of gastrotomy

in certain cases of extra-uterine gestation, the object of the operation being to anticipate and so to avert the almost inevitably fatal rupture of the cyst and death from hæmorrhage. In the former communication the suggestion was also made that with a view to prevent one of the great dangers attendant upon this operation—viz., hæmorrhage—the placenta should not be removed, but should be left to undergo the slow but sure process of atrophy and absorption; it being argued that, as by the removal of the fœtus there is no longer any physiological necessity for that structure, its removal by atrophy might fairly be reckoned on. The present communication was based upon another case of so-called ventral pregnancy, which, coming under the author's care during his absence, had been seen by two of his colleagues at the Hospital for Women, Dr. Squarey and Mr. Scott, and a living child at about the seventh month was removed. The attempt, however, to remove the placenta (which was situate deep down in the pelvis) and the fœtal cyst was attended by such frightful hæmorrhage that the patient succumbed in a few hours. Dr. Meadows now contended that in all cases where the diagnosis of a living and viable child could be made out, gastrotomy ought to be performed; and that in order to facilitate the operation, and at the same time to diminish its danger, both the placenta and the containing cyst should be left *in situ*, special care being taken not to detach any portion of the placenta. In this way the operation might be reduced to a very simple process; and the chief care should be—first, to extract the living child, and, secondly, to do as little damage as possible to the remaining structures, thus preventing hæmorrhage, and enabling them afterwards to undergo the process of atrophy and absorption, just as occurs in some cases where, no operation having been performed, the fœtus has died, been mummified as it were, and finally been absorbed.

Mr. Scott said that in the case under discussion the danger of rupture of the cyst was imminent. As to the nature of the operation which should be performed in a similar case of advanced fœtation, looking at the extensive and firm character of the adhesions in every direction, he had no hesitation in giving his entire approval to Dr. Meadows' view as far as leaving the cyst was concerned. With regard to the placenta he did not feel so assured. In this case, after the entire removal of the placenta, all bleeding within the cyst ceased.

Dr. Murray thought there was too much risk incurred in completely closing the abdominal opening as recommended by Dr. Meadows, and leaving the placenta behind without any chance of escape. In the case reported there seemed no doubt that the cyst containing the fœtus showed signs of contraction. It might therefore be fairly presumed that the same contraction noticed might continue after the removal of the fœtus, and by this means the placenta be partially or wholly separated, and give rise to serious trouble and danger. He would certainly prefer leaving an opening with the umbilical cord passing through it.

Dr. Barnes observed that Dr. Meadows' case was scarcely required in order to prove that the removal of the cyst or placenta was bad practice. This had been settled by experience. Dr. Ramsbotham especially insisted upon this at an operation performed by his advice at the London Hospital by Mr. Adams, at which Dr. Barnes was present. The placenta was left untouched, and the woman made a good recovery. The adhesion of the placenta to the intestines was often so intimate, there being sometimes no definite sac, that the attempt to detach it must necessarily involve considerable risk, and experience had shown that if left *in situ* it would be removed safely by natural processes.

The President observed that in a former discussion he had pointed out the danger of removing the cyst. In the three cases in which he had operated the fœtus alone had been removed.

Dr. Madge said that in extra-uterine pregnancy the placenta was bound by adhesions to the part to which it was fixed. To break up these adhesions by forcibly separating the placenta and exposing the enlarged and highly congested vessels in apposition with its maternal surface, would—from hæmorrhage into the abdominal cavity—itself be sufficient to cause death.

Dr. Protheroe Smith said the bulk of the swelling and the tension of the cyst might be easily reduced by the use of the pneumatic aspirator without risk of the admission of air, and thus by a very simple operation those natural processes be aided by which this abnormal condition had been often brought to a favourable issue.

Dr. Phillips, while admitting that simple evacuation of the liquor amnii had proved successful in some cases, thought, from what was known of the secreting power of the amnion, that this would not in all cases be found sufficient; and if it led to the death of the fœtus, the child's body had afterwards to be disposed of by long and exhausting (though occasionally very successful) processes.

Dr. Edis said that incision through the vagina and extraction of the fœtus by the forceps had not been mentioned. In the cases under consideration the head was low down in Douglas's pouch. By this plan the general cavity of the peritoneum would not be interfered with. The placenta should be left; and if it become subsequently detached, its extraction could be readily accomplished, the vaginal wound being kept open and the cyst injected with some disinfectant. Dr. Greenhalgh had recorded a successful case of the kind.

Dr. Meadows said he was surprised at the statement made by Dr. Barnes, that the practice advocated in the paper had long been the recognised and established rule. If this were so it was very remarkable that no obstetric writer that he knew of laid down any such rule, and Ramsbotham was absolutely silent upon it, if indeed he did not actually discountenance it. He was glad to find such a general concurrence of opinion as the paper had elicited. He believed with Dr. Snow Beck that in the majority of cases the placenta was attached to the fimbriæ or some part of the Fallopian tube; but in the case now cited, though this might have been so in part, it certainly was not altogether, for the great bulk of the placenta had been attached to, and during the operation was removed from the interior of, the cyst, deep down in Douglas's pouch, and quite independent of the Fallopian tube.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

Thursday, October 10.

Dr. Burnup, retiring President, introduced the President, Dr. Philipson, who took the chair.

After the usual discussion on the prevalent diseases of the district, in which Drs. Charlton, Hutchinson, Arnison, Denham, Burnup, and Humble, and Messrs. L. Armstrong, H. E. Armstrong, and Hawthorn took part,

Dr. Foss exhibited an Aneurism of the Aorta from the body of a man 41 years of age, whose previous health had been good until eighteen months before, when he had been maltreated. Since then he had suffered from faintings, *malaise*, etc. A month ago expectorated a quart of florid blood. A fortnight afterwards brought up about two quarts of blood, and died immediately. Chest only was opened at the post-mortem examination. There were black cretified masses of arrested tubercle at apex of left lung; right lung healthy. Pericardium adherent everywhere to heart, of which the muscular structure was soft. Ascending portion of aorta was converted into a large, irregular, sacculated aneurism, which pressed against, and was adherent to, right pleura. At posterior and upper part of the sac was a serrated longitudinal rupture, three-quarters of an inch in length, opening into lung. There was no sign of atheroma.

Dr. Peart exhibited portions of Small Intestine six years after typhoid fever, with coils much adherent.

Dr. Byrom Bramwell detailed the history of a case of Latent Idiopathic Pericarditis, which occurred in a girl, aged 17. The only symptoms were pain in the epigastrium, and slight sore throat. After death, which took place suddenly, the pericardium was found distended with serum, in which floated flakes of coagulated lymph. The adjacent surfaces of the heart and pericardium were covered with a thick layer of recent lymph. Dr. Bramwell also exhibited—2. A specimen of Rupture of the Heart. The rupture, which was just sufficiently large to allow of the passage of a silver probe, was situated in the posterior wall of the left ventricle, close to the septum, two inches from the apex. 3. A good example of Hydronephrosis. 4. A patient who had been twice successfully operated upon for Strangulated Inguinal Hernia within two months; the first operation on May 8, 1872, the second on July 4, 1872.

Dr. Charlton exhibited, on the part of Dr. Tinniswood, of Norton, near Stockton, a specimen of Bony Deposit in the Aorta, pressing upon the left coronary artery. The case proved fatal by rupture of the aorta. The subject, a young woman, had been exposed to some violence, and the case came on for trial at Durham. There was a remarkable family predisposition to the disease, one brother had died suddenly from the same complaint, and a sister was supposed to be affected with it. Dr. Tinniswood also sent a Gall-stone of

unusual size, one and a half inches in length, and with the usual crystallised formation within.

Three patients were exhibited by Mr. Luke Armstrong, Surgeon to the Newcastle Infirmary; the following being a summary of the notes taken by his Clinical Clerk, Mr. Percy Watson:—

1. *Double Amputation.*—J. G., aged 20, porter, admitted to the hospital on August 6. Both lower extremities terribly crushed (by a train of coal waggons passing over them) and otherwise severely injured. Chloroform having been administered, both legs were amputated, the right three inches below the knee, the left above the ankle. Wire sutures were used, and the stumps dressed with carbolic oil. Three days after had an attack of hæmoptysis, which passed off after having an astringent mixture administered. Slight sloughing of the flaps occurred, which necessitated skin-grafting; twenty-one grafts were taken from a newly-amputated limb, nineteen of which took. From this time the patient progressed favourably, the stumps being quite healed by September 25.

2. *Compound Dislocation of the Ankle-joint.*—T. C., aged 30, cartman, admitted to the hospital on July 30. Fell from the top of a wall twelve feet high, a large stone falling at the same time upon his ankle. The inner malleolus was broken off, the tibia projecting through a large opening in the soft parts, the fibula being fractured about three inches from the lower end; thus the ankle-joint was thoroughly laid open. The wound having been drawn together with silver-wire sutures and dressed with carbolic oil, a splint with a foot-piece was placed on the outer side of the leg, and bags of ice were constantly applied for seventeen days. It was then opened out for the first time, the sutures were removed, and the wound was dressed with zinc lotion. The wound healed rapidly, and the patient left the hospital on October 1 with a movable joint.

3. *Compound Dislocation of the Ankle-joint.*—W. R., aged 13, was admitted to the hospital on June 8. Caught his foot in the wheel of a stationary engine, which jerked him into the air. On falling he alighted astride a projecting tap, which ruptured the urethra. When admitted a large wound was found over the ankle-joint, the tibia and fibula both projecting, the foot being turned up on the inner side. The foot was put in position, a splint being placed on the inner side. The wound was drawn together with wire sutures, and dressed with carbolic oil. A catheter was introduced into the bladder, and allowed to remain for some time. At the end of fifteen days the wound was opened out, and dressed with zinc lotion. Skin-grafting was had recourse to when the granulations would admit of it. The boy was discharged in good health and with a movable joint on November 4.

NEW INVENTIONS.

EFFERVESCING LOZENGES.

Mr. Cooper, of 26, Oxford-street, has submitted to us some elegant preparations of effervescing lozenges, which we have used in several cases with good effect and agreeable results. The lozenge is about the circumference of an ordinary lozenge, but twice as thick. The active principle of many powerful drugs can be so combined with the effervescing powder of the lozenge as to have really a very pleasant taste. The lemonade and ginger-beer lozenges, which melt readily in the mouth, are really excellent substitutes for lemonade and ginger-beer in glasses. These lozenges, amongst other advantages, have the following:—The quenching of thirst without taking fluids; the administration of aperients and tonics in a pleasant state; being portable they can be used by speakers, travellers, troops on the march, visitors to theatres, and occupants of the ball-room. The ingredients are perfectly harmless, and a lozenge of almost any kind can be prepared, when prescribed, in a few minutes. Mr. Cooper's invention is a very useful and elegant one, and well deserving of the patronage of the Profession.

NEW SPONGE-TENTS, Etc.

These tents are made on a new principle by Salt and Son, Birmingham, and have the following advantages over those generally in use, inasmuch as they can be sold at 6s. per dozen, and they dilate more rapidly than the tallow-covered tents. These new tents are coated with cocoa-butter, and therefore do not become displaced before they begin to expand. They are easily introduced, and, unlike the uncoated tents of Dr. Marion Sims, do not become spoiled if not dexterously inserted. They are carbolised, and are made of the actual shape of the "cervix"—oval. Cakes of the solid compressed sponge may be had, from which the surgeon may cut a tent of any size, from those fit to use in the urethra to such as are used for the uterus or rectum. These tents have been made according to directions given by Mr. Lawson Tait.

OBITUARY.

DR. ARCHIBALD SIMPSON

Was born November 30, 1829. He was educated at the Grammar School of Aberdeen and at Marischal College and University of that city, where he was one of the most distinguished students, gaining the highest mathematical and classical honours. He was first graduate in Arts, 1847, and Medallist in Midwifery at Edinburgh, where he took his diploma as surgeon in 1851; M.D. Aberdeen, 1852. He afterwards spent three years in Egypt as assistant to Dr. Ogilvie, Alexandria; and from thence he went to Syria as Surgeon to the English Hospital at Jerusalem. This post he relinquished in a few months, on account of his wife's bad health, and returned to England. He settled in Islington as a general practitioner in 1857, where he has practised ever since. His health began to fail about a year ago, and symptoms of thoracic tumour appeared, which rapidly increased; and he died on November 11, at the early age of 42 years, having worked till within a few days of his death, beloved and regretted by a numerous circle of attached patients and friends.

LEGAL INTELLIGENCE.

LAW ASSISTED BY PSYCHOLOGY.

In the Chancery Court the other day the whirring sound of certain machinery and an engine was made the subject of an action (Gaunt *v.* Fynney), on the ground of its being a nuisance. Mr. Fry, Q.C., contended, *inter alia*, that it was greatly exaggerated and intensified by the plaintiffs (two unmarried ladies) constantly thinking about it, and supported his contention by a citation from the work on the "Influence of the Mind on the Body," by Dr. D. H. Tuke. The Lord Chancellor, in delivering judgment, considered this a fair defence, observing—"Mr. Fry made a happy use, in part of his argument, of a passage in a recent work upon mental science, which, treating of the influence of the mind upon the sense of hearing, says that 'the thought uppermost in the mind, the predominating expectation, makes a real sensation from without assume a different character.' Everyone must have had some experience of the truth of this statement; a nervous, or anxious, or prepossessed listener hears sounds which would otherwise have passed unnoticed, and magnifies and exaggerates with some new significance, originating within himself, sounds which at other times would have been passively heard and not regarded. The bill, therefore, so far as it sought relief on the ground of nuisance, must be dismissed."

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—At examination meetings of the College, held on Monday, Tuesday, and Wednesday, November 11, 12, and 13, the Licence to practise Medicine was granted to—

Armstrong, Benjamin.	Loverock, Robert George.
Butler, Patrick.	Peele, Edward.
Carleton, David John.	Sheehy, James.
Healy, Joseph Keane.	Sproule, Godfrey Knight.
Johnstone, Charles Alexander.	Sproule, Robert.

The Diploma in Midwifery was granted to—

Armstrong, Benjamin.	MacLaughlin, Frederick Peard.
Butler, Patrick.	Peele, Edward.
Healy, Joseph Keane.	Sheehy, James.
Johnstone, Charles Alexander.	Sproule, Godfrey Knight.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 14th instant, viz.:—

Bower, Reginald, Knowle, Warwickshire, student of the Birmingham School.

Bowes, John Ireland, L.S.A., Elham, near Canterbury, of Guy's Hospital.
Buck, William Elgar, B.A. and M.B. Cantab., Leicester, of St. Bartholomew's Hospital.
Cornelius, Walter Bernard, Canonbury, of University College.
Crookshank, Harry Maule, L.K. & Q.C.P.I., Shepherd's-bush, of University College.
Davies, Hugh Walter, Dorset-street, Portman-square, of St. Mary's Hospital.
Dixon, Thomas James, L.S.A., Graaff-Reinet, South Africa, of Guy's Hospital.
Edwards, Alfred, L.S.A., Scilly Isles, Cornwall, of University College.
Fisher, John, Little Massingham, Norfolk, of King's College.
Horner, Arthur Claypon, Everton, Beds, of St. Bartholomew's Hospital.
Henderson, William, M.D. Edin., Exeter, Devon, of the Edinburgh School.
James, Arthur Culver, L.S.A., Kennington-park-road, of Guy's Hospital.
Marlatt, Charles William, M.B. Toronto, Yarmouth Centre, Ontario, of St. Thomas's Hospital.
Penny, George Town, Bridgefield, Lancashire, of St. Bartholomew's Hospital.
Randall, Wydham, Bridgeud, Glamorgan, of St. Bartholomew's Hospital.
Scobell, Henry, Plympton St. Mary, Devon, of St. Bartholomew's Hospital.
Spencer, Edward Richard, L.R.C.P. Edin. and L.S.A., Keystone, Hunts, of University College.
Underwood, Thomas Francis Ken, Gower-street, of King's College.
Wagstaff, Thomas Henry, L.S.A., Camberwell, of the Middlesex Hospital.
Warden, Charles James Hislop, Cornwall-road, Bayswater, of St. George's Hospital.
Watson, Charles Russell, Sydney, New South Wales, of University College.
Whitfield, William John Clarke, Bristol, of the Bristol School.
Young, John, Narborough, Leicestershire, of St. Bartholomew's Hospital.

Of the eighty-four candidates examined, twenty were referred in Surgery or Medicine, or both; and of the seventy-four admitted Members there were fourteen holding the Licence of the Society of Apothecaries, four L.R.C.P. Edin. and L.S.A., three L.R.C.P. Lond., three L.R.C.P. Edin., two M.D. Edin., one M.D. Queen's Univ. Ire., one M.B. Cantab., one M.D. New York, one M.B. Toronto, and one L.K. & Q.C.P. Ire. The other candidates were examined and passed in Medicine.

The following Members of the College passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 19th inst., and, when eligible, will be admitted to the Pass Examination for the diploma of Fellowship of the College, viz. :—

Adams, Josiah Oake, L.S.A., Clapton, diploma of Membership dated April 26, 1865, of St. Bartholomew's Hospital.
Cant, William Edmund, L.R.C.P. Lond., Leavesden, Herts, May 9, 1867, of St. George's Hospital.
Howell, Horace Sydney, M.D. St. And. and L.R.C.P. Lond., Great Dunmow, Essex, April 10, 1861, of St. Bartholomew's Hospital.
Jessett, Frederic Bowseman, L.S.A., Erith, Kent, December 20, 1858, of University College.
Lowne, Benjamin Thompson, Guildford-street, Russell-square, May 2, 1861, of St. Bartholomew's Hospital.
Morris, Henry, M.B. Lond. and L.R.C.P. Lond., Petworth, April 25, 1866, of Guy's Hospital.
Stirling, Edward Charles, B.A. Cantab., July 23, 1872, of Cambridge and St. George's Hospital.
Veale, Thomas Slick, L.S.A., Clay-hill, Epsom, July 17, 1854, of University College.

And the following gentlemen *not* Members of the College:—

Bennett, Wm. Henry, of St. George's Hospital.
Benson, Percy Hugh, of Aberdeen and St. Bartholomew's Hospital.
Betty, George Samuel, of the University College.
Dodson, Andrew, of the Birmingham and Guy's Hospitals.
Greenwood, John William, of St. Thomas's Hospital.
Harmar, James Raffles, of the Birmingham Hospital.
Rogers, Thomas King, of the University College.
Shuter, James, B.A. and M.B. Cantab., of Cambridge and St. Bartholomew's Hospital.

Eight out of the twenty-four candidates examined, having failed to acquit themselves to the satisfaction of the Court, were referred to their anatomical and physiological studies for six months.

APOTHECARIES' HALL. — The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 14, 1872 :—

Bailey, John Andrew, Bushey, Herts.
Bruce, James, Kidsgrove, Stafford.
Godding, Charles Caue, Portsmouth.
Hirons, George Merriman, Alverchurch, Worcester.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

AIR, CUMMINGS, M.R.C.S., L.R.C.P.—Registrar to the Evelina Hospital for Sick Children, *vice* R. C. Chicken, M.R.C.S., whose term of office has expired.

BLAKE, J. FFRENCH, L.S.A.—Resident Obstetrical Officer to Charing-cross Hospital, *vice* W. M. Atkinson, M.R.C.S., L.S.A., whose term of office has expired.

CORFIELD, WM. HENRY, M.D. Oxon., M.R.C.P., etc.—Medical Officer of Health of the Parish of St. George's, Hanover-square.

HANCOCK, HENRY, F.R.C.S.—Treasurer of the Royal Medical Benevolent College.

DELAMOTTE, PETER WILLIAM, L.R.C.P., L.S.A. — House-Surgeon to Charing-cross Hospital, *vice* Mr. Savory, who has been appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital.

FULLER, HARRY, M.R.C.S. Eng., L.S.A.—Resident Medical Officer and House-Surgeon to the Suffolk General Hospital.

GIFFARD, DOUGLAS W., M.R.C.S., L.S.A.—House-Surgeon to the Evelina Hospital for Sick Children, *vice* J. B. Ball, M.B. Lond., resigned.

HUNTER, WILLIAM, M.B., C.M.—Parochial Medical Officer for Dailly, Ayrshire.

KNOTT, CHARLES, M.R.C.S.E.—Medical Officer for Landport District of Portsea Island Union.

MORGAN, E. R., M.R.C.S., L.S.A.—Medical Officer of Health for Rural District of Neath Union, Glamorganshire.

ORWIN, ARTHUR W., M.R.C.S.—Resident Medical Officer to Charing-cross Hospital, *vice* Peter W. Delamotte, L.R.C.P. Edin., L.S.A., appointed Resident Surgical Officer.

PHILPOT, J. H., M.B. Lond., M.R.C.S.—House-Physician to King's College Hospital, London.

PIKE, WILLIAM ROYSTON, M.R.C.S.E., L.S.A.—Medical Officer for Southsea District of Portsea Island Union.

PIPPETTE, WALTER, L.R.C.P. Edin., Prelim. M.B. Lond., L.R.C.S., L.S.A. —Medical Officer for District No. 5 of Fulham Union, *vice* F. H. Alderson, M.R.C.S. Eng., L.M., L.S.A., resigned.

RAE, W., M.R.C.S.—House-Surgeon to King's College Hospital, London.

SALT, GEORGE, M.R.C.S., L.S.A.—House-Surgeon and Dispenser to the Tiverton Infirmary.

SHIELS, ROBERT, L.R.C.P. and S. Edin.—Medical Officer for District No. 4 of South Stoneham Union, Hampshire.

SPENCER, L. W., M.R.C.S. — Resident Accoucheur to King's College Hospital, London.

WILLMORE, FREDERIC WILLIAM, M.R.C.S. Eng., L.S.A. Lond.—Medical Officer and Public Vaccinator to the Stafford-street District of Walsall Union, *vice* Mr. F. P. Palmer, deceased.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—Dr. Alexander Crosbie, Surgeon to the *Challenger;* Dr. Alfred D. Demalge, Assistant-Surgeon to the *Duke of Wellington;* Dr. T. Cann, Assistant-Surgeon to the *Cruiser;* and George Maclean, Assistant-Surgeon to the *Challenger.*

Deputy Inspector-General of Hospitals and Fleets William T. Domville, M.D., to be Honorary Surgeon to Her Majesty, *vice* Bernard, deceased.

BIRTHS.

ADCOCK.—On November 15, at Sandgate, Kent, the wife of John Adcock, M.D., Staff Assistant-Surgeon, of a daughter.

CARLESS.—On November 19, at Lansdowne-grove, Devizes, the wife of Edward N. Carless, M.B., of a son.

HOUGHTON.—On November 13, at 6, Mount-street, Grosvenor-square, the wife of H. G. Houghton, M.D., of a daughter.

LEVER.—On November 19, at 21, Kensington-gardens-square, London, the wife of R. C. Lever, M.B., 7th Hussars, of a son.

STILLWELL.—On November 13, at Hillingdon, Middlesex, the wife of H. Stillwell, M.D. Edin., M.R.C.S. Eng., L.S.A., of a daughter.

MARRIAGES.

ATWOOL—LOVELL.—On November 19, at the parish church of St. Mary's, Willesden, the Rev. H. Courtenay Atwool, M.A., M.D., curate of Willesden, to Anna Elise, eldest daughter of the late H. Lovell, M.R.C.S. Eng., L.S.A., of Aspley Guise, Beds.

FENN—JULIUS.—On November 12, at West Molesey Church, Edward Living Fenn, M.D., of the Old Palace, Richmond, to Katherine Pauline, third daughter of Frederick G. Julius, M.D., of The Grove, West Molesey.

LUBBOCK—HOTHAM.—On November 14, at St. Michael-le-Belfries, York, Montagu Lubbock, L.R.C.P., M.R.C.S., fifth son of the late Sir John Lubbock, Bart, to Lora, youngest daughter of the late Captain Hotham, R.E.

VINEY—NICHOLSON.—On November 15, at the Congregational Church, Redhill, Surrey, Ebenezer Viney, of Upper Norwood, to Catherine, second daughter of the late Brinsley W. H. Nicholson, M.D., F.R.C.S., Deputy Inspector-General of Hospitals.

WAEICK—ARMSTRONG.—On November 19, at St. Paul's Church, Ball's-pond, John Henry Waeick, Esq., of Oakley-road, Islington, and Great James-street, Bedford-row, solicitor, to Annie, second daughter of the late William Armstrong, M.D., of Egremont, Cumberland.

DEATHS.

BENNETT, RISDON DARRACOTT, B.A., of Trinity Hall, Cambridge, and Middle Temple, Barrister-at-Law, eldest son of J. Risdon Bennett, M.D., F.R.C.P., at 15, Finsbury-square, on November 19, aged 30.

COCHRAN, GEORGE BLAIR, M.D., at Victoria-buildings, Weston-super-Mare, on November 16, aged 63.

ELLIOTT, ROBERT ARTHUR, Staff Assistant-Surgeon (half-pay), and late of H.M.'s 95th Regiment, eldest son of the late Robert Elliott, F.R.C.S.E., at North-street, Chichester, on November 13, aged 40.

ELWES, CHARLES WALTER, M.D., fourth son of the late J. M. Elwes, Esq., of Bossington, Hants, at his residence, 117, Lansdown-place, Brighton, on November 13, aged 33.

GRAVES, ANNA, widow of the late Robert James Graves, M.D., F.R.S., of Merrion-square, Dublin, and Clogham Castle, King's County, at Clogham Castle, on November 17.

PAYNE, CHARLES HENRY, eldest son of Charles Henry Payne, M.D., at Wimbledon-hill, after three weeks' illness, on November 15, aged 3½ years.

RAYNER, FREDERICK MATHEW, Staff Surgeon R.N., at Eastern Avenue, Erleigh, near Reading, on November 18.

WHITEFIELD, ARTHUR DUNNING, second son of Arthur Whitefield, M.R.C.S. Eng., L.S.A., at Elm Villa, Eastbourne, of croup, on November 15, aged nearly 8 years.

WING, DORA, widow of Edwin Wing, M.D., late Medical Superintendent of the Northampton General Lunatic Asylum, and daughter of the late Hon. John O'Driscol, Chief Justice of Dominica, at Hammersmith, on November 8.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION, DERBY.—Medical Officer. Candidates must be Members of one of the Royal Colleges of Surgeons of the United Kingdom, and registered in accordance with Act of Parliament. Applications, with testimonials, to the Secretary, Mr. J. Bullivant, 58, Abbey-street, Derby, on or before November 23.

BIRMINGHAM HOSPITAL FOR WOMEN.—Dispenser. Any woman competent to dispense will be eligible as a candidate. Apply to the Honorary Secretary of the Medical Board.

CHARING-CROSS HOSPITAL.—Chloroformist. Candidates must be qualified to practise under the Medical Registration Act. Applications, with testimonials, to Henry Woolcott, Esq., Secretary, on or before Dec. 4.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Dispenser and House-Surgeon's Assistant. Applications and testimonials to David Hartley, Esq., Resident Surgeon.

DONCASTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Honorary Secretary.

DURHAM COUNTY ASYLUM, SEDGEFIELD, FERRYHILL.—Assistant Medical Officer for the Female Department. Applications, with testimonials, to be sent without delay to Dr. Smith, Medical Superintendent.

HUNTINGDON COUNTY HOSPITAL.—House-Surgeon. Applications, with testimonials, to Dr. Ward, Huntingdon, on or before November 30.

KILDALTON, ISLAY.—Medical Officer. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen, Islay.

LEICESTER PROVIDENT DISPENSARY.—Medical Officer. Candidates must be duly qualified and registered. Applications, with testimonials, addressed to the Chairman of the Board of Governors, on or before November 27.

LONDON FEVER HOSPITAL.—Resident Medical Officer. Candidates must possess both a medical and surgical diploma from some recognised examining board of the United Kingdom. Applications, with testimonials, to the Secretary of the Hospital, Liverpool-road, Islington, on or before November 26.

OWEN'S COLLEGE, MANCHESTER.—Assistant-Lecturer in Chemistry, and Junior Demonstrator in the Chemical Laboratory. Applications, with testimonials, to the Council (under cover to the Registrar), on or before December 3. Further information may be obtained of the Principal, J. G. Greenwood, Esq., or from Professor Roscoe, Owen's College.

ST. THOMAS'S HOSPITAL, S.E.—Medical and Surgical Registrars. Applications, with testimonials, to R. G. Whitfield, Esq., Medical Secretary, on or before November 30.

SEAMEN'S HOSPITAL, GREENWICH.—House-Physician. Applications, with testimonials, to Kemball Cook, House-Governor and Secretary, on or before November 26.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Candidates must be Members of one of the Royal Colleges of Surgeons of the United Kingdom, or Licentiates of the Faculty of Physicians and Surgeons of Glasgow, and also Licentiates of the Apothecaries' Company, or Licentiates of the Royal College of Physicians of London, and duly registered. Applications, with testimonials, to Medical Staff of the Infirmary, care of the Secretary, on or before December 3.

SUFFOLK GENERAL HOSPITAL, BURY ST. EDMUNDS.—Physician. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee, on or before November 24.

TIVERTON INFIRMARY AND DISPENSARY.—House-Surgeon and Dispenser. Applications, with testimonials, to the Honorary Secretary, Tiverton.

WESTMINSTER GENERAL DISPENSARY.—Surgeon. Candidates must be Fellows or Members of the College of Surgeons, and not engaged in pharmacy and midwifery. Applications, with testimonials, to the Secretary, on or before November 25.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Halifax Union.—Mr. Robinson has resigned the Ripponden District; area 13,570: population 6620; salary £25 per annum.

Hartley Wintney Union.—Mr. John A. Hedges has resigned the Farnborough District; area 12,244; population 3200; salary £80 per annum.

Howden Union.—Mr. Henry J. Raines has resigned the Newport District; area 18,511; population 4200; salary £32 10s. per annum. The Holme District is vacant; area 11,079; population 1913; salary £30 per annum.

North Aylesford Union.—Mr. J. Langston has resigned the Strood District; area 15,590; population 9321. Also, the Workhouse; salary £175 per annum.

APPOINTMENTS.

Epping Union.—George J. Eady, M.R.C.S. Eng., L.R.C.P. Edin., L.S.A. Lond., to the Great Parndon and Roydon Districts.

Hendon Union.—Thos. Bridgwater, M.R.C.S. Eng., L.S.A., M.B. Univ. Lond., to the Harrow District.

Rugby Union.—Thos. O. Walker, M.R.C.S. Eng., L.S.A., to the Crick District.

South Stoneham Union.—Robert Shiels, L.R.C.P. Edin., L.R.C.S. Edin., to the Fourth District.

Westbourne Union.—Thos. P. Stephens, L.F.P. & S. Glasg., L.R.C.P. Edin., to the First District and the Workhouse.

A COMPETITIVE examination for sixteen appointments as Assistant-Surgeons in the Indian Medical Service will be held in London in February. Candidates must be between the ages of 22 and 28, and must possess a diploma in Surgery as well as a degree in Medicine. Applications are to be addressed to Major-General Sir T. T. Pears, Military Secretary to the Indian Office.

MR. ROBERT ARTHUR SIMPSON, the medical student who distinguished himself by his exertions in relieving the sufferers from the Kirtlebridge railway accident, has been presented with £120 by the directors of the Caledonian Railway Company.

WE notice with regret an announcement of the death of Mr. George Reid, the Secretary to the Great Northern Hospital, which took place at his residence in Great Coram-street on the 7th instant.

CONVERSAZIONE GIVEN BY THE PRESIDENT OF THE DUBLIN OBSTETRICAL SOCIETY.—On Wednesday evening, November 13, Dr. George H. Kidd, the outgoing President of the Dublin Obstetrical Society, entertained the members of the Society and a very numerous party of distinguished visitors and friends at his house, 30, Merrion-square South.

THE MEDICAL MICROSCOPICAL SOCIETY.—The following are the gentlemen elected to act as a Provisional Committee for the Medical Microscopical Society:—Mr. Jabez Hogg, Honorary Secretary R.M.S.; Mr. T. C. White, Honorary Secretary Q.M.C.; Charing-cross, Dr. Bruce; St. George's, Mr. R. Brudenell Carter, Mr. E. C. Baker; Guy's, Mr. C. H. Golding Bird; London, Dr. Woodman, Mr. J. Needham; St. Mary's, Dr. H. Lawson; Middlesex, Mr. B. T. Lowne; St. Thomas's, Dr. F. Payne; University College, Mr. E. A. Schäfer; Westminster, Mr. Geo. Cowell; St. Bartholomew's, Mr. H. E. Symons, Mr. J. W. Groves.

DERBYSHIRE INFIRMARY.—The differences between the Governors and the Building Committee, arising from the latter having expended more than was collected for the building and furnishing of the Nightingale wing and the alteration of the old building, have been summarily and most satisfactorily removed by Mr. F. Wright, of Osmaston Manor, sending a munificent donation of £2000.

SUFFOLK GENERAL HOSPITAL, BURY ST. EDMUNDS.—The Governors recently decided that an officer should be appointed, to be called the "Resident Medical Officer and House-Surgeon," to take charge of all out-patients under the supervision of the Medical Officer for the week, in addition to the duties hitherto performed by the officer designated House-Surgeon. The Committee have acted by appointing the House-Surgeon, Mr. Fuller, to the new office, with an addition of £50 a year to his salary, and a unanimous vote of thanks for having performed similar double duties since the resignation of Dr. Goodwin.

DUBLIN SANITARY ASSOCIATION.—At the first general meeting of the Association, held on Thursday, the 14th inst., the following were elected office-bearers for the year ending May 31, 1873:—*President:* Jonathan Pim, M.P. *Vice-Presidents:* Sir E. R. Borough, Bart.; Lord James W. Butler; Sir Arthur E. Guinness, Bart.; Ion Trant Hamilton, M.P.; Alfred Hudson, M.D., President K. and Q.C.P.I.; Frederick Kirkpatrick, M.B., President R.C.S.I.; the Right Hon. Viscount Monck; G. H. Porter, M.D., Surgeon-in-Ordinary to the Queen in Ireland; W. Stokes, M.D., D.C.L, Physician-in-Ordinary to the Queen in Ireland, and Regius Professor of Physic T.C.D.; Colonel the Right Hon. T. E. Taylor, M.P. *Executive Committee:* R. Allen, C. P. Cotton, C.E., Dr. Croly, Dr. Finny, Professor Galloway, Dr. Grimshaw, J. J. D. La Touche, John M'Evoy, Dr. Maunsell, Dr. J. W. Moore, George R. Price, Dr. Purcell, R. Sexton, Dr. Speedy, Dr. D. White, R. S. Ball, LL.D., Professor Wilkinson. *Treasurer:* Wilfred Haughton. *Bankers:* Messrs. Boyle, Low, and Murray. *Honorary Secretaries:* R. O'B. Furlong, F. W. Pim, C. F. Moore, M.D., J. Todhunter, M.D. *Assistant-Secretary:* E. Spencer. The following gentlemen have promised papers for the Society during the ensuing session:—Dr. F. Mouat, "On Medical Statistics with especial reference to Cholera and Syphilis;" Dr. G. Buchanan, "On the Concurrence of Epidemic Diseases;" Dr. Wm. Squire, "On the Periods of Infection in Epidemic Diseases;" Dr. Smart, C.B., "On Cholera in Insular Positions;" Dr. Domenichetti, "On Dengue."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the first examination in anatomy and physiology for the Fellowship of the College, on Saturday last, the following were the questions submitted to the twenty-four candidates, who were required to answer the whole of the questions, viz.:—1. Describe the arrangement of the muscular fibres of the auricles and ventricles of the heart, and the structure of the auriculo-ventricular and arterial openings. State the exact mode of action of the mitral and tricuspid valves. 2. What do you understand by reflex action? Describe its different forms, and give examples of each. Through what portions of the nervous system are the several kinds of reflex action produced? In what relation do they respectively stand to consciousness and will? 3. How is heat generated and regulated in the human body? State the various chemical changes associated with its evolution, and their proportional influence in its production. 4. From what sources does the entire scalp receive its supply of nerves? Give the dissection requisite to expose the branches distributed to the occipital region from their origin to their termination. The following were the questions in pathology, therapeutics, and surgery submitted to the candidates on Thursday, the 21st inst.:—1. What do you understand by the term shock and collapse? State the symptoms of each, and explain how they are induced; give short illustrative cases, and point out the treatment you would adopt. 2. Name the varieties of nævus as developed in the integument. Describe minutely their special anatomy and appropriate treatment. 3. The pathology and treatment of pyæmia. 4. Describe the operation and the parts cut through in applying a ligature upon the left common iliac artery; and point out the anatomical differences between that artery on the left and right sides of the body. The last examination for the licence in midwifery for the present year will take place on Wednesday, the 4th prox.

THE OXALATE OF PROTOXIDE OF IRON.—At the last meeting of the Académie de Médecine, M. Caventou delivered in his report on this substance, which had been laid before the Academy two years since by M. Girard. The reporter stated that the mode of preparation recommended by M. Girard is in nowise different from that usually employed in laboratories. Its therapeutical properties have been carefully tested by M. Hérard in cases of chlorosis and anæmia, and these prove to be worthy of attention, presenting a preparation of iron which, while proving efficacious, has no tendency to produce constipation. The preparation is almost insipid, is readily taken by patients, and easily borne by the stomach. Given in doses of from ten to twenty centigrammes per diem it increases the strength and cures chloro-anæmia as well as other good preparations of iron, while it establishes a peculiar claim by not causing constipation. Indeed, by raising the quantity to from thirty to fifty centigrammes, an aperient action is obtained. M. Caventou therefore considers that his remedy should be endorsed with the recommendation of the Academy, which is necessary for the authorisation of new remedies during the intervals that elapse between the editions of the Codex.—*Bullétin de l'Académie*, Nov. 12.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A. B. C.—It is a recognised operation, and there have been many successful cases.

S. Y.—"Vital Statistics of Glasgow, 1838," p. 23.

D. N. C.—The College of Surgeons was erected in Lincoln's-inn-fields in 1825.

1823.—1. No. 2. The verdict was "Died from natural causes."

W. M.—The *Madras Medical Journal* for October.

Lunatic.—See the appendix to Dr. Cox's work on "Insanity," and Paris and Fonblanque's "Medical Jurisprudence," vol i., p. 289.

A. P. Davis, M.R.C.S.—The Hunterian Oration will be delivered at the College of Surgeons on Friday, February 14, by Mr. Hancock, the President; it is only delivered biennially.

An Old Subscriber.—The first number of the *Medical Times* was published on Saturday, September 28, 1839.

Mortality.—In the Venetian provinces in 1817—a year of scarcity—the number of deaths was so large as 1 in 14.

A Candidate, Truro, Cornwall.—The following are the members of the Midwifery Board of the College of Surgeons, viz.:—Mr. T. B. Curling, the Senior Vice-President of the College, Dr. Arthur Farre, Dr. R. Barnes, and Dr. W. O. Priestley. The meetings are held about four times in the year, the next taking place on the 4th proximo.

Magnetiser.—Yes.

"The smallest hearts sometimes increase and rage
More than all art of physic can assuage;
Sometimes the fury of the worst disease
The hand by gentle stroking will appease."

THE NEW HEALTH ACT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—From what was said by Mr. Wodehouse, one of the Inspectors of the Local Government Board, at the meeting of the Bedminster (Bristol) Board of Guardians yesterday, it would seem that the Government instructions are to advise the appointment of one Medical Officer of Health for one or more unions. How this gentleman is to find time to attend to the multitudinous duties involved by the Order published last week is one of those things that can hardly be conceived. In this Union alone there is a population of over 60,000, and an acreage of 53,000. Twenty-one parishes (rural), exclusive of Bedminster, which, though nominally rural, is really properly a suburb of Bristol, with a population of over 32,000—consisting almost entirely of artisans' dwellings closely crowded—and also of Cleveden, which possesses a Local Board and a population which has increased during the last ten years from 2941 to 4039, with building constantly going on. As this appears one of the earliest movements in this district, it has struck me that the official interpretation of the Act may not be unacceptable. I am, &c.,

Clevedon, November 20. A CONSTANT READER.

CORRIGENDUM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have only just seen the *Medical Times and Gazette* of last week, and in the list of gentlemen who were admitted M.R.C.S. on the 12th inst., I am described as of Pontypridd, Glamorganshire, whereas it should have been of Pontypool, Monmouthshire.

November 20. I am, &c., GEORGE MORGAN.

TWADDLE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Going direct from practical work to studious theory is very trying in middle age. One endeavours to read, to fix facts in different mental pigeon-holes, but the result to some is confusion, chaos, want of sleep, cerebral debility, which may be permanent. "My brain is empty," said Balzac one day, flinging down the pen after long laborious cogitation. Some medical men can never remember names, faces, and doses of medicine; cannot spell—in fact, can do nothing without reference. Others, more fortunate, never forget a patient or his symptoms, even in old age. To-day, with *muscæ volitantes* floating about, a walk and a rest from uncongenial reading taken. Strolling into the Abbey ruins by twilight, it was a matter of concern to notice a noble ash more than a hundred years old, dead, withered, liable in its fall to damage the left aisle of the exquisite church which but for Henry VIII. would be used now, although six centuries have passed by since the stones from Caen and Purbeck were somehow brought and beautifully adapted. The pen could race on for ever dilating on the massive buttresses, the lancet windows covered with ivy, the good old monks, the historical associations, the moonlight effects—but Gradgrind medical readers require facts, and, resembling Sir Peter Teazle, despise noble sentiments. The jackdaws having cunningly driven out the rooks, and worried the inoffensive owls, although away for the winter, almost daily fly in to look after the deserted nests. The variegated brilliant shades of green and gold, however lovely, do not relieve the sad silence of the woods, where recently larks, linnets, thrushes, blackbirds, and especially nightingales, directed thought to the beauties of nature, the songs of the angels, the paradise of the future within our reach. Now, a few words about croup, which in damp localities during the cold spring or autumn mostly attacks healthy boys under 5 years of age, especially those with a hereditary predisposition, convulsive history, a syphilitic or epileptic taint. We have the warning in simple cold, slight fever, suffused eyes, sneezing, dirty tongue, dry cough, disordered bowels—all symptoms precursive of variola, varicella, measles, or hooping-cough. In about eighteen hours the disease has been matured so far that on the upper and back part of the trachea a surface-coating deposited, and a general thickening of the structures round and about, encouraged by the heat of the child's body during sleep. Suddenly he sits up in bed, gasping for breath, flinging off the clothes, tugging at his throat, feverish, thirsty, the eyes bloodshot, the face livid, the head perspiring, the body hot and dry, the pulse hard, rapid, irregular; the dry, hoarse, barking cough, *once* heard, never forgotten. Common sense will indicate the mechanical strain on the internal organs, especially the heart and lungs, the blood poisoning, the threatening collapse rapidly approaching; although, in slight cases, towards morning the symptoms remit. Active treatment alone will turn the scale. A brisk emetic to remove the obstructing plug, warm bath to relieve the skin, turpentine enema to clear the bowels, steam inhalation to relax the spasm, and poppy fomentations or opium poultices externally will relieve distress about the throat. Next, to cut short the disease and prevent recurrence, rub in mercurial ointment until a gold pencil slightly tarnishes in the patient's burning hand. Beef tea, gin and seltzer, or iced champagne there's no objection to. There is no occasion to give any medicine, although a saline diaphoretic is a favourite remedy. If no improvement in twelve hours, then tracheotomy. However, if called in time the treatment suggested will in very many cases answer. A word about mercury. Young practitioners should be very chary about using this ticklish weapon unless feeling *quite certain* that administration is unavoidable; inunction apparently the safest mode. Before me are some calculations and notes taken for two years on mammary abscess, a condition involving long illness, hideous scars, and often undeserved discredit. I could give you figures, cases, and tables of about sixty; it is easier and simpler to record deductions. It appears rarely during pregnancy; both breasts involved occasionally; the same breast six times over perhaps. In the majority of instances the right upper lobe will be affected. May arise from stupidity, neglect, cold, retracted or painful nipples, dread, pain or inconvenience of nursing, blows, lifting the child, tight-lacing. A young mother whose breasts, flat before pregnancy, now distended, yet unsupported: confined about a month, she feeds the child, who, caring no longer to nurse, may have thrush, malformed palate, or be tongue-tied. Exposing her bare chest, the mother catches cold, the disease runs on, and, feeling the shy reluctance to say a word about it or with reference to obstinate constipation, a young, fair-haired, delicate primipara will go on suffering, until the feverish cheek, the clammy hand, shivering, and constant thirst excite alarm. Then, too late to draw off the milk, to apply hot olive oil, or cold evaporating lotions, to use liniments of aconite and belladonna, or to give jalap, tartar emetic, iodide of potassium, colchicum,

or galactafugues generally. Now, leeches, fomentations, free incisions (using the ether spray), poultices, strapping, sedatives, constitutional support will be the treatment, looking out for sinuses sometimes to be cured by galvanism. For cracked nipples Peruvian balsam and glycerine will frequently be of service. Query: How about antiseptic treatment applied to mammary abscess?

This letter reads very unscientific. In a splendid book, Mr. Glaisher tells us of the incomparable panoramas, the magnificent scenes witnessed from a balloon,—the sun appearing like an immense beacon-light placed upon a layer of snow, the insignificance of lofty mountain-peaks and deep valleys, the silver strips of oceans, the Lilliputian look of cities, the purple clouds, the curling smoke, the village lights and fires, the pigmy world below, the sublime grandeur of the heights above. But, as Dr. Symonds, of Bristol, said—"*Our* philosophy does not range the stars, or dive into the hidden recesses of the earth. In the simple, trivial paths and details of daily life walks and toils the votary of MEDICINE."

COMMUNICATIONS have been received from—

AN OLD ACCOUCHEUR; Dr. COPEMAN; Dr. SANSOM; A. B. C.; Dr. PHILLIPS; Dr. CORFIELD; Dr. THOROWGOOD; Mr. LAWSON TAIT; Dr. SEDGWICK SAUNDERS; Mr. GASKOIN; Mr. TALLACK; Mr. J. F. BLAKE; Mr. A. W. ORWIN; Mr. J. HANCOCKE WATHEN; Mr. J. CHATTO; Mr. METCALFE JOHNSON; Dr. J. RUSSELL; Mr. HAYNES WALTON; Dr. J. HUGHLINGS-JACKSON; Mr. GEORGE LAWSON; Dr. EDGAR SHEPPARD; Professor FLOWER; A CONSTANT READER; Mr. H. CRIBB; Mr. S. GILL; Dr. EDWARDS-CRISP; Mr. J. C. WALSHE; Mr. G. MORGAN; Mr. T. H. MORTON.

BOOKS RECEIVED—

The Handbook for Midwives, by Henry Fly Smith, B.A., M.B. Oxon., M.R.C.S.E.—Annual Report of the General Health Committee to the Council of the Borough of Salford—Clinique Chirurgicale de l'Hôpital de la Charité, tome premier, par le Dr. L. Gosselin—Proceedings of the Pathological Society of Philadelphia, vol. iii.—Remarks on Strictures of the Urethra, by F. N. Otis, M.D.—On the Physiology of Syphilitic Infection, by F. N. Otis, M.D.—The Movement against Tobacco, being the Fourth Annual Report of the English Anti-Tobacco Society—Report of the Medical Officer of the Homerton Fever Hospital—Modern Medicine, an Introductory Lecture, delivered by J. M. Da Costa, M.D., on October 7, at the Jefferson Medical College—Responsibility and Disease, an Essay, by J. Balfour Browne, Esq., Barrister-at-Law—Statistical Report on the Health of the Navy for the Year 1870—Introductory Address, delivered by T. H. Morton, M.R.C.S., L.S.A., at the Sheffield School of Medicine.

PERIODICALS AND NEWSPAPERS RECEIVED—

Philadelphia Medical Times—The Medical Archives, vol. viii., No. 8—Canada Medical Record, November—Medical Press and Circular—Chemist and Druggist—The Telegraphic Journal, vol. i., No. 1.—The Oldham Standard—New York Journal of Psychological Medicine, October.

APPOINTMENTS FOR THE WEEK.

November 23. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

25. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Lichtenberg, "Two Cases of Rhino-plastic Operation." D. Broadbent, "A Study of a Case of Heart Disease, probably Malformation."

26. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Spencer Wells, "Results of 500 Cases of Ovariotomy." Mr. Lawson Tait, "On a New Form of Trocar for Ovariotomy."

27. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

SOCIETY OF ARTS, 8 p.m. Mr. T. Webster, Q.C., F.R.S., "On Technical Education, and the means of promoting it."

28. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

29. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 16, 1872.

BIRTHS.

Births of Boys, 1118; Girls, 1100; Total, 2218.
Average of 10 corresponding weeks, 1862-71, 2077·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	603	580	1183
Average of the ten years 1862-71	794·2	771·6	1565·8
Average corrected to increased population	...	...	1722
Deaths of people aged 80 and upwards	...	...	39

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	2	1	1	3	1	1	2	...	1
North ...	751668	6	1	3	1	6	...	7	...	5
Central ...	333887	...	...	2	...	3	...	2	...	...
East	638928	2	2	4	1	10	...	2	...	4
South	966132	3	3	4	1	12	1	5	2	5
Total	3251804	13	7	14	6	32	2	18	2	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·647 in.
Mean temperature	37·9°
Highest point of thermometer	46·7°
Lowest point of thermometer	33·7°
Mean dew-point temperature	34·7°
General direction of wind	N.N.E.
Whole amount of rain in the week	0·90 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 16, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Nov. 16.	Deaths Registered during the week ending Nov. 16.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2218	1183	46·7	33·7	37·9	3·28	0·90	2·29
Portsmouth ...	115455	12·1	84	44	48·8	28·2	37·2	2·89	0·23	0·58
Norwich	81105	10·9	40	30	46·5	32·0	38·8	3·77	1·50	3·81
Bristol	186428	39·8	133	80	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	58	29	44·7	30·9	37·1	2·84	0·68	1·73
Birmingham ...	350164	44·7	291	163	46·3	32·2	38·0	3·33	0·77	1·96
Leicester	99143	31·0	67	32	46·2	33·0	38·2	3·44	0·76	1·93
Nottingham ...	88225	44·2	54	34	50·9	31·2	38·8	3·77	0·92	2·34
Liverpool	499897	97·9	376	244	45·1	32·0	38·9	3·83	0·22	0·56
Manchester ...	352759	78·6	272	179	45·0	33·0	38·7	3·72	0·24	0·61
Salford	127923	24·7	105	54	48·4	31·5	39·0	3·89	0·20	0·51
Oldham	84004	20·2	63	68	...	...	...	...	...	...
Bradford	151720	23·0	138	82	51·5	33·8	40·1	4·50	0·79	2·01
Leeds	266564	12·4	196	129	50·0	34·0	40·2	4·55	1·21	3·07
Sheffield	247847	10·9	187	111	45·0	33·0	38·9	3·83	0·88	2·24
Hull	124976	35·1	92	54	48·0	32·0	38·9	3·83	2·11	5·36
Sunderland ...	100665	30·4	74	44	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	112	70	50·0	34·0	40·3	4·61	2·48	6·30
Edinburgh	205146	46·3	100	82	45·0	31·7	37·0	2·78	1·50	3·81
Glasgow	489136	94·8	394	225	44·5	32·0	37·6	3·11	0·02	0·05
Dublin	310565	31·9	139	126	47·2	30·8	38·3	3·50	0·55	1·40
Total of 21 Towns in United Kingd'm	7393052	34·0	5193	3063	51·5	28·2	38·6	3·66	0·89	2·26

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·65 in. The highest was 29·91 in. on Tuesday evening, and the lowest 29·33 in. on Saturday at noon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers, enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture XI.

We pass next to the consideration of a very singular and heterogeneous group of mammals, among which will be found differences of structure and habits as great as those that separate some of the preceding orders. As, however, they possess some common characters, and as the number of their genera and species is very restricted (at least at the present period), it is convenient to continue to associate them, as was done by Cuvier, in one ordinal division, called Edentata.(a)

They are separated primarily into two sub-orders, characterised, among other things, by the nature of their food and the concurrent structure of their digestive organs. The first, or *Entomophaga*, live mainly on animal substances—chiefly, though not exclusively, insects. The second, or *Phyllophaga*, are purely leaf-eaters.

Of the first group, the true ant-eaters (*Myrmecophagidæ*) of South America may be taken as an exaggerated type, being highly specialised creatures, presenting extraordinary deviations from the ordinary mammalian form. There are three genera—(1) *Myrmecophaga*, the great ant-bear, a ground animal, with non-prehensile tail, living mainly on termites, into the hard earthen nests of which it digs with its powerful front claws; (2) *Tamandua*, of smaller size, prehensile tail, partly arboreal and partly terrestrial; and (3) the little *Cyclothurus*, or two-toed ant-cater, no larger than a rat, with limbs and tail wonderfully adapted for exclusively climbing habits.

The visceral anatomy of the great ant-eater (*Myrmecophaga jubata*) has been described in part, at least, by Owen(b) and by Pouchet,(c) and the museum contains many illustrations of its structure. The singular form of the head, with its excessively long and tubular mouth, terminating in a very small aperture in front, must be familiar to all who have availed themselves of the excellent opportunity now afforded for the study of these animals in a living state at the Zoological Gardens. Through this terminal aperture the long worm-like tongue, covered with the viscid secretion of the enormous submaxillary glands, is rapidly protruded, and withdrawn again covered with adhering particles of food, which are then sucked into the pharynx. The long slender jaws are absolutely toothless, but there is a longitudinal callous ridge on the inside of each cheek, which may perform some part in crushing or bruising the food; otherwise, the buccal membrane is smooth, and perforated by minute orifices, by which the secretion of numerous glands, forming an almost continuous stratum, is poured out. The extremely elongated tongue is nearly cylindrical, and tapering to the apex, covered with very minute, slightly elevated, uniform, conical papillæ, and a pair of well-marked circumvallate papillæ near the base of the dorsal surface. There is a linear median groove on the dorsum, which ceases about four inches from the apex. It is retracted by a long pair of muscles (sterno-glossal), which arise from the inner face of the expanded xiphoid cartilage of the sternum.

The parotid gland is rather small in proportion to the size of the animal, in the usual situation, and of flattened triangular form. The duct, which is eleven inches in length, terminates near the anterior angle of the mouth. The sub-maxillary glands, on the other hand, are immensely developed, and unite below in the middle line for a considerable distance. Posteriorly they lie over the front part of the sternum, and are notched on each side for the prominences of the shoulders. The anterior apex of each gland is prolonged forwards a little way in advance of the angle of the jaw. The length of each gland from before backwards is sixteen inches. The duct is formed by the union of several branches, which leave the inner and posterior part of the glands nine or ten inches behind the attenuated anterior ends, and dilate to form a small reservoir, surrounded by a compressor muscle. It terminates by a minute slit without papillæ in the anterior part of the floor of the mouth, close to the symphysis menti, so that the tongue in passing through the groove between the rami of the mandible must receive a coating of its very viscid secretion. The sublingual gland is described as represented by a thin layer attached to, and spread over, the inferior buccal membrane for an extent of twelve inches, and having its greatest breadth of two inches and a half opposite the angle of the jaw. There are also well-developed labial and buccal glands.(d)

The stomach of the great ant-eater consists of a sub-globular sac of moderate capacity, lined by a soft, vascular secreting membrane, into which the œsophagus enters, and of a smaller pyloric portion, with a dense epithelial lining and thick muscular walls, not unlike the gizzard of a bird. The cavity of this portion in transverse section presents the form of a crescent with the points of the horns upwards, the space in the upper part, or hollow of the crescent, being filled by a large pad of sub-mucous connective tissue interposed between the muscular coat and the horny grinding surface, which, as in so many other familiar instances in the animal kingdom, compensates for the absence of masticating organs in the mouth.

The intestinal canal is slung on a simple, continuous mesentery (as in reptiles), without the usual mammalian constriction at the duodenum. In an animal of which the length from muzzle to vent was four feet seven inches, Professor Owen found the small intestine thirty, and the large intestine four feet long. There is no ileo-colic valve, but the transition of the ileum into the colon is marked by a rapid dilatation of the calibre of the canal, with an ill-defined cæcal pouch on one side. The lining membrane of the small intestine is said to present no villi visible to the naked eye, but has some longitudinal folds of mucous membrane irregularly placed in the upper half, and in the lower part is a single and very conspicuous ridge. The inner surface of the colon is smooth, finely reticulated, and with a few very narrow transverse folds. In the rectum the ridges are longitudinal.

The liver is divided by the umbilical and two deep lateral fissures. The left lateral lobe is considerably the largest, and the left central the smallest, of the four principal lobes. The Spigelian lobe is very little developed, and the caudate lobe rudimentary or obsolete. There is a deep and wide cystic fissure in the right central lobe, which permits the rounded fundus of the gall-bladder to be visible in the upper surface of the liver.

The visceral anatomy of the Tamandua ant-eater has never been completely described; but the Museum contains preparations of all the principal organs obtained from an animal which lately died in the gardens of the Zoological Society, almost the first which has been brought alive into this country.(e)

The mouth is generally similar to that of the great ant-eater, though considerably less elongated. In front of the palate is a nearly square movable pad supported by cartilage, and covered by a tuberculated mucous membrane. On the hard palate are two lateral longitudinal ridges in the anterior portion, subsiding posteriorly, and between them some irregular transverse ridges, very slightly pronounced, and small scattered tubercles, but no horny spines. The soft palate terminates posteriorly by a thin arched border, without any appearance of uvula, opposite the epiglottis, five inches and a half behind the apex of the mouth. On the inner surface of each cheek is a longitudinal ridge, covered with minute horny spines, distinctly visible to the naked eye. The anterior part of the tongue, when retracted, lies in a deep groove in the floor of the mouth, formed by the slender arched rami of the mandible, which meet over the tongue in its retracted state, shutting it out from the general buccal cavity, but when this organ is protruded, and its thicker basal part passes into the groove, the rami are divaricated to a corresponding extent. The floor and sides of the anterior portion of this groove are covered with minute horny papillæ, and the ducts of the submaxillary gland open into it.

The tongue is long, cylindrical, and tapering. Its extreme apex is formed by a hemispherical smooth dilatation, behind which it is covered pretty evenly all round with very minute, pointed, conical horny spines, directed backwards. Near the

(a) Though this name is by no means strictly appropriate, it is preferable to *Bruta*, which some modern naturalists have revived on the grounds of priority. That term was used by Linnæus for a group, which, though containing the then known Edentates, was headed by the elephant, and included the walrus and manati, and was therefore far from equivalent to the order as now understood.

(b) *Transactions of the Zoological Society*, vol. iv. (1854).

(c) "Mémoires sur le Grand Fourmilier." Paris, 1837.

(d) For a detailed account of the anatomy of the mouth, tongue, salivary glands, and hyoid apparatus of the great ant-eater, see the memoirs by Owen and Pouchet referred to above.

(e) The salivary glands have been described by Chatin (*Annales des Sciences Naturelles*, 5me série, tome xiii., No. 9, 1870), the tongue by Duvernoy ("Mem. Soc. d'Histoire Nat. de Strasbourg," ii., 1830). See also Rapp, "Anatomische Untersuchungen über die Edentaten," 2nd edit., 1852.

base is a pair of small circumvallate papillæ. When drawn back by the sterno-glossal muscles, the basal part of the tongue passes within a loose sheath of mucous membrane at the floor of the back part of the mouth, which becomes effaced when the organ is fully exserted. It is protruded chiefly by the action of the genio-glossal muscles.

The salivary glands are developed much in the same manner as in the great ant-eater. The very large submaxillary glands extend from behind the external auditory meatus to the front of the chest, where the glands of the two sides meet in the middle line, lying above the upper part of the pectoral muscles and sternum; but, as Chatin has described, each gland consists of three distinct lobes, which open into the mouth by separate ducts running parallel to one another, and upon which there is no saccular dilatation.

The stomach resembles that of the great ant-eater in having a sub-globular thin-walled cardiac portion, and a muscular pyloric gizzard, though the latter is not quite so strongly developed. The great omentum hangs from the inferior border of the stomach, extending on the right for half an inch on the duodenum, but has no connexion with the colon. The small intestine was 100 inches in length, the large intestine five inches and a half, in an animal which measured eighteen inches and a half from nose to root of tail. The convoluted mass of the small intestine, resembling the gyri of a brain, as seen when the abdomen was first opened, occupied the whole of the space between the stomach and the pubis, completely concealing the short and almost straight colon. The duodenum is not bound down to the vertebral column, but passes upwards and to the right quite superficially, then soon makes a sharp bend on itself, then another in the opposite direction, all superficial, and then passes to the left behind the other convolutions of the small intestine, but does not pass beneath the arch of the colon as in most mammals. The tube gradually and slightly diminishes in diameter from the duodenum (where it is four-tenths of an inch) to the end of the ileum (two-tenths of an inch). Its lining membrane is covered with minute villi, just visible to the naked eye. These are largest in the upper part, broad, flat, and placed with the long diameter of their bases crossing one another, so as to give an irregular honeycomb or alveolar character to the surface, well seen with a pocket lens. There are three small Peyer's patches—the first twelve inches below the pylorus, the last forty inches above the commencement of the large intestine. Throughout the lower third of the canal a longitudinal fold of mucous membrane, which cannot be effaced by stretching the intestine, projects into the cavity, opposite to the mesenteric attachment, like that described by Owen in the great ant-eater. There are also several minor longitudinal folds above and on the sides of this, but not continued for any great extent. The ileum opens by a narrow valvular orifice into the short colon, which commences in a short globular cæcum, and then passes directly down into the pelvis—consisting, in fact, of little more than rectum. It is more than twice the diameter of the ileum, and has a strongly developed muscular coat.

The liver resembles that of the great ant-eater. The pancreas is narrow and elongated, not diffused or arborescent as in carnivora and insectivora. Its duct enters the duodenum with the common bile-duct about two inches from the pylorus.

The smallest species of ant-eater (*Cyclothurus didactylus*) has a similar edentulous tubular mouth, though relatively still shorter than in the last, and a similar extensile vermiform tongue, and immense submaxillary glands. Its stomach is pyriform, the cardiac end being the largest and rounded. The walls are generally muscular, especially towards the pylorus, which is a crescentic aperture, but there is no distinct gizzard-like portion as in the two preceding species. The colon is short, and is very remarkable for having at its commencement a symmetrically disposed pair of short cæca,(f) narrow at the base, and rather dilated at their terminal blind end, and communicating with the general cavity by very minute apertures. The liver resembles that of the tamandua in having the left segment the largest; the umbilical and the cystic fissures are in one; the caudate lobe is rudimentary; and, as remarked by Hunter, there is no Spigelian lobe. There is a gall-bladder, and the common duct enters the duodenum three-quarters of an inch from the pylorus.

One other family of the order—the *Manidæ* or pangolins—are truly edentulous; unlike the last, they inhabit the Old World, several species being found both in Africa and Asia. They are distinguished externally from all mammals by their covering of large imbricated horny scales, which, with their small heads, long bodies and tails, and short legs, give them a very reptilian aspect. The anatomy of no one species of the family has yet been thoroughly described, though Hunter, Rapp, and others have given short notes upon some of the more important points of their structure, and the Museum contains several interesting preparations—among others, one of the very long, narrow, worm-like tongue, which differs from that of the American ant-eaters in being flattened towards the tip. The retractor or sterno-glossal muscles are seen in this preparation to arise from the hinder extremity of the immensely prolonged ensiform cartilage of the sternum, reaching backwards almost to the pubis. The stomach is small, and differs considerably from that of the ant-eaters in having the greater part of its cavity lined with hard cuticle, continuous with that of the œsophagus. Its walls generally are muscular, especially at the pyloric end, where the epithelium is thick and papillose; and, apparently to compensate for the large surface covered by the cuticular lining, and therefore non-glandular, there is near the middle of the great curvature a mass of complex secreting follicles, the ducts of which terminate in a common orifice. The stomach is generally found to contain a number of small stones, which probably perform the same office as in the gizzards of birds. The intestinal canal is not provided with a cæcum. The liver has a gall-bladder.

Fig. 37.

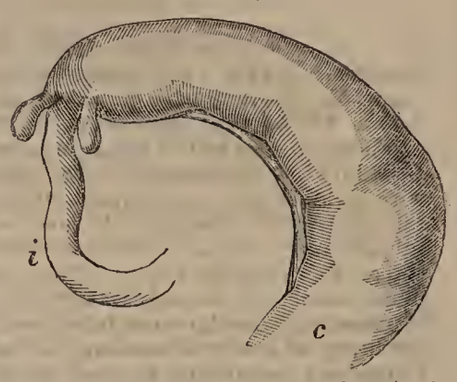


Fig. 37.—Cæca of the two-toed ant-eater (*Cyclothurus didactylus*): *i* ileum, *c* colon.

The remaining entomophagous edentates are provided with teeth, though of a simple form, without enamel, and confined to the posterior and lateral regions of the mouth.

In the armadillos (*Dasypodidæ*)—which are more omnivorous in their habits than most of the group—the tongue, though extensile, is considerably less elongated than in the ant-eaters and pangolins, being triangular and pointed, and is provided with conical, fungiform, and circumvallate papillæ. The parotid gland is very small, and the submaxillary of great size. The duct of the latter, not far from the gland, dilates into an oval reservoir.(g) The sublingual is very narrow, and opens by numerous small orifices upon the floor of the cavity of the mouth. The stomach is comparatively simple and sub-globular, lined with a soft vascular membrane, the thick œsophageal epithelium terminating at the cardiac orifice; the muscular coat is thin at the fundus, but thicker towards the pylorus, at which spot in *D. peba* is an oblong valvular pad projecting from the upper border, as in the proteles, sloth bear, pig, etc. The intestinal canal is not very long, the colon especially being short and simple. In the nine-banded armadillo (*Tatusia peba*) there is no cæcum, the intestine only undergoing a rapid dilatation at the commencement of the colon; but in the six-banded armadillo (*Dasypus sexcinctus*) and the closely allied *D. villosus* the ileum enters the large intestine by a slit-like valvular aperture, situated between a pair of short, broad, rounded cæcal projections of the colon, as shown in Fig. 38.

Fig. 38.

Fig. 38.—Commencement of colon and cæca of the six-banded armadillo (*Dasypus sexcinctus*): *i* ileum, *c* colon.

The liver in *Tatusia peba* is formed on the ordinary mammalian type, having the usual six lobes all distinctly marked out. The left lateral is the largest, the Spigelian long and pointed, and the caudate reaching to the edge of the right lateral. The gall-bladder is elongated and pyriform, placed under the middle of the right central lobe.

(f) "There are two cæca, as in birds."—Hunter, "Essays and Observations," vol. ii., p. 181.

(g) See Rapp *op. cit.*, plate vii. Owen, *Proceedings of the Zoological Society*, 1831, pp. 141 and 154.

Its duct enters the duodenum about two inches from the pylorus, with the pancreatic duct.

The last family of the entomophagous edentates contains only the genus *Orycteropus*, or African ant-eaters. They differ in several points of their visceral anatomy from the South American species. The tongue is far less vermiform, being thick and fleshy at the base, and gradually tapering to the apex. The salivary apparatus is developed in much the same manner as in the rest of the group, but the duct of the submaxillary has no reservoir. The œsophagus is narrow, lined with a thick white epithelium, which ceases abruptly at the cardiac orifice. The stomach consists of two portions—a great sub-globular cardiac or left part, into which the œsophagus enters, and a smaller left or pyloric part. The mucous membrane lining the former is very thick, soft, and extremely corrugated, the ridges and tubercles with which it is covered not being effaced by stretching the membrane. The principal ridges run longitudinally, and become more marked at the pyloric end, where all the coats are thickest. The pyloric cavity has a comparatively thin and smooth lining, and thick muscular walls. The orifice is guarded by a very powerful valve.

In a specimen lately received from the Zoological Society, the small intestine measured thirty-two feet in length, and the large seven feet—the former being three-quarters of an inch in diameter in the duodenum, diminishing to half an inch in the ileum; the latter, when moderately distended, averaging from one and a half to two inches across, and slightly sacculated at the commencement. The interior of the small intestine was covered with long filamentous villi, but it had no folds or other contrivance for increasing the surface. The ileum terminated in a circular contracted aperture with a prominent valvular margin, which would allow neither fluid nor air to pass backwards through it. The colon commenced by a large cæcum, seven inches in length, with an expanded globular apex, three inches in diameter, and sharply bent on itself. It is principally in the less conspicuous development of the gastric gizzard, the greater length of the colon, and especially of the cæcum, that the alimentary organs of the African ant-eater differ from those of its American relative.

The liver is broad, and deeply divided by the lateral fissures. The right and left lateral lobes are of nearly equal size; the right central very large, and with its edge excavated by a wide rounded notch, in which is lodged the fundus of the gall-bladder. The Spigelian lobe is very small, but there is a tolerably well-developed and pointed caudate lobe. The cystic duct is much convoluted between the gall-bladder and the hepatic duct. The common bile-duct enters the duodenum three-quarters of an inch from the pylorus.(h) The pancreas much resembles that of man in shape, and is ten inches long. It has two ducts, the principal one joining the bile-duct, the second one entering the duodenum an inch and a quarter lower down.

On passing from the insect-eating edentates to the second sub-order, that of the sloths, whose food consists entirely of the leaves and young shoots of the trees among the boughs of which they pass their whole existence, we meet with a totally different condition of digestive apparatus, and one which has no exact parallel throughout the animal kingdom.

The sloths are all inhabitants of the dense forests of South America. There are several species, not yet well determined, but they all belong to one or the other of the two genera into which the family is divided—viz., *Bradypus*, sloths with three toes on all the feet; and *Cholopus*, which have only two toes on the anterior extremity.

In both the face is short and rounded, and the tongue short and soft, presenting a marked contrast to that of the ant-eaters. The sub-maxillary glands are reduced to their normal proportions, and are slightly exceeded in size by the parotids, as in most herbivorous animals. The sublingual is very small. The stomach in both genera is very large and complex, and formed on the same principle, though differing in the two in the details of its structure. In *Cholopus* it consists of three main divisions of very unequal size—1. A very large sub-globular paunch, resembling in position and form that of the camel, and divided by an imperfect longitudinal septum into two compartments, the anterior of which is prolonged at its lower end into a curved conical cæcal appendage. The posterior compartment, into which the œsophagus enters directly, is further divided by a horizontal ridge into an upper and lower pouch, the latter being the larger. 2. A very small sac, situated much as the psalterium in ruminants, and of similar form, having its most convex border turned upwards or outwards; while running along its short floor is a groove bounded by muscular ridges extending from the œsophagus into (3) a small elongated tubular cavity, curved with the convexity downwards, with muscular walls, and communicating by a narrow pyloric orifice with the duodenum. This corresponds in situation with the abomasus of the cotylophora and camels. Although there is this general resemblance to the stomach of the ruminants, there is in the sloths a singular difference in the distribution of the hard cuticular lining. This extends from the œsophagus over both divisions of the posterior compartment of the paunch, but not into that which has the cæcal prolongation, and passes through the second stomach into the third, where it becomes very thick and rugous, and covers the whole inner surface, except a large oval patch on the convex border, over which the lining membrane is soft, vascular, and glandular.

The three-toed sloths (genus *Bradypus*) differ chiefly in the cæcal prolongation of the paunch being more elongated and complicated internally by a number of longitudinal septa dividing it into deep cells, whereas in *Cholopus* it is quite simple. In both genera the intestinal canal is long but narrow, and without cæcum or ileo-cæcal valve, the small intestine opening into the colon by a funnel-shaped dilatation. This, when contrasted with the rabbit or koala (to be spoken of in the next lecture), affords a striking illustration of the complementary character of the development and complexity of the stomach and of the cæcum in herbivorous animals.

The liver, as in vegetable feeders generally, is small, and presents a remarkable difference in the two genera. In the two-toed sloth it is narrow and elongated. The umbilical ligament, instead of passing to the under surface through a fissure on the free border, pierces the smooth upper surface near the middle, and so reaches the transverse fissure. The situation of its entry and a notch on the border mark the division of the upper surface into two principal parts—right and left lobe—which are of nearly equal size, and not further subdivided. On the under surface is an enormous Spigelian lobe, which hangs down over the transverse fissure, widening out and projecting beyond the free border of the other lobes; and as the caudate lobe is little developed, the whole organ has a tri-lobed appearance, as correctly described by Hunter. There is a small pyriform gall-bladder on the under surface of the right lobe, and the common bile-duct enters the duodenum about an inch from the pylorus.

In the three-toed sloth the liver is extended transversely. The umbilical ligament enters at the fissure as usual; the right segment is considerably larger than the left; the latter is not subdivided, but in the former there is a right lateral fissure marking off a small right lateral lobe. The Spigelian lobe is comparatively small, the caudate little developed, and there is no gall-bladder. The absence of this receptacle in one, and its presence in another form of animals apparently so similar in habits and food, is worthy of notice in speculating on its function. But there is still very much to be known regarding the natural history and anatomy of this very interesting group of animals. Even the external zoological characters of the different species have not yet been satisfactorily determined.

(h) Rapp (*op. cit.* p. 84) found two distinct gall-bladders under a common peritoneal covering in the orycteropus which he dissected. This must have been, as he suspected, only an individual peculiarity, as it was in the usual single condition in both the animals which I have had the opportunity of examining.

ORIGINAL COMMUNICATIONS.

CASES OF PHLEGMASIA DOLENS TREATED BY TURPENTINE.

By E. COPEMAN, M.D., F.R.C.P.

Case 1.—Mrs. B. was attacked with phlegmasia dolens about a fortnight after delivery. I found her with a pulse at 120, coupled with considerable general debility. The tongue was clean. She complained of pain and weight at the back of the head, and the affected limb was considerably swollen, although not very tense or white. A saline mixture with cinchona was ordered, with Dover's powder at night, a dose of castor oil occasionally, and frequent fomentations. I saw her again seven or eight days afterwards; the limb was then very large, and painful in various parts, and there was a good deal of œdema on the left side of the abdomen and thigh. We ordered the saline mixture to be continued, and applied a liniment containing mercury, opium, and spirit of turpentine freely to

the affected limb, which was also wrapped up in a loosely applied flannel roller. The case improved from this time, and in a short time the patient recovered.

Case 2.—Mrs. W. had an attack of phlegmasia dolens a fortnight after her first confinement, which produced a fearful amount of depression, leading her several times to take leave of her friends as a dying woman. The treatment consisted principally of turpentine fomentations applied assiduously to the affected limb, and she recovered.

Case 3.—Mrs. B., aged 35, was confined about a fortnight before my visit, and had suffered from considerable hæmorrhage before and after the artificial removal of the placenta. When I saw her she had phlegmasia dolens, with considerable constitutional disturbance, and both limbs were affected. Her surgeon had recently been treating her with turpentine internally, which she took without nausea or vomiting. I found the pulse 140, bowels costive, and the limbs much swollen. I advised a turpentine enema, and the limbs to be enveloped in turpentine flannels; nourishment to be taken freely. Her general symptoms and appearance gave no hope of recovery; and I had the satisfaction of hearing that her severe illness terminated in recovery, in a shorter time than usual.

Case 4.—Mrs. A., of delicate constitution, had a severe attack of illness after labour, resulting in phlegmasia dolens, for which turpentine had been freely used externally to the abdomen and the affected limb. When I saw her the pulse was still rapid, and she had other unfavourable signs of low vital power, but the condition of the limb was improving. We agreed to a continuance of the local application of turpentine, and ordered quinine, with meat and wine, and an opiate at night if required. She had a favourable recovery.

Case 5.—Mrs. T., aged 31, a lady of feeble constitution, was confined with her second child on Wednesday, April 25. Her labour was natural and easy, and for a week no unfavourable symptoms appeared. On Wednesday, May 2, she had loss of appetite, and at night could get no sleep. This state of anorexia and sleeplessness continued till Saturday, when her surgeon prescribed some chlorate of potash and cinchona; but she was sick after each dose, and then had diarrhœa which lasted all Sunday, but was afterwards controlled by a mixture containing tincture of opium, spirit of nitrous ether, and compound spirit of lavender. I saw her on Monday, the 7th, at which time the diarrhœa had not returned. There was but little abdominal or uterine tenderness; the lochia were not unhealthy, and milk was secreted; but her tongue was red and dry, and her pulse from 120 to 130. She still felt sick, but complained but little of her head; no delirium. I advised the mixture to be continued, and fomentations of turpentine and laudanum to the abdomen; for diet, broth, and milk thickened with arrowroot and with the addition of a little brandy. In a day or two she had an attack of phlegmasia dolens, which was treated by turpentine fomentations to the leg and ten-minim doses of spirit of turpentine internally. The attack soon passed off, and she had a rapid recovery.

Case 6.—A lady, 33 years of age, had a severe attack of phlegmasia dolens in the left leg soon after her confinement. She was a tall, stout person, of nervous temperament, with a very anæmic complexion. I found her leg very much swollen and œdematous, with considerable tenderness and hardness along the femoral vein. Turpentine fomentations were assiduously applied during the day, and linseed meal poultices at night. She had a turpentine enema occasionally, and took a grain of quinine and a grain of sulphate of iron three times a day, together with a mixture containing small doses of chlorate of potass. The treatment answered well, and she has had several children since without any similar complication.

Case 7.—Mrs. A. had been confined a fortnight when I was sent for in consequence of her having an attack of phlegmasia dolens in both legs, commencing in less than a week after her labour, and accompanied by abdominal pain and distension. I was informed that her pulse had varied from 80 to 100, but I could not make it less than 120. Her tongue was furred and inclined to be dry, and she appeared to be of a very nervous temperament. Bowels well relieved by an aperient. Legs much swollen and painful. We ordered turpentine stupes to the legs, a turpentine enema, an anodyne at night, and a dose of citrate of quinine and iron three times a day. All went on well, and she soon recovered.

Case 8.—On Saturday, February 22, a few years ago, I was summoned to visit a young lady in a neighbouring county. She was about 20 years of age, and had been attacked shortly before by pain and swelling in the left leg and thigh, with inflammation of the femoral vein, and œdema precisely analogous to phlegmasia dolens. She had a very rapid pulse; her abdomen was distended, and there was tenderness above Poupart's ligament on the left side. The disease had been ushered in by severe rigors, and the similarity in the symptoms to a case of phlegmasia dolens was remarkable, and I do not remember to have seen it before in so young a female, unmarried, and where no suspicion of pregnancy could ever have been entertained. I advised the same treatment that I have found so successful in true phlegmasia dolens—namely, turpentine internally and as an external application, attention being given at the same time to the state of the bowels, which I strongly suspected to be loaded and more or less concerned in the causation of the attack. On March 1 I heard she was rather better as to the swelling and tenderness in the course of the crural vein, but her pulse remained too rapid, and the abdomen more distended than was satisfactory to the medical attendant on the spot. There had been no return of rigors, and she was more able to take nourishment. I should mention that there had been menstrual irregularity, and possibly the tenderness above the left groin might have been caused by an inflammatory affection of the ovary. She was delicate in appearance, and of a strumous constitution. After a few weeks I had the satisfaction of hearing of her complete recovery.

Case 9.—Some years ago I was requested to visit a gentleman, more than 50 years of age, who had been suffering for eight weeks from phlegmasia dolens in the right leg. He had been attended by two medical men who had treated him with very active leeching below the knee, and shortly before I saw him he seemed to be much better. He was of a sanguineous temperament, with florid countenance, and of sedentary habits. The swelling began in the leg, and gradually ascended to the thigh. The night before my visit pain in the thigh returned, and I found the whole limb again very much swollen and œdematous, without change of colour. A blister had been applied to the thigh, and was open, and the bowels had been kept freely relieved. There was a good deal of thickening just below the groin and along the femoral vein. Countenance anxious; tongue milky; nervous system irritable; appetite not good; and he was a good deal shrunken and weakened by loss of blood. I advised a discontinuance of antiphlogistic treatment, and fomentations of opium and turpentine to the affected limb. I also prescribed an alkaline and a mild bitter tonic, plain nourishing diet, and aperients when required. This was on October 6, and by the 14th the limb was much reduced in size, and his general health improved. I find the following remarks in my case-book on December 10 following:—"This case recovered remarkably well, but he has lately been troubled with bleeding piles (to which he has been subject occasionally for years), and is reduced in strength by loss of blood. He has cold hands, pallor, and quick irritable pulse. I advised tinct. ferri sesquiox. gr. xv. t. d., c. dec. sars. co. ℥jss., and lot. plumb. c. alum, with cold sponging, to the piles." This patient is still alive and well, and no longer suffers from piles. He has had once since a severe attack of obstruction of the bowels, relieved effectually by watery extract of aloes and opium, and once also a rather serious attack of bronchitis, but he has had no return of any affection of the leg, and is now quite well.

Case 10.—Mrs. ——, aged about 38, sent for me in consultation with Mr. M. on Saturday, March 30, 1872. She had been confined early in December, and her labour was followed by profuse floodings, which very much reduced her strength. Her constitution is naturally rather feeble, and she has had much anxiety about her sick husband, who is obliged to spend the winter in a warm climate abroad. About three weeks after her confinement she was seized with symptoms of phlegmasia dolens in the left leg, which were not thought much of at first, but were afterwards developed into a complete attack of that disease. From that time she had been slowly recovering, and had derived great benefit from the local application of turpentine; but a few days ago she became more depressed in spirit, and faint, accompanied with some return of tenderness in the course of the femoral vein, to which poultices were immediately applied, and the whole limb was bandaged with flannel. I found her more cheerful, with clean tongue, and pulse 84, regular, but feeble. She had fainted the day before, but I found the heart sounds healthy; skin natural; scarcely any tenderness in the limb, but a decided hardness in the course of the vein, for an inch or more, in its upper third. I advised turpentine in conjunction with the poultices, and ammonia with steel and quinine, or with decoction of bark, and left with the hope that the worst was over, and that after another two or three weeks she would be a great deal recovered. My anticipations were soon realised, and she

was able to leave home for a change to re-establish her general health and strength.

Case 11.—Mrs. P., of middle age, mother of eight children, and of late years become fat after several years of weak health and disturbed nervous system, was confined nearly a month before I was sent for on March 30, 1872. Nine days after her confinement, which had been attended with rapid birth and severe flooding, she had offensive discharge from the vagina, of which she herself complained, followed by an attack of phlegmasia dolens of the right leg. This went on well for a time; but on the 27th, three days before my visit, and three weeks after her confinement, she had a chill and a return of swelling and pain—not severe—in the affected limb, and seemed depressed both in bodily strength and spirits. Her bowels, although apparently regular, had, in consequence of a dose of castor oil and an enema, discharged a quantity of offensive and lumpy fæcal matter yesterday, and turpentine fomentations were applied to the limb. I found her better when I arrived; pulse reduced from 120 to 108. She expressed relief from the turpentine applications and flannel bandage to the limb, and had slept well under the influence of a dose of chloral at bedtime. I advised a continuance of the treatment, with the addition of a mixture containing ammonia and decoction of cinchona and a mild nourishing diet.

On April 1 I received a very good account from her husband, stating that she was steadily improving.

On April 3 I had a note to say that improvement continued, but that she had just begun to complain of slight pain in the calf of the other leg, and that the contents of the bowels were still lumpy.

On Monday, the 8th, I visited her again, in consequence of her not being quite so well the day before, and I found what I expected, from the mention of the pain in the calf of the left leg, that it was now in the same state as the other had been, but swollen even to a larger size. This was also rubbed with turpentine liniment and rolled with a flannel bandage, and the same medicine was continued, attention at the same time being paid to the state of the bowels. She looked rather pale, and her pulse was nearly 100, but she was able to take nourishment in sufficient quantity, and was allowed sherry-and-water in moderation. The right leg was nearly, if not quite, well, but still kept covered with a bandage.

Thursday, April 18.—Had been going on well until two days ago, when her pulse rose a little and her mind became rather disturbed. She had a turpentine injection, which was followed by four motions—the first very large and solid; the second almost as much, and of the same lumpy character; and the others also containing solid fæces. Her pulse to-day was nearly 120, but the legs were going on well under the influence of turpentine liniment and flannel bandage. She seemed a little confused in her mind, but this I attributed partly to the too frequent administration of food and stimulants, and somewhat to rather free lactation. I advised the addition of tinct. cinch. ʒss. to each dose of the mixture, and a repetition of the turpentine enema in the morning, a less frequent administration of food, and slight diminution in the quantity of stimulants. The result was satisfactory, and she soon got well.

Norwich.

AMPUTATION OF THE THIGH IN CALCUTTA.

By J. FAYRER, M.D., C.S.I.

The following is a brief analysis of thirty-seven cases of amputation of the hip, thigh, and knee, performed in my wards of the Medical College Hospital, Calcutta, between the months of May, 1859, and June, 1870.

The operations were as follows:—Two through the knee by Carden's method; nineteen through the lower third of the thigh (seven of these being by the antero-posterior flap and twelve by the modified circular operation); four were through the middle third (three being antero-posterior and one modified circular); six were through the upper third (three being antero-posterior and three modified circular).

There were six amputations at the hip-joint (three being re-amputations, after previous amputation of the thigh at the lower third). These have already been noticed in an abstract of eight hip-joint cases already recorded.

A few words on the mode of amputating. The antero-posterior flap operation is the same as that usually performed by surgeons; effected by transfixion, it is easily and rapidly accomplished, and where time is an object is advantageous; but it has the disadvantage of leaving a redundancy of useless muscle in the covering of the bone, and increases the magnitude of the surface that has to heal.

The modified circular operation may be performed with an ordinary scalpel—by making an incision through the skin and fascia down to the muscles, in the form of anterior and posterior flaps. The skin and fascia is then allowed to retract to its utmost, being aided with a few touches of the scalpel. The muscles are then divided obliquely upwards, from the line to which the skin has retracted, to the bone, by one or more incisions or sweeps of the knife (scalpel or catlin), according to the size of the limb; and finally, with one or two circular sweeps, the periosteum is divided. This, if properly done, makes an excellent covering—enough of muscle and abundance of integument and fascia, which are the essential coverings. It may be done either with an ordinary scalpel or a catlin. It takes more time than the flap operation, but that is unimportant when the patient is unconscious. This method of amputation is applicable in any part of the limb, but is perhaps especially adapted to the lower third of the thigh and to the leg below the knee.

The mortality was very high, and caused mainly by pyæmia, which in many instances was due to osteo-myelitis. Of the thirty-seven cases only three individuals recovered, out of the thirty-four operated on. Twenty-nine died in the Hospital; two were removed by relatives when very low, their object being to take them to die on the banks of the sacred river.

There were two primary and sixteen secondary amputations for traumatic causes. Of pathological amputations there were nineteen.

Of the thirty-one deaths, eighteen were due to septicæmia. In thirteen cases originating in osteo-myelitis, six deaths were due either to shock from the combined effects of the injury and the amputation, or to exhaustion from debility produced by protracted disease, pain, and suppuration.

Two deaths were directly due to the formation of fibrinous coagula in the heart or pulmonary artery. One was caused by accidental opium-poisoning in a case that otherwise promised fairly. Two were removed by relatives when exceedingly weak. It is not probable that they recovered, though they did not die in the Hospital.

It is well known that in Calcutta amputation of the thigh is an operation seldom successful. The statistics, as far as I know, are very unfavourable in all the hospitals. This is, no doubt, due to a combination of causes—such as a cachectic state of the patient; late treatment of the disease; an exhausting, malarious, and depressing state of climate, acting most prejudicially on the blood-elaborating organs, and diminishing the powers of resistance to shock and those of carrying on repair; a great tendency to suppuration, and with it to septic conditions of various forms; and added to these, I fear, must be defective hospital construction and hygiene, and (certainly during the period included in this return) an endemic tendency to osteo-myelitis, a most prolific originator and concomitant of pyæmia, and one of the most fatal of all surgical complications.

It is satisfactory to know that this particular evidence of septicæmia has greatly diminished during the past two or three years, owing probably to improved drainage, clearing out of space surrounding the hospital, better ventilation, reduction of the number of beds, and to the free use of carbolic acid, and perhaps also to one of those mysterious changes of endemic constitution, which doubtless exist, though not understood. Bad as, at the best, are the statistics of thigh amputation, I believe they have never represented a higher death-rate than those I now record, and which I think it is well should be recorded, suggesting as they do interesting matter for profitable reflection on the effects of climate, the nature of hospital construction and hygiene, and the existence of endemic tendencies to pyæmia in reference to the subject of surgical operations and treatment generally in damp and hot climates like that of Bengal, where all the natural evils are intensified by the adventitious ones of a great city.

It will be observed that of the thirty-one deaths eighteen were from pyæmic conditions, two were from gangrene, six from exhaustion, and two from the formation of fibrinous coagula in the right cavities of the heart, or obstruction of the pulmonary artery. All these forms of death point to conditions of the patients and of their surroundings that force on one the conclusion that they are to a certain extent due to preventable causes; whilst at the same time they confirm the exceedingly dangerous nature of the operation itself, and explain why it is that in Calcutta it is regarded as of a most

fatal character, and therefore only to be had recourse to as the last and only resource for saving life.

A glance at the abstract of cases will show, indeed, that such was the fact in those now recorded; and it shows, moreover, how very unsatisfactory are the resources of surgery when they can only be made available (as is so frequently the case in the Calcutta hospitals) when the best chances of saving life have nearly passed away, and blood-poisoning has already commenced its fatal work.

It is needless to repeat what I have already elsewhere said on the pathology of the various causes of death—osteo-myelitis, and pyæmia from that and other causes; the development of that condition of the blood which leads to the formation of fibrinous coagula in the heart or vessels, causing either death or local gangrene, or other important changes,—they and others are of special importance, in the damp, malarious climate of Calcutta, in reference to surgical operations, and merit further study and observation.

Case 1.—M. R., aged 36, a Hindoo beggar, was admitted in a very low state on May 16, 1859, with disease of the knee-joint and necrosis of the femur. Amputation of the right thigh at its lower third by modified circular operation was performed on June 12. He became very low after the operation, and died of exhaustion on June 13, 1859.

Case 2.—J., aged 40, a Hindoo coolie, was admitted in a bad state of health on October 24, 1859, with gangrene of the left leg and foot. Amputation of the left thigh at its lower third by the modified circular operation was performed on October 29. Died from the recurrence of gangrene on September 17, 1859.

Case 3.—D., aged 35, a Hindoo coolie, was admitted in a fair state of health on December 11, 1859, with a severe injury of the left knee-joint. Amputation of the thigh at its middle third by antero-posterior flap was performed on December 20. He was taken away by his friends on December 21, 1859, when very low.

Case 4.—J. C., aged 17, an English seaman, was admitted in a very bad state of health on February 15, 1860, with an abscess in the left thigh and necrosis of the femur. Amputation of the thigh at its upper third by modified circular operation was performed on March 11. Died of osteo-myelitis on March 15, 1860.

Case 5.—J. P., aged 28, Hindoo male, was admitted in a cachectic condition on March 23, 1860, with osteo-cephaloma of the left knee. Amputation of the left thigh at its upper third by antero-posterior flap operation was performed on March 26. Was taken away by his friends on April 9, 1860, when very low from exhaustion.

Case 6.—R. S., aged 35, a Hindoo shopkeeper, was admitted in a bad state of health on March 19, 1860, with necrosis of the left tibia and fibula. Amputation of the left thigh at its lower third by antero-posterior flap operation was performed on March 31. Took about thirty grains of opium, given to him by his brother to allay pain, and died of opium-poisoning on April 3, 1860, otherwise doing well.

Case 7.—P., aged 13, a Hindoo boy, was admitted in a very fair state of health on April 23, 1860, with compound fracture of the right femur in its middle third, four days after the accident. Amputation of the right thigh at its upper third by antero-posterior flap operation was performed on May 4. Died of osteo-myelitis on May 9, 1860.

Case 8.—J., aged 22, a Mahomedan syce, was admitted in a very low state of health on October 4, 1861, with compound comminuted fracture of the left tibia and fibula at their middle third, which had led to gangrene of the whole leg and foot. Amputation of the thigh at its lower third by modified circular operation was performed on October 5. Died of osteo-myelitis on October 26th, 1861.

Case 9.—D., aged 30, a Hindoo sweetmeat-maker, was admitted in a bad state of health on August 3, 1862, with dry gangrene, probably from embolism of the right leg. Amputation of the thigh at its lower third by antero-posterior flap operation was performed on August 25, 1862. Died of pyæmia on October 1, 1862.

Case 10.—M., aged 20, a Hindoo female, was admitted on August 26, 1863, with extensive disease of the knee-joint. Amputation of the left thigh at its lower third by modified circular operation was performed on September 30, 1863. Died of osteo-myelitis on October 20, 1863.

Case 11.—K., aged 20, a Hindoo farmer, was admitted in a very bad state of health on October 14, 1863, with medullary cancer of the left femur. Amputation of the left thigh at its upper third by modified circular operation was performed on October 20. Died of osteo-myelitis in a few days.

Cases 12, 13.—S. A., aged 16, a Mahomedan coachman, was admitted on April 10, 1864, with an extensive lacerated wound opening into the knee. Amputation of the thigh at its lower third by modified circular operation was performed on April 12. Secondary amputation of the hip-joint was performed for osteo-myelitis on April 24. Was perfectly cured and discharged on August 1—100 days after the operation—with a good stump and cicatrix; was then employed in the Hospital, when he grew very stout.

Case 14.—R., aged 35, a Hindoo female, was admitted in a bad state of health on April 13, 1864, with suppuration in the knee-joint, resulting from fracture of the left tibia. Amputation of the thigh at its lower third by modified circular operation was performed on May 9, 1864. Died of osteo-myelitis on May 10, 1864.

Case 15.—B., aged 35, a Hindoo washerman, was admitted in an otherwise good state of health on September 24, 1864, with severe compound fracture of the left leg. Amputation of the thigh at its lower third by antero-posterior flap operation was performed on October 1. Died of osteo-myelitis on October 2, 1864.

Case 16.—H. D., aged 30, a Hindoo boatman, was admitted in a good state of health on February 27, 1865, with his right foot cut off at the second row of tarsal bones by a ship's cable. Syme's amputation was performed on the same day. Pyæmia and osteo-myelitis set in, and amputation of the thigh at its lower third by modified circular operation was performed on March 15. Died of pyæmia on March 17, 1865.

Case 17.—W., aged 25, a Mahomedan Khalasie, was admitted on July 13, 1865, with compound comminuted fracture of the bones of the right leg and extensive laceration of soft structures higher up the limb. General health had been good. Amputation of the thigh at upper third by antero-posterior flap operation was performed on July 13, at 8 p.m. Died of exhaustion four hours after the operation.

Cases 18, 19.—I. H., aged 36, a Mahomedan Khalasie, was admitted in a fair state of health on October 20, 1865, with traumatic suppuration of the knee-joint. Amputation of the thigh at its lower third by modified circular operation was performed on October 26. The hip-joint was amputated for osteo-myelitis, of which he died on November 12, 1865.

Case 20.—H., aged 25, a Mahomedan servant, was admitted in a bad state of health on August 20, 1865, with compound comminuted fracture of the fibula of the right leg. The leg and the foot became gangrenous, and amputation of the thigh at its lower third by modified circular operation was performed on November 2, 1865. Died of exhaustion.

Case 21.—M., aged 25, a Hindoo man, was admitted in a low state of health on October 6, 1865, with medullary cancer of the right femur. Amputation at hip-joint was performed on January 15, 1866, by antero-posterior flaps. Died of cancerous infiltration of viscera and pyæmia on January 27, 1866.

Case 22.—S. C., aged 30, a Mahomedan mason, was admitted in an otherwise very fair state of health on January 22, 1866, with compound comminuted fracture of the lower part of the femur and longitudinal fracture of the condyles. Amputation of the thigh at its lower third by antero-posterior flap operation was performed on February 5. He would not submit earlier. Died of pyæmia on February 8, 1866.

Cases 23, 24.—E. D., aged 17, an English girl of very strumous constitution, was admitted in a bad state of health on February 25, 1866, with scrofulous disorganisation of the right knee-joint. Amputation of the thigh at its lower third by antero-posterior flaps was performed on February 27, 1866. Was discharged cured on March 25, 1866. Eight months after the thigh was again amputated in the middle for reappearance and extension of the ulceration. She died of osteo-myelitis.

Case 25.—M., aged 35, a Hindoo female, was admitted in a bad state of health on August 13, 1866, with suppuration in the knee joint. Amputation through the knee by Carden's method was performed on August 26. Died of osteo-myelitis on September 3, 1866.

Case 26.—A., aged 30, a Mahomedan servant, was admitted in a fair state of health on October 1, 1866, with popliteal aneurism of the right leg. Femoral artery tied. Amputation of the thigh at middle third by antero-posterior flaps was performed for gangrene on October 28. Discharged cured on March 11, 1867.

Case 27.—C. M., aged 40, a Mahomedan boatman, was admitted in a bad state of health on November 2, 1866, with compound fracture of the lower third of the left leg, leading to gangrene. Amputation of the thigh at its lower third by antero-posterior flaps was performed on November 4. Died from extension of gangrene on November 6, 1866.

Case 28.—P. L., aged 50, an East Indian, was admitted into

the Hospital in a very low state, with suppuration in the knee-joint, on November 26, 1866. Amputation through the knee by Carden's method was performed on December 22. Died of exhaustion and shock on December 23, 1866.

Cases 29, 30.—P., aged 21, an Oorya gardener, was admitted in a very low state on June 26, 1867, with suppuration in the right knee. Amputation of the thigh at its lower third by the modified circular operation was performed on July 2. Amputation of the hip-joint was performed on July 4 for secondary hæmorrhage and symptoms of osteo-myelitis. Died of plugging of the pulmonary artery—date not mentioned, but within forty-eight hours.

Case 31.—R. C., aged 35, a Hindoo man, was admitted on May 13, 1868, with a frightfully lacerated wound on the outer aspect of the left hip, inflicted by a shark-bite. Amputation at the hip-joint was performed by antero-posterior flaps on May 13. Died of combined shock of the shark-bite and operation on the same day.

Case 32.—B., aged 20, a Mahomedan servant, was admitted on December 2, 1868, with a rapidly growing cancerous tumour on the middle of the left thigh. Amputation at the hip-joint was performed by flap operation on December 6. Died of exhaustion on December 7, 1868.

Case 33.—A. P., aged 35, a Hindoo bearer, was admitted in a low state of health on December 22, 1868, with suppuration in the left knee. Amputation at the middle of the thigh by modified circular operation was performed on December 29. Died of osteo-myelitis on January 8, 1869.

Case 34.—B., aged 12, a Hindoo boy, was admitted in a low state of health on January 20, 1869, with gangrene of the left leg supervening on compound fracture of tibia and fibula. Amputation of the thigh at its upper third by modified circular operation was performed on January 21. Died of cardiac plugging and pyæmia on January 25, 1869.

Case 35.—B. K., aged 40, a Hindoo shopkeeper, was admitted in a bad state of health on June 14, 1869, with an epithelioma of the right knee. Amputation of the thigh at its lower third by modified circular operation was performed on August 18, 1869. Died of osteo-myelitis on October 2, 1869.

Case 36.—S., aged 60, a Hindoo man, was admitted on December 27, 1869, with simple fracture of the middle of the right leg, which had led to gangrene. Amputation of the thigh at its lower third by modified circular operation was performed on January 8, 1870. Died of pyæmia on January 11, 1870.

Case 37.—B., aged 26, an Oorya bearer, was admitted in a bad state of health on June 5, 1870, with disorganisation of the left knee from compound fracture. Amputation of the thigh at its lower third by flap operation was performed on June 21, 1870. Died of osteo-myelitis on July 11, 1870.

Abstract of Thirty-seven Cases of Amputations of the Hip, Thigh, and Knee.

Amputations.		Hip.			Upper Third.			Middle Third.			Lower Third.			Knee.			Grand Total.
		Death.	Recovery.	Total.	Death.	Recovery.	Total.	Death.	Recovery.	Total.	Death.	Recovery.	Total.	Death.	Recovery.	Total.	
Traumatic.	Primary	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...	2
	Secondary	1	1	2	2	...	2	1	...	1	10	(a)1	11	...	...	...	16
Pathological...		3	...	3	3	...	3	2	1	3	7	1	8	2	...	2	19
Totals.....		5	1	6	6	...	6	3	1	4	17	2	19	2	...	2	37

Causes of Death.—Gangrene, 2; pyæmia, 5; pyæmia of osteo-myelitis, 14; exhaustion and shock, 6; pulmonary or cardiac plugging, 2; removed by relatives in a dying state, 2; accidental opium-poisoning, 1.

Remarks.—There were 18 deaths from pyæmic conditions, 2 from recurrence of gangrene, 6 from shock or exhaustion, 2 from plugging of the pulmonary artery, 2 removed in a very weak state by their relatives (both probably died), and 1 case of opium-poisoning. This return of six amputations at the hip-joint does not include those performed out of the hospital; they are noticed elsewhere in an abstract of eight cases of amputation at the hip. There was one case of re-amputation of thigh after amputation of the foot. Total amputations of thigh, including hip and knee, 37—of which 3 were re-amputations at hip after amputation of thigh, and 1 re-amputation of thigh after amputation of foot. Three individuals of the 34 recovered—viz., 1 of hip-joint after amputation of the thigh, 1 at the middle, and 1 at the lower third of the thigh.

(a) This case was re-amputated at hip-joint, and recovered.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

A SERIES OF CASES ILLUSTRATIVE OF CEREBRAL PATHOLOGY. CASES OF INTRA-CRANIAL TUMOUR.

(Under the care of Dr. HUGHLINGS-JACKSON.)

Continued from page 569.)

Case 2.—*Epileptiform Seizures beginning in the Left Thumb—Tubercle in the Third Right Frontal Convolution.*

This case, as well as several which follow, illustrates the remarks I made in this journal, December 23, 1871, on a case of convulsive seizure beginning unilaterally. That case was one in which the spasm began in the ulnar fingers of the right hand: in the following case it began in the left thumb.(a)

The great interest the present case has, lies in the fact that the cerebral lesion, discovered in association with a convulsion beginning very locally, was a very local one; a tubercle the size of a hazel-nut lay in the hinder part of the third right frontal convolution. I have never found disease so very local in any other case of convulsion beginning unilaterally. It was supposed during life that the patient had a tubercle in the surface of the right side of his brain, in the region of the corpus striatum, but no diagnosis of its exact(b) position was attempted.

The description of the paroxysm is unfortunately incomplete, the patient being unable to trace the march of the spasm beyond the arm. In many cases of convulsions beginning in the hand we obtain accounts of the spreading of the spasm to the face, to the leg; and if we are present at a paroxysm, we, after the patient has lost consciousness, may trace it still further. The importance of such observations is that they will lead us to a knowledge of the particular movements represented in particular regions of the brain, and—what is equally important—to a knowledge of the order in time in which movements are therein represented. In other words, they will lead us to a knowledge of *fundamental* principles of localisation.

The fact that a tubercle was found in that convolution *of the right* side, the fellow of which *on the left* is supposed by Broca and some others to be the seat of "articulate language" in a man whose speech was *not* affected, has not, I think, very much significance; for I do not feel at all sure that there would have been any great defect of speech if a tubercle, only the size of a hazel-nut, had been found in *any* part of the *left* side of the brain. For a tumour destroys far less brain-tissue than one would think at first glance. Besides, as it grows slowly, what it does destroy, it destroys *very slowly*. And in the estimation

(a) I would refer the reader to those remarks for an account of the order of frequency in which external parts suffer in cases of convulsion beginning unilaterally. In this group of convulsions the spasm prefers, so to say, to begin in the more voluntary parts; in other words, in the parts which have more special and independent movements - more "educated" movements —the parts of which the movements are last acquired,— or, in physiological language, in the parts which have the greater number of *different* movements at the greater number of *unequal* intervals (higher harmony and melody). Hence convulsions which begin in the hand begin usually in the index finger and thumb—in the most "voluntary" parts of the whole body. The importance of the thumb—the *human* thumb, with its well-developed flexor longus pollicis—will be vividly realised by students of Duchenne's writings, especially his "Physiology of Movements." (Consider the "expressionless" thumb of a monkey, of a very young child, or of an idiot. An idiot, it has been said, "does not know what to do with his thumb.") I make these remarks because I think we do not make enough use of cases of convulsions in our physiological studies of mind.

In "paralytic symptoms" there is the same order; the paralysis affects parts the more they serve in voluntary and the less they serve in automatic operations. This is at any rate so of hemiplegia and affections of speech. I hope shortly to show that this principle applies to the order of mental symptoms, and in particular to the explanation of cases of strange doings, mania, etc., after certain epileptiform seizures. The patient is reduced to a more automatic condition. Or, speaking from another point of view, there is, as Dr. Thompson Dickson would put it, "a loss of control."

(b) I shall shortly report a case, examined post-mortem since the above was written, in which convulsive seizures began in the left great toe. In this case Dr. Gowers, who kindly examined the brain for me, found a tumour which involved the lower part of the ascending frontal convolution; but there were other lesions in the brain.

of the "gravity" of lesions, the element of slowness or suddenness in destruction of nerve tissue is of equal importance to that of difference in quantity destroyed. For example, cases of cerebellar tumours and of cerebellar hæmorrhages are utterly different things in their effects; because one destroys and squeezes slowly, the other destroys and squeezes rapidly.(c) This tumour, so far as we could learn, produced no symptoms at all *by its destroying action;* for we may safely say that if the third right frontal convolution were simply wanting, there would be no symptoms at all, at any rate no *discoverable* symptoms. But it is altogether a different thing when a "foreign body" excites "irritation," and leads to instability of nerve-tissue, as this mass of tubercle did. Hence the clearing of the paradox that "disease of the brain" sometimes does and sometimes does not produce symptoms. The expression "disease of the brain" is not precise enough for scientific purposes. A man can *do without* a certain quantity of his convolutions, but he suffers if that quantity becomes unstable, because it will now and then *discharge*.

I have to thank my friends Mr. Stephen Mackenzie and Mr. Ambrose Kibbler for valuable help in the investigation of this case.

A man, 22 years of age, fairly nourished (he wasted rapidly after admission), was admitted under the care of my colleague, Dr. Andrew Clark, November 7, 1871. The following is in part taken from the report by Mr. Allen Fox, the clinical clerk. The patient had been, he himself considered, quite well until three months before admission, when he had a "violent cold," pain in his chest, and cough. His first fit was one month later—that is, two months before admission. One morning, just after breakfast, and after much coughing (he had had a bad night), his thumb—the left—began to move to and fro at the metacarpo-phalangeal articulation. After this had lasted five seconds (implicating no other joint and causing no sensation), a "kind of numbness with pain proceeded to overcome his whole frame" not taking away his consciousness (*vide infra*). The fit suddenly went off, leaving him for about an hour very weak. The patient had several attacks whilst in the Hospital; they always began in the left thumb, went up the arm, and then (so he said) spread all over his body, and he always told us that he did not lose consciousness. Immediately after the attacks he felt cold, and, later, hot. Mr. Kibbler saw the patient directly after a seizure on November 16, and he is confident that the patient *was* unconscious. The nurse also is confident that he was unconscious in his other severe seizures. His speech, whenever I saw him, was perfect. He had two very partial attacks later in the day of November 16, beginning in one hand, and each was aborted by squeezing and straightening the hand. On November 19 he felt a fit "about to begin as the thumb began to go off." This seizure was stopped.

Unfortunately no fit was witnessed, but the man's account of the *onset* of the seizure was very definite. The case is exceptional if we trust the patient's statement that he was not unconscious, for he could not trace the spasm beyond the arm. He told me that "it went all over" after the arm was fully involved. But there can be no doubt that he did become really unconscious after the arm was involved—at any rate, in some seizures. The diagnosis of disease of the convolutions near the corpus striatum was made with confidence. This was but the first step in diagnosis. So far we had only concluded that there was, in the cerebral region mentioned, grey matter in a state of such great instability that it was occasionally discharged abruptly. We had next the distinct inquiry, By what *pathological* process was this instability produced? And practically the question was, whether these changes in grey matter were, or were not, the result of the irritation of a "foreign body," an adventitious product?—or, as it is sometimes put, were the fits "caused" by organic disease?

I at first thought there was no adventitious product. The optic discs by indirect examination looked normal. But on the patient's admission Mr. Kibbler found, by *direct* (d) examination, that besides white streaking along the vessels on the optic discs, there was also in one eye white matter about their convergence. These appearances were very much more marked on the right side. There was only a little streaking along the vessels on the left. I feel very much indebted to Mr. Kibbler for having drawn my attention to these appearances; for, whatever they may mean, it is desirable not to overlook them. As I have seen such slight changes (see Case 3) after very severe neuritis, I believed that this patient *had* had neuritis. His sight was good, and had never been affected; but this, I am quite certain, did not contraindicate the diagnosis of neuritis (see remarks on Case 3.) However, such slight ophthalmoscopical appearances are so very common that it was rash to attach so much importance to them as evidences of past neuritis. Yet doing so led me to the correct diagnosis of an adventitious product; for optic neuritis, along with any well-marked nervous symptoms (hemiplegia, convulsion, etc.), is very strong evidence indeed of the existence of an adventitious product. I may here most conveniently mention that the backs of the eyes with the optic nerves were removed post-mortem, and examined microscopically by Dr. Herman Pagenstecher, who pronounced them to be quite normal.

So then, relying on the appearance, which I suppose did, but which according to Dr. Pagenstecher's microscopical examination did not, imply previous neuritis, I arrived at the diagnosis of an adventitious product. This was the second step in diagnosis. The third step was to find the particular nature of the adventitious product. So far it might have been a syphilitic "deposit" or a glioma.

The presence of pulmonary tuberculosis was allowed to make the third step in diagnosis for us—viz., that the adventitious product was a mass of tubercle. The diagnosis of cerebral tubercle might perhaps have been made at a blow, without any pretence of stages; but it is well to give the three stages, as in most cases of convulsions beginning unilaterally the diagnosis of the exact *nature* of the disease is *not made for us*.

The patient died of tuberculosis on December 22. At the *autopsy* next day the lungs were found free from any old disease at their apices, and they were crammed with true miliary tubercle. There were several transverse ulcers in the ileum. There was no tubercle of the spleen or liver. The cervical and mesenteric glands were enlarged, and in their centres cheesy.

There was no other disease in the brain than a rounded tubercle the size of a hazel-nut. It lay under the grey matter in the hinder part of the third right frontal convolution. It was very easily turned out of its bed, and was vascular on its surface; in its centre it was slightly cheesy. There was scarcely any softening of the brain near it. Very few granule masses were found in the bed from which it was removed, or in the grey matter near it.

Now, ignoring the ophthalmoscopical appearances, there is to be considered, as an element in diagnosis, the fact that in some seizures the patient did not lose consciousness (he said he did not in any). It very frequently happens that consciousness is not lost in seizures which begin unilaterally. In these cases the fits are often very partial, and when so there may be no trace of loss of consciousness. In the very partial fits noted (November 16) the patient was not unconscious. Dr. Bright supposed absence of loss of consciousness in convulsive seizures to be strong evidence that the internal lesion is circumscribed organic disease, such as tumour. So far as cases completed by post-mortem examination go, there can be no doubt of the correctness of this opinion. It has been several times insisted on by Dr. Wilks. With deep respect for these physicians I would remark that there are many patients who have seizures of this kind who present no symptoms of circumscribed organic disease, and who continue in seeming good general health for years. In the case recorded (December 23, 1871) there was no evidence of circumscribed organic disease. Indeed, in most cases of convulsions of this kind we can only say there is instability of nerve-tissue in the region of the middle cerebral artery; there being *no evidence* to show the pathological process by which that instability results. We must not judge solely by cases of patients who *have died* of disease of the brain. And if we do there are exceptional cases. I have notes of the case of a patient who had been subject to fits beginning in his right index finger and thumb, losing speech but not consciousness in some of them, in whose brain I found no circumscribed organic disease—such as tumour or syphilitic "deposit"—but great wasting, apparently equal, of *both* cerebral hemispheres. But the case I have related (Case 2) makes me attach more value to absence of loss of consciousness in convulsive seizures in the diagnosis of circumscribed organic disease; for in that

(c) I am anxious to know if the lesions in cases exceptional to the hypothesis of Dax and Broca are not mostly new growths—that is, slowly growing things—and shall be glad of references to cases of tumours in or near to the corpus striatum.

(d) Ophthalmoscopical examination by the direct method is most important. By numerous examinations of healthy eyes one may settle what white markings along and about the vessels of the discs really mean, and whether or not they, or some of them, have any *pathological* meaning. I have several times known the appearances of acute neuritis pass away so far that to indirect examination the discs looked normal—the patients having had no defect of sight in any stage (see Case 3). I do not speak of "congestion of the discs," nor of slight and doubtful appearances; I speak of cases of severe neuritis, in which the disc is much swollen, and in which there have been effusions of blood—of appearances so marked that a tyro could not overlook them.

case, apart from the phthisis, there was during life no evidence of circumscribed organic disease (there was no *severe* headache, and possibly there had been no optic neuritis), and yet circumscribed organic disease was discovered post-mortem.

(*To be continued.*)

GENERAL HOSPITAL, NOTTINGHAM.

Case 1.—*Aneurism of Common Femoral, treated first by Pressure and ultimately by Ligature of the External Iliac.*

(Under the care of Mr. WHITE.)

W. O. was admitted with a large ovoid swelling immediately beneath Poupart's ligament on the left side, which presented all the signs diagnostic of an aneurism. It first made its appearance three weeks before admission, but has rapidly increased in size. Cause assigned was a blow from handle of a hand-cart, received ten days prior to discovery of swelling in thigh. The foot of affected limb was swollen, tense, and giving great pain. Could walk with difficulty only, and not without assistance of a stick.

Pressure was used three weeks (by means of the method recommended by Bellingham, of Dublin) with considerable benefit, the tumour becoming more firm, and pulsation and thrill less. This improvement, however, did not last, both pulsation and thrill at the end of a month being as perceptible as on first examination. Ligature of the external iliac was performed, an incision parallel to Poupart's ligament being made, and the vessel secured by a ligature of double carbolised catgut. Secondary hæmorrhage occurred on eighth day after operation, which proved fatal.

Case 2.—*Malignant Growth in Mediastinum.*

(Under the care of Dr. RANSOM.)

R. P. was admitted with the following symptoms—viz., dull heavy aspect; puffiness of face; haziness of vision; vertigo; tinnitus aurium; voice laryngeal in character; no dysphagia. Has a disagreeable sensation in occipital region, relieved by pressure; occasional epistaxis. Swelling of face and neck, relieved by alteration in position; hands and forearms livid and cold; superior thoracic veins and those of arms are visibly distended. Complains of tightness in supra-sternal region, and once or twice a fluttering in supra-scapular region. Dyspnœa increased by moving, but relieved by horizontal posture. Troublesome cough; expectoration muco-purulent. Right radial more perceptible than left. The thorax is bi-symmetrical, prominent in sternal region above the middle, and with supra-clavicular hollows effaced or somewhat convex. Respiratory murmur equal on both sides, and movements not markedly restricted anywhere. The superficial epigastrics are distended, especially on the right side. No other signs of abdominal disease. No glandular enlargement in neck, axillæ, or groins. There is a dull region about manubrium sterni, which extends laterally into both clavicular spaces, nearly as far as acromial angles, and downwards as far as third costal cartilage. This corresponds to the bulged region, or nearly so. There is no pulsation, shock, or thrill perceptible to hand over this area. Cardiac impulse not to be felt by hand. Sounds normal. Respiration puerile here and there. Slight comparative dulness in right supra-scapular region and right inter-scapular region. Resonance below scapulæ alike on both sides. Bronchial breathing in right inter- and supra-scapular regions.

This condition gradually became worse, and he died comatose two months after admission.

Post-mortem revealed the following condition of things—viz., a large nodular growth having the appearance of encephaloid was found occupying the anterior mediastinum, and situated immediately beneath manubrium sterni, which, however, was not eroded. Laterally it was bounded by the lungs, the roots of which were partially enveloped; inferiorly, by the heart; posteriorly, by the trachea and œsophagus; superiorly, by the thyroid body, but was not tangible above sternal notch during life. It invaded the substance of the pericardium and was visible upon inner surface, where it is reflected upon origin of great vessels. Included in its substance were the right and left brachio-cephalic veins and descending cava, causing considerable narrowing of all these, so that superior cava had an available calibre of not more than a quarter of an inch in diameter, supposing it to be circular. These walls were also infiltrated with a substance like soft encephaloid, a portion of which projected into right auricle. The pulmonary artery lay also in the midst of the mass. The aorta and primary branches were compressed, but calibre not altered. The trachea and œsophagus little compressed.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 30, 1872.

MR. STANSFELD ON THE PUBLIC HEALTH ACT.

Mr. Stansfeld ought to write a manual on the art of receiving deputations for the benefit of his colleagues, especially for Mr. Ayrton and Mr. Lowe. Nothing, in our opinion, could be more masterly than the mode in which he managed—we know of no other word which so well expresses our meaning—the deputation from the Kent and Sussex branch of the British Medical Association on Thursday last week. The skill with which, without in the least degree departing from his avowed policy, he talked away the differences of opinion between himself and the gentlemen he was addressing; the torrent of very clear, suave, and pleasant language in which he clothed his avowal of a course which he well knew was not at all to their taste; the tone of injured innocence which he assumed on the matter of the non-medical inspectors; and last, but not least, the clinching retort to the plea for protection, "that he did not think it fair that the medical profession should make a claim to have the great sanitary work of the country placed in their hands, and then tell him that they had not the courage to perform their duties,"—all was the performance of a master. To such a charming, frank, courteous, patriotic Minister, who could object? Certainly there were some little differences between him and the deputation; but there were so very many points on which they agreed—and, as Mr. Puff says in the *Critic*, "where they do agree their unanimity is wonderful."

Dr. Carpenter, of Croydon, was the mouthpiece of the deputation, and his business was to lay before the President of the Local Government Board a series of resolutions, the first of which was—"That the proposed appointment of non-medical men to be inspectors under the Public Health Act would be a retrograde step, and certain to impede the object for which the Act was obtained." No doubt about it, in effect answers Mr. Stansfeld. "There are occasions upon which we must have the inspection of the medical officer; there are branches in the business of inspection which must be conducted under medical experience." But then he says—I want to deal with the 700 or 800 newly created sanitary authorities; and by whom can I better deal with them than

by the experienced inspectors with whom, under the Poor-law, they, as boards of guardians, are already acquainted? I therefore make the original Poor-law Inspectors the Local Government Inspectors, to initiate the working of the new Act; and in order to relieve them of their duties in inspecting workhouses I simply appointed "assistant inspectors,"—I never appointed a "sanitary inspector" at all. This, to say the least, is very ingenious, although it savours a little of *hocus-pocus*. No doubt there are a number of medical men who are specially qualified by their education for the work of sanitary inspectors and inspectors of workhouses. Mr. Stansfeld is quite ready to acknowledge that there are some duties of inspectors which only medical men are qualified to undertake. But then he does not make, and has not made, inspectors. The old inspectors of the Poor-law Board—a large number of whom are non-medical—are to do the new work under the new Bill, and to do their original work he has employed as "assistant inspectors" his numerous *protégés* who have failed to obtain practice at the bar, or who have retired on their laurels from their country's service! It is true that he assured the deputation that Mr. Simon "and his colleagues and subordinates" are considering the proposals which they will deem it their duty to make with reference to what shall be their place in respect to the new machinery; but he added—"When I get those proposals I shall consider them, and endeavour to appreciate and understand them. But I shall test them by other considerations, and endeavour to arrive at that conclusion which on the whole appears to me fitting at that time, because I do not think anyone can pretend at this moment to impress a permanently and absolutely unchangeable form upon the whole imperial, local, and sanitary administration of the country." There is a touch of irony about Mr. Stansfeld "endeavouring to appreciate and understand" which is amusing but not at all satisfactory. We trust that when Parliament meets Mr. Stansfeld will be forced to give a better and more reasonable account of the motives which have led him to exclude the only class of men who are specially fitted to perform the duties from all the inspectorial appointments made in consequence of the passing of the new Act. To us the course he has pursued in this matter seems utterly indefensible, and it is only made worse by his flimsy explanation.

The second resolution proposed that the areas supervised by the Medical Officers of Health should not be of limited extent, but should be arranged with reference to the drainage or water-shed of the district, and independent of the parochial and Parliamentary boundaries. Mr. Stansfeld was here on much surer ground than he was when defending his recent appointments. He told the deputation that, however theoretically the water-shed might indicate the legitimate sanitary area, practically the proposal could not be carried out; that the health of the country was not to be secured by large drainage operations so much as by close supervision, the removal of nuisances, and, in case of necessity, by house-to-house visitation—operations which could be more successfully performed over a smaller area than in a larger one. In reference to by far the greater part of the area of the three kingdoms this is undoubtedly a fact. Drainage of land has already done its great work by banishing ague and dysentery. House-drainage can be successfully carried out over a smaller surface.

The third of the resolutions urged by the deputation was that the ordinary dispensing chemists and druggists of the country were not qualified for the post of analysts under the Adulteration of Food Act. To this proposition Mr. Stansfeld positively overflowed with assent. "Of course," he said, "they are not qualified." He hardly thought it possible that the Board could have sanctioned such appointments. He does not know that the calling a dispensing druggist a chemist implies that he has any knowledge of chemical analysis. Mr. Stansfeld's virtuous disclaimer on this point would carry greater weight had qualification been allowed any weight in the appointment of his inspectors. We do not know that calling a barrister or a retired artillery officer an Assistant-Inspector under the Local Government Board implies that he has any knowledge of inspectorial duties, and yet it is unfortunately notorious that these appointments have been made.

The rest of the propositions brought forward by Dr. Carpenter were embodied in suggestions that the President of the Local Government Board should refuse his sanction to the formation of areas which had not been approved by skilled engineers, to the appointment of Poor-law Medical Officers as Officers of Health, and to the appointment of Medical Officers of Health to small areas. With regard to the first and third, for the very valid reasons which Mr. Stansfeld believed to be conclusive against water-shed areas, he could not agree to these suggestions; but on the subject of the third—the appointment of Poor-law Medical Officers as Officers of Health—he gave full play to that power of quietly maintaining his own policy, whilst assenting one by one to the arguments of his opponents, which he possesses so conspicuously. The deputation were under the impression that the Poor-law Medical Officers were to be the Officers of Health. "Oh dear no," says Mr. Stansfeld; "all that the Act says, and all I have ever said is, that they might be the Medical Officers of Health." The deputation said that the Officers of Health required special qualifications for their duties. Here, again, Mr. Stansfeld is at one with the deputation—"I agree with you in the proposition that the Medical Officer of Health ought to be something more than even a fair average medical man." And in proof he referred to the orders recently issued by the Local Government Board, which he said would completely dispel the impression that the Board was desirous, as a general rule, that the Poor-law Medical Officer should be the Medical Officer of Health. But soon after he told them that a great many such appointments had already been made—some for five years, some for six months—and that although under certain circumstances such appointments might be unjustifiable, there might be others which rendered them very desirable. The most telling hit that he delivered was, as we have already hinted, at the plea for a Superior Officer of Health, to protect the Local Officers of Health from the odium and loss of practice which it is asserted would arise from the due discharge of their duties. In the first place, said Mr. Stansfeld, such a scheme "would not fulfil the object of protecting the medical man, because the people complained against and living in the locality would well understand who it was that posted the inspector"; and then he gave the *coup de grâce* to the protection phantom by the appeal to the courage of the profession which we have already quoted.

For ourselves, always excluding Mr. Stansfeld's mistaken action in the appointment of "assistant-inspectors," we find no fault with the general policy of his Act nor with his interpretation of it. The payment of the Medical Officers of Health, he said, is still under the consideration of the Local Government Board; and, until we know the general scale of remuneration which will prevail throughout the country, we shall reserve our comments. With regard to the expensive outlay which sanitary doctrinaires would impose upon the ratepayers, we should oppose it on the ground that all practical hygienic benefits will be best obtained by well-considered plans of visitation and inspection over areas of reasonable size, and by the utilisation of existing local machinery rather than by delivering the country over to an army of engineers. As to the question whether Poor-law Medical Officers should be the Medical Officers of Health, its solution will undoubtedly in the end rest with themselves. No medical man would enter on the duties of such an office without general preparation by the requisite study and by making himself thoroughly acquainted with his locality. Both of these things may be accomplished by the Poor-law Medical

Officers; and if they allow either an unworthy dread of the effect of doing their duty on private practice, or mere indolence, to stand between them and the boon which the new Act places within their grasp, they will only have themselves to thank. But in that case we suspect that both Parliament and the public will not be very ready to listen to the complaints of Poor-law Medical Officers. We believe that by seizing the present opportunity, and by performing the duties of their new office fairly, scientifically, and with public spirit, they will gain enormously in reputation and position, and will confer a lasting benefit on the country. Of course every man who does his duty runs some risk, and the medical profession affords no exception to the general rule. But our brethren were never reputed deficient in courage. A great chance is open to them; they are fairly afloat, and they "must take the current when it serves, or lose their ventures."

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

No. V.

Statistical details will of necessity engage much of the attention of the Medical Officer of Health, and it is indispensable that he should know how to deal with them. Statistics are dangerous tools to handle, and even the best statisticians sometimes fall into traps and errors, chiefly from assuming that the details of statistics are necessarily expressions of facts; and too often the supposed facts are no facts at all. Medical statistics are perhaps of all most liable to fallacy, and for several reasons. Errors of diagnosis form one fertile source of fallacy; and this very frequently from no carelessness or incompetency in the medical attendant. Again, a doubtful diagnosis is in a vast number of cases never cleared up by a post-mortem examination. We are reluctantly compelled to add that, to the disgrace of the medical profession, the real cause of death is occasionally falsified in order to spare the feelings of the friends of the deceased, or for other reasons. How many children die yearly of indubitable syphilis, and the medical death certificate shows some other cause? We have known confluent small-pox returned as chicken-pox, and even as "fever with eruption." We trust that such certificates may soon become a thing of the past.

There is less excuse for erroneous deductions being made from statistics by a local medical officer than by such an official as—*e.g.*, the Registrar-General: the former is supposed to have a perfect knowledge of all local influences and modifying causes bearing upon statistics; whilst the latter can rarely be so well informed as to details. There is still room for the extension of much information among medical men as to the fallacies of statistics. The interesting work of M. Quetelet, entitled "Letters on Probabilities," and the monograph of Radicke on Statistics, published by the New Sydenham Society, should be in the hands of every Health Officer.

In his periodical reports to the local authority (generally monthly) on the health of the district, a system of tabulation of diseases must be adopted; and this may in general be less detailed then the tabulations which will be adopted in the more elaborate annual report. These tabulations should embrace the number of births, and the gross number of deaths, distinguishing sex; the number of deaths in public institutions; the deaths of persons under one year, and over sixty years of age; the deaths between one and five years; and, in the annual report, the deaths during each quinquennial or decennial period of life. To these should be added the deaths from the various forms of epidemic infections and contagious diseases—small-pox, scarlet fever, diphtheria, measles, hooping-cough, continued fever, typhus, enteric fever, diarrhœa (distinguishing infantile diarrhœa from the diarrhœa of adults), and cholera respectively; and also the deaths from the chief forms of tubercular disease, diseases of the lungs, and of the heart, etc. These tabulations must be supplemented by appropriate comments. And here we may remark that it is well to adapt the comments to the audience and the occasion. Where it is the custom to print and circulate the reports of the Medical Officer, his reports may be full and detailed in their remarks on disease; but where the reports are merely read in committee or at the full board, it is advisable that any comments should be as concise as possible. In this latter case details are seldom grasped, and the leading points both of comment and recommendation should be salient and to the point, otherwise the Health Officer may be requested to abridge his reports. Above all, let anything like sensationalism be avoided: a medical report should have as much precision as if it were a legal document.

In reporting upon nuisances and other matters injurious to health, the reports of the Health Officer must be studiously guarded, for they may be called for in a court of law. If legal proceedings are taken by the local authority, this will always be by the express resolution of the Board, advised by its Medical Officer; but the legal proceedings will not be instituted or carried on by him, but in all cases either by the Inspector of Nuisances, the Clerk to the Board, or its solicitor. The Health Officer will merely appear as an expert, though it will be well for him to be thoroughly informed, by personal inspection, as to the facts of the cases in which he gives evidence; he will thus be enabled to grapple thoroughly with the cases, and also, if need be, to give evidence as a common witness in support of his subordinate officers. In no case, however, must he institute on his own authority legal proceedings, or take charge of the conduct of a case in a police-court.

The practice will of necessity vary, according to the size of the district, the constitution of the local authority, etc., as to the appearance or non-appearance of the Medical Officer of Health at the meetings of the Board, when his reports are read and considered. Should his attendance be required, he will of course know, and act up to, his true position as an adviser of the Board. He will advance and support his views and recommendations with clearness, temper, tact, and firmness. He will not enter into the discussions which may ensue relative to his recommendations, except when appealed to and by way of reply to objections; nor will he, in the event of the rejection of his proposals, resent the course taken, but will act loyally up to the resolutions arrived at by the Sanitary Board. More good may be achieved by the exercise of a wise forbearance, a respectful and courteous, but firm and dignified, demeanour, than by any amount of an opposition which may be susceptible of a wrong construction. At the same time, the Health Officer must never shirk advising to his Board again and again the adoption of the measures which he feels to be necessary.

THE WEEK.

TOPICS OF THE DAY.

We have received an official list of those persons whose names or certain of their qualifications have been erased from the Medical Register by order of the General Medical Council. During the thirteen years of the Council's existence their number has amounted to twenty-four. Of these, four have been removed on the ground that the entry of their names had been fraudulently or incorrectly obtained. In the case of four, name or qualifications, or both, have been removed in consequence of their names having been previously removed from the lists of members or licentiates of certain of the licensing bodies—the Royal College of Surgeons and the Royal College of Physicians of Edinburgh. Eleven names have been removed on the ground that the persons had been convicted of felonies or misdemeanours; and those of the remaining five have been erased for infamous conduct in a professional respect. It is well known that the Apothecaries' Society has, under the Act of 1815, no legal power of depriving its licentiates of their

licence. This is not the fault of the Society, for we believe we are right in stating that they have brought the fact under the notice of the Government, and have prayed that the necessary power to remove offenders from the list of licentiates might be granted them. But in the case of persons who possess the membership of the College of Surgeons as well as the licence of the Hall, and who gravely offend against the law of professional morality, the General Medical Council has, in fact, the power of remedying the inability of the Apothecaries' Society. If the Royal College of Surgeons erases the name of a man who notoriously is preying on the public as a quack from its list of members, the General Medical Council is not bound to keep his name on the Medical Register because he happens to be a licentiate of the Apothecaries' Society. The Act, as we pointed out last week, gives the Council the full power to remove the name of any person who is guilty of infamous conduct in any professional respect; and if they allow a name to remain on the Register, which for its possessor's notorious breaches of professional morality has been removed from the list of the College of Surgeons, because he is still in possession of the Apothecaries' licence, the Council in our opinion fails in its duty to the Profession and the public.

The meeting held on November 16 to promote the application of some of the endowments of the old universities to the cause of science and to the promotion of original scientific research will certainly command the sympathy of the medical profession. The functions of universities are threefold. There is the examining function, the teaching function, and the function of promoting sound learning in all its branches by providing the necessary means for those who will devote their talents and time to mature study and scientific research. For the latter function the fellowships of the colleges were instituted. It is therefore absurd to say that the apportionment of certain of the revenues of the universities for the promotion of original research in any branch of knowledge, and in the natural sciences especially, is contrary to the intention of the founders of these seats of learning.

We are glad to see that the notorious women, Mrs. Victoria Woodhull, with her sister Col. Tennie Claflin, were arrested recently in New York on the charge of publishing and circulating obscene literature, and, in default of finding bail to the amount of $10,000 each, were committed to gaol. Our readers will remember that some time ago we called attention to these women's disgraceful newspaper as one of the last developments of the women's rights movement in America. We know, of course, that all the respectable part of the American community regarded them and their publication with the utmost disgust and loathing. The special matter against them now is an indecent libel against the Rev. H. W. Beecher. A gaol is a fitting conclusion to "The Progress of Free Thought and Untrammelled Lives!"

Dr. J. B. Berkhart has been appointed Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria-park.

The British Medical Association is to hold its next annual meeting in London.

DR. BÄUMLER.

Dr. Christian Bäumler, who has just left us to take a professorial chair in the University of Erlangen, takes with him the goodwill and the best wishes of all his English medical acquaintance. It is not easy to define the exact functions he is now about to exercise. A contemporary calls his chair that of Materia Medica, but we understand his duties will involve more especially the teaching of Therapeutics, and to some extent also the Principles and Practice of Medicine. It would be difficult to find one better qualified for such a post. Dr. Bäumler takes with him the best wishes of a large number of professional friends.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS, IRELAND.

At the first ordinary meeting of the present session, held on Wednesday, November 20, the President, Dr. Alfred Hudson, delivered an inaugural address. He summarised the lessons taught by the late small-pox epidemic, and by the discussions thereon at several meetings of the Medical Society; and he urged the necessity for pressing upon the Government and the Legislature the views of the Profession on the question of preventive medicine in its relation to such an epidemic disease as small-pox. He then proceeded to make some remarks on the problems of the causation of disease, especially as affecting its relations to the classification of fevers, and generally to pathology and therapeutics. He observed that the study of causation exercised both an analytical and asynthetical influence—first, in separating diseases having a common character; secondly, in grouping others correlated as to their causations,—and that the latter led to the generalisation or simplification of therapeutic measures, by the application of one remedy to a group rather than many remedies to a single disease. He adduced illustrations in the groups of malarial affections, of the various constitutional affections of syphilis, of the cognate group of diseases, including erysipelas, puerperal fever, diphtheria, and scarlatina; and the applicability to each several group of quinine, mercury, and iron. As remarkable examples of generalisation in therapeutics he adduced the application to numerous cognate conditions of bromide of potassium, ergot of rye, and opium; and alluding to the recent controversy on the question how far a system of scientific therapeutics is possible, he believed it attainable only by cautious scientific generalisation founded on empirical facts, inasmuch as it must rest upon data requiring a comprehensive diagnosis of disease, and a knowledge of the physiological and therapeutic action of remedies. In conclusion, he deprecated the tendency to scepticism, and the disposition to reject tried and approved remedies because of their real or imaginary inconsistency with the theories of the day.

HEALTH OF THE NAVY FOR 1870.

The Statistical Report on the Health of the Navy for 1870, just issued, and compiled by Dr. Alexander E. Mackay, Deputy-Inspector of Hospitals and Fleets, states that the total force in the service afloat corrected for time in the year 1870 was 46,710, and the total number of cases of disease and injury entered on the sick list 56,688, which is in the ratio of 1223 per 1000, being an increase compared with the preceding year equal to 1·1 per 1000. The average number of men sick daily was 2164·3, which is in the ratio of 46·3 per 1000, being an increase compared with the preceding year equal to ·1 per 1000. The total number of persons invalided was 1646, which is in the ratio of 35·2 per 1000; and the total number of deaths was 918, which is in the ratio of 19·6 per 1000. Compared with the preceding year, there was an increase in the invaliding rate to the extent of 3 per 1000; and in the death-rate of 9·7 per 1000. This great increase in the ratio of mortality was entirely attributable to the loss of her Majesty's ships *Captain* and *Slaney*. But for those losses the death-rate would only have been 8·5 per 1000, being a reduction compared with the preceding year equal to 1·4 per 1000. The death-rate from disease alone was only 6·7 per 1000. In 1869 it was 7·3. Dr. Mackay says:—

"On the home station zymotic diseases prevailed extensively; and, as commonly happens at such times, several of the vessels employed in the force were visited by epidemics, to a greater or less extent, of different forms of infectious disease. The training ships for naval cadets and boys were the vessels chiefly affected; and in the *Britannia*, at Dartmouth, both small-pox and scarlet fever, especially the latter disease, were extensively epidemic during the year. The history and character of those epidemics are fully detailed in the report on the station.

"Ample testimony continues to be borne by the medical

officers of the home force to the salutary influences of the Contagious Diseases Act, even in its present limited sphere of operation.

"There was very little of a noteworthy character in the returns from the Mediterranean squadron. Various forms of febrile disease were the most prominent affections.

"The comparative absence of yellow fever on the North America and West Indies station had the effect of reducing the death-rate in the squadron employed there to the extent of 15 per 1000, as compared with the preceding year. Cases of that fatal form of disease did, however, occur in some of the vessels, particularly in the *Aboukir*, and ten deaths resulted.

"On the South-east Coast of America, or Brazil station, yellow fever prevailed extensively at Rio de Janeiro, Monte Video, Buenos Ayres, and at Asuncion, in Paraguay. Into the latter place it is supposed to have been imported from the Brazils. Ten cases of the disease occurred in the squadron, all contracted at Rio de Janeiro, and of these seven proved fatal. A detailed history of these cases is given in the report on the station.

"The returns from the squadron on the West Coast of Africa and Cape of Good Hope station continue to confirm, in the most satisfactory manner, the opinion which has been long entertained of the advantages likely to be derived from the short-service system which has now been adopted with reference to that station. Compared with the preceding twelve months there was a reduction in the invaliding-rate to the extent of 12·4 per 1000, while the death-rate was only fractionally increased.

"There was nothing to call for any particular notice on the East Indies, China, and Australian stations, or in the irregular force."

PURIFIED WATER.

In the *Times* of Wednesday occurs the following paragraph:—"During the recent absence of his Royal Highness the Prince of Wales from Sandringham the London and General Water Purifying Company received orders to apply their system of filtration throughout the establishment, and they completed the operation on Saturday last. It may therefore be considered that the danger arising from the former impurity of the water is now removed." It is this last sentence we desire earnestly to bring under notice, as embodying one of those dangerous errors which are all the more dangerous because apparently beyond suspicion. The most dangerous impurities of water are not removable by filtration. The substances which render a water suspicious are nitrates and chlorides, still more so ammonia (especially if in quantity); but these are perfectly dissolved in the water, and give it that cool, pleasant taste which is its most insidious property. The presence of these, if in more than slight quantity, in all probability indicates sewage contamination; and the risk is not from the nitrates and their kind, but lest the substances the origin of the nitrates should appear in the water unaltered. When these matters do appear in water, certain of their particles may be retained by a filter, but the most dangerous are too fine to be kept back, and so pass through into what is then commonly supposed to be pure water. Filtering only removes mechanical impurities—such as mud, small pieces of plants, and the like,—the water seems bright and pure after having passed through, but may retain its deadly properties. Hence arises the importance of people understanding what filters will do, and what they will not do. Assuredly they do not remove all danger.

ROYAL COLLEGE OF SURGEONS.

At the pass examination for the Fellowship of the College, which was brought to a close on Saturday last, ten candidates offered themselves, of which number six were successful; they had all previously been admitted members of the College, their diplomas dating from 1861 to 1871 inclusive. The list of successful candidates cannot be published until submitted to the Council at its next meeting, on the 12th proximo.

HOW THE DOCTOR IS ROBBED.

It is remarkable that there is no class of the public which will not occasionally receive gratuitous medical relief. They think it is no reflection on their "independence" or "honour" to rob the doctor of his fee, though they might possibly shrink from accepting a loaf of bread from the baker, or a leg of mutton from the butcher. The extent to which gratuitous medical advice is given to well-to-do persons is really astonishing. Go to the waiting-room of any medical practitioner who gives gratuitous advice, or to the "receptacle" for out-patients of any hospital or dispensary in London, and you will find numbers of respectable-looking persons, well able to pay for advice, waiting for their turn amongst those who are really destitute and proper objects of charity. The evil, however, has penetrated even below this, as will be seen by the following statement of the proceedings at the last meeting of the Shoreditch Board of Guardians. We approve entirely of the resolution to which the Board has arrived—the only one which, it seems, they could have legally passed to check an evil of the greatest possible magnitude. If the law were so altered as to constitute a recipient of parochial medical relief a pauper, with particular exceptions, the defrauders of the union and the doctor would, we think, be effectually stopped in their dishonest proceedings. Large sums having lately been expended on medical relief, the guardians decided on examining the cases. This led to the discovery that several persons whom the medical officers were attending could well afford to pay for advice and medicine. The Board has consequently resolved that in future all applications for medical relief shall (except in urgent cases) be made direct to the Board, and persons not in a destitute condition accepting medical aid will be prosecuted.

THE OVERWORKED DOCTOR.

It is difficult to conceive how some of the medical officers in the larger and poorer districts ever get through their work. More is expected from them than they can possibly perform, and yet every act of presumed neglect on their part is treated with the greatest severity. It transpired in the course of discussion at the ordinary weekly meeting at St. George's-in-the-East Board of Guardians, held last week, that one of the nurses was in the habit of attending midwifery cases, upon which the clerk immediately called attention to the fact that by the *law* the medical officer was required to attend such cases himself. Dr. Belcher said that it would be impossible for him to carry out the strict letter of the law, and after a desultory conversation intimated his intention of asking for assistance. This announcement was received with expressions of surprise and disapproval. It is to be regretted that a law does not exist to compel boards of guardians to deal justly and liberally with their medical officers.

THE PUBLIC HEALTH ACT AT LINCOLN.

The following report of the proceedings of the last meeting of the Lincoln Board of Guardians is so illustrative of the narrow-mindedness and ignorance against which the Public Health Act must make its way that we reproduce it entire from the *Lincoln Journal*. We regret to say that the chairman who set the law at defiance is a clergyman:—

"The Clerk (Mr. Danby) read a letter from the Local Government Board, recommending the Guardians to proceed to the appointment of Medical Officers of Health and Inspectors of Nuisances, under the provisions of the Public Health Act; and suggesting that, in order to secure the services of competent men, good salaries should be offered. The Chairman: It appears that we are recommended to appoint officers at large salaries. The Clerk: All that you can do is to refer these matters to a board, the town guardians forming no part of the rural sanitary authority. The Chairman: I do not see that we are bound to do anything at present, and I think the Act is a great nuisance. To make drains for every district and provide

sewers for every house we shall have to spend a great deal of money. The whole tendency of the Act is towards centralisation, because if we do not do these things they will be done for us, and we shall have to pay for them. The Clerk: The Government will pay half the salaries of the officers. The Chairman: I know; but where do they get the money from? They only take it out of one pocket to put it in another. If we are not bound to do anything, I think we should not move in the matter. The Clerk: I think we are bound. The Chairman: If any parish wants any work doing, then we should make the appointments and do it, but not without. If we appoint the officers, their salaries would commence whether there's anything for them to do or nothing. Mr. J. Maltby: Could we not appoint the officers and pay them for special work? The Chairman: Perhaps we might, but I do not think we have any duty before us, and therefore propose that we proceed with the next business. The Clerk: If you delegate your powers to a committee you cannot resume them. The Chairman: Do you think we should consider the appointment of officers or leave it for the present? Mr. Thurman: I propose we proceed to the next business. The Clerk: They can *mandamus* us to appoint. The Chairman: No doubt, but I do not see any cause for appointing them at present, as there's no work to be done. I hope the parishes will not need us at all. We have plenty of work as it is without meddling with their drains. The subject then dropped."

PROFESSIONAL ETHICS.

We are glad to announce that the Royal College of Surgeons is continuing its praiseworthy determination to remove from its Membership persons who are using its diploma for questionable purposes, and to state that at an early meeting of the Council some action will, in all probability, be taken against one of those persons who disgrace their College and profession, and violate those by-laws which they solemnly declared to observe on their admission as Members. There can be no doubt of the scope or meaning of clause 2, section xvii., of the by-laws of the College, which states that "no Member of the College shall advertise or publish any matter or thing prejudicial to the interest or derogatory to the honour of the College, or disgraceful to the profession of Surgery; and any Fellow or Member who may in any manner offend herein shall be liable to removal by resolution of the Council from being a Fellow and Member or a Member of the College." In a few weeks we shall probably have to add another name to the black list published by the General Medical Council.

THE EFFECTS OF SLANDEROUS ABUSE.

The newspapers which have taken the side of the lady medicals at Edinburgh have lately indulged in a fresh volley of abuse of the Senatus, but more especially of the Medical Faculty, for whom no epithets have been thought too coarse. The results are shown in the entries of students for the current session, which up to Monday last are reported in the papers as follows:—Faculty of Arts, 712; Medicine, 643; Law, 316; Theology, 53; total 1724. This shows an increase of 41 upon the number at the corresponding date last session. The enrolment is still going on. Turning back to the reports for the session 1868-69, or four years ago, we find that the whole number of entries in the Medical Faculty was then only 435, so that the increase already this session over that amounts to the large number of 199 students, with promise of more. Such, then, are the damaging results of all the scoldings these professors have got. But the fact thus read has another meaning, for we may infer that the entries would have been the other way if the Faculty had yielded to the gallant but unwise sentiments of the medical ladies' friends. Young men and women will never study together in this country.

CHAIR OF COMPARATIVE ANATOMY, TRINITY COLLEGE, DUBLIN.

As was generally anticipated, Dr. Macalister has been chosen to fill this newly-founded chair. The emoluments are between £300 and £400 a year. Dr. Macalister continues to hold the Professorship of Zoology in the University of Dublin.

DUBLIN OBSTETRICAL SOCIETY.

The annual meeting for the election of officers took place at the College of Physicians, Kildare-street, on the evening of Saturday, November 23, there being a very numerous attendance of members and of visitors. The following members were elected office-bearers for the year 1872-73, the thirty-fifth session of the Society. *President:* Evory Kennedy. *Vice-Presidents:* Lombe Atthill, Henry J. Sibthorpe. *Treasurer:* H. Halahan. *Secretary:* J. Rutherford Kirkpatrick. *Committee:* Fleetwood Churchill, John Denham, Alfred H. McClintock, George Johnston, George H. Kidd. The outgoing president, Dr. Kidd, delivered an address, in which he dwelt on the services rendered to obstetrical science and to practical medicine by two distinguished obstetricians who had lately passed away—Sir James Simpson, Bart., and Dr. Thomas Edward Beatty. The chair was subsequently taken by the in-coming President, Dr. Evory Kennedy, and after several able speeches had been made in response to various votes of thanks, a most successful meeting was brought to a close.

PATHOLOGICAL SOCIETY OF DUBLIN.

The annual meeting for the election of officers for the thirty-fifth session (that of 1872-73) was held in the anatomical theatre of Trinity College on Saturday, November 23. The following members were elected as office-bearers:—*President:* George Kidd. *Vice-Presidents:* Robert Adams, Sir D. J. Corrigan, Bart., Edward Hamilton, Henry Kennedy, J. T. Banks, John Denham. *Council:* Robert McDonnell, Thomas Hayden, Benjamin G. McDowel, Edward H. Bennett, William Moore, Robert Law, James H. Warton, George H. Porter, James S. Hughes, John Hamilton, Arthur Wynne Foot, Henry H. Head. *Honorary Secretary:* William Stokes. *Secretary and Treasurer:* Robert W. Smith. *Secretary for Foreign Correspondence:* Robert D. Lyons. The President for the past session, Mr. Tufnell, subsequently vacated the chair, when Dr. Kidd was installed as President. A vote of thanks to the ex-President was then carried unanimously, having been proposed by Dr. Stokes and seconded by Dr. Robert Smith.

CONCERNING INDIAN MEDICAL OFFICERS.

Another step in the right direction has been taken by the Indian authorities respecting their treatment of the military medical officers. We learn from the *United Service Gazette* that the Secretary of State for India has issued a letter on the rate of pay admissible to British medical staff officers holding administrative appointments in India, the tenure of which is limited to five years. It has been determined that these officers, when absent from India, shall be placed on a similar footing as regards furlough allowances as officers commanding divisions and brigades, and shall be allowed to receive during the period of their absence on medical certificate, which is to be restricted to six months, their Indian allowances and half staff salary. In no case will more than one grant of leave out of India be allowed. On arrival in England they will be examined by a medical board, and if reported unfit for further service in India they will be removed from the Indian establishment. It has been further ruled that British medical staff officers appointed to India subsequent to the publication of the rules of 1868 have not the option of electing the furlough rules of 1851.

VACCINATION AT SHEFFIELD.

No doubt influenced by the strictures which we have felt it our duty to make on the conduct of the Sheffield Board of Guardians with respect to vaccination, they showed symptoms of "trimming" at their last meeting, when the following resolutions were passed:—"That in no case a prosecution on the matter of vaccination take place until it has been distinctly considered and ordered by the Guardians in each particular

case; and that any person infringing the vaccination law, and failing to appear before the Guardians, when summoned, shall forthwith be prosecuted for default of vaccination." "That each vaccination officer for his respective district (Handsworth excepted) personally attend and report to the Board on the first Wednesday in each month all persons who remain unvaccinated."

FROM ABROAD.—M. OULMONT ON HYOSCYAMINE—THE VIENNA LEICHENHOF—THE TROUBLES OF ACADEMICAL CANDIDATES.

M. OULMONT, a candidate in the Section of Therapeutics of the Académie de Médecine, read a memoir before that body on "The Therapeutical Action of Hyoscyamine in Convulsive and Spasmodic Affections," being a continuation of a former paper of his, published two years since, on the physiological action of this substance. The following are the conclusions of the present memoir:—1. Hyoscyamine represents all the active principles of henbane, and the fixity of its composition allows of its being employed with a precision that is not attainable with henbane in substance. 2. It should be given at first in small doses (two milligrammes per diem), whether in the form of pills or hypodermic injections; but the dose may be increased to ten or even twelve milligrammes per diem. 3. It should be continued even after the supervention of slight symptoms of intoxication (as dryness of the throat, and dilatation of the pupils); but if these become more serious, and if cerebral symptoms are produced, it should be suspended. Such symptoms, however, soon disappear. 4. Its action is narcotic, and it is efficacious against pain, and especially in neuralgia. Its efficacy is less marked than that of opium and belladonna. 5. It exerts a favourable action in spasmodic and convulsive neuroses. It has cured mercurial tremor when all other means have failed, and in senile trembling and paralysis agitans it has produced an amelioration procurable by no other means. 6. In locomotor ataxy it is of no use, but in traumatic tetanus it has produced an amount of relief that encourages further trial.

It being in contemplation to establish in the Brussels University some improved form of institution for pathological anatomy, a report has been addressed to the authorities (*Presse Belge*, November 10) by M. Héger and two other Professors, who had been sent to Vienna in order to examine into the teaching of this branch of medical science there prevailing. They are of opinion that the reforms inaugurated by Rokitansky have had more to do than any other circumstance with conferring on the Vienna school its present celebrity. While in France or Belgium autopsies are the exception, in Vienna and almost everywhere in Germany they are the rule. In 1870, of 2689 patients dying in the hospital, 1485 were submitted to post-mortem examination, besides a considerable number examined for medico-legal purposes.

Rokitansky set out with the principle that the autopsy should never be performed by the person who has treated the patient, who can never entirely free himself from preconceived views. All those who die in the General Hospital are therefore brought to the Institute, of which he is the Director, and he and his assistants examine them without even being aware of the diagnosis that has been made or the treatment that has been pursued. This Institute is situated within the "great medical city" termed the General Hospital, in one of the courts of which it appears as a handsome building, two storeys high. It is known as the Leichenhof, and bears on its *façade* the inscription "*Indagandis sedibus et causis morborum.*" Its ground-floor opens into a large court, surrounded by a railing, where the families of the deceased assemble to recognise them and accompany them to the cemetery. The corpse, which has been examined the day before, has been reclothed and deposited in an open coffin, surrounded by flowers, and the religious ceremonies are performed in a chapel attached to the Leichenhof. These attentions much contribute to attenuate the prejudices felt by so many against autopsies. The dead are brought from the wards, and lie each on a bed, stripped of clothing, awaiting the autopsy, and having attached to a toe a small leaden plate inscribed with the number which has been entered on the register, so that all doubt as to identity is prevented. The two rooms in which the dead are thus deposited are large and well ventilated, and adjoining them is another for the municipal officer whose duty it is to verify the deaths. There are two rooms wherein the autopsies are performed—one for the medico-legal autopsies, to which students are not admitted; and the other for the clinical autopsies, wherein is a large amphitheatre for their accommodation. The rest of this floor is occupied by rooms for the assistants for the pathological lectures, as also work-rooms for the clinical professors, containing preparations, tests, microscopes, etc. On the second floor is situated the splendid museum, for which Professor Rokitansky's 65,000 autopsies have supplied ample materials. There is here also a lecture-room for the course of pathological anatomy, and the laboratory of Professor Stricker.

Every morning the autopsies are practised with rapidity, and yet with care, by the professor and his assistants; and not unfrequently the clinical professors with their pupils are present at the examination of the bodies of their patients. They are here, however, simply as spectators. Of course the diagnosis is almost always confirmed by the autopsy; and where this is not the case, the professor, returning to his clinical wards, explains to his pupils the cause of the error that has taken place.

M. Amédée Latour, in one of his recent amusing *feuilletons*, says that there are now three vacancies at the Faculty of Medicine and eleven at the Academy—a state of things never before known to exist. As to the vacancies at the Faculty, in the absence of the restoration of the *concours* they will be supplied by nomination. For each of the Academical vacancies there are at least six candidates, therefore there are sixty-six on the move; and as it is customary for every candidate to personally solicit every member of the Academy, they are literally on the move, so that not a cab is to be had. Terrible will be the mounting of stairs, and frequent the ringing of bells. As each academician is liable to receive at least sixty visits, and each candidate to pay at least eighty, we have thus a total of 5280 visits. Putting as a minimum the cab-fare at 3 fr. per visit, we have these poor candidates put to an expense of 9840 fr. without counting their gloves—say 10,000 fr., which is a little more than 150 fr. per candidate. Add to this the time, the most precious of capitals, which may surely be put at three times this sum, and we have the total cost to each candidate 600 fr. as a minimum. Oh, but this is not all! He has to print in beautiful type, on fine paper in quarto, the list of his claims for selection, of which he will want 300 copies for distribution. This will surely cost him another 400 fr.; so that his candidature will come at last to 1000 fr. Thus the sixty-six candidates now engaged will at the very least incur an expense of 66,000 fr.! This is a rather heavy price to pay; still, those who succeed do not complain. But what is surprising is the perseverance with which some candidates continue bravely to present themselves five or six times. Many are induced to persist in their candidature by apparent promises which do not prove realities; and here both academicians and candidates are at fault. There are some of the former who, through native good nature, temperament, or repugnance to give pain to a *confrère*, dare not refuse a solicitation, and promise every candidate in order that they may disoblige none. On one occasion an academician figured on each of six candidates' lists of promises, and each of these relied upon him. But as a general rule the candidates have to thank themselves for their deception, accepting, as they do, with such extreme complaisance, and drawing such advantageous con-

sequences from them, the mere polite phrases and compliments of the academicians, and not paying sufficient attention to the moods of the verbs when the academician declares he shall, or he should, be happy to contribute to the success of his visitor. When the candidate is timid and does not know how to press home his question he retires satisfied with the vaguest words, and feels sure he may place on his list of promises the name of so polite and kindly an academician, and one who so well appreciates his titles to attention. In the meantime the academician has promised nothing, having kept himself within the bounds of a very elastic conditional future, and it is no fault of his if the candidate has taken for an engagement the simple forms of puerile and good-natured civility. There are, however, academicians, although perhaps not very numerous, who say plainly and loyally "Yes" or "No," and the candidates will do well to only reckon upon such.

DISEASE AND MORTALITY AT HOME AND ABROAD.

Small-pox is very prevalent at Worcester. The Town Council are about to erect a small-pox hospital, and to carry out a strict policy of isolation.

The Berlin death-rate is more than double that of London. Typhus fever rages unchecked. It is estimated that the want of sanitary care alone has been the cause of nearly 10,000 deaths since last November. Round the Thiergarten, in the wealthy and fashionable quarter, where house-rent is higher than in Paris or Vienna, children die rapidly from marsh fever, dysentery, etc. It is no uncommon thing to see from seven to twelve corpses conveyed to the cemetery in one hearse.

The death-rate of Glasgow fell last week to 24 per 1000; the average of the five preceding years has been 31 per 1000.

In Bombay during the week ending October 15 there were 345 deaths; the annual death-rate was equal to 28 per 1000.

In Madras the 280 deaths in the week ending October 11 showed an annual death-rate equal to 37 per 1000.

In Paris 705 deaths occurred in the week ending the 16th inst., and the annual death-rate was equal to 20 per 1000.

In Brussels 54 deaths took place in the week ending the 9th inst., and the annual death-rate was 15 per 1000.

In Vienna the 228 deaths in the week ending the 9th inst. gave an annual rate of 28 per 1000. During the six weeks ending the 9th inst. the weekly deaths from small-pox steadily declined from 126 to 70.

In Rome 149 deaths were registered in the week ending the 3rd inst., and the annual death-rate was 32 per 1000.

In New York 440 deaths were registered in the week ending October 25, and the annual rate of mortality was 24 per 1000. In Philadelphia 212 deaths were returned during the same week, showing a death-rate of 16 per 1000. The Annual Report of the New York Board of Health for 1870, just published, states that the total number of deaths in the city of New York during 1870 was 27,175, and of these 17,467 were of persons of native birth, while only 9714 were of foreigners—that is to say, the native deaths were 64·25 per cent. of the whole population; therefore the excess of native deaths above what it ought to have been, according to population, is 9 per cent. of the whole mortality.

Three deaths occurred in Kensington last week from small-pox, and 4 deaths from typhoid fever in the mansions of South Kensington.

Scarlet fever has broken out in a malignant form at Leadgate, Durham, a district surrounded by collieries. No fewer than 82 cases had occurred during the month.

Small-pox is greatly on the increase in the township of Altofts.

In Hackney during the past fortnight there had been 86 deaths. This number was less than had been registered during the corresponding period of any year since 1856.

The cholera has disappeared in St. Petersburg, but small-pox still continues both there and in Moscow, in spite of all the measures taken against it.

In the metropolis last week 1277 deaths were registered, being 455 less than the average numbers.

At Oldham, between August 3 and the 23rd inst., no fewer than 381 deaths had occurred from scarlet fever.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

No. XXII.

By J. F. CLARKE, M.R.C.S.,

For nearly forty years on the Editorial Staff of the "Lancet."

THE WESTMINSTER HOSPITAL THIRTY YEARS AGO.

Cases of Alleged Incompeteney against Mr. Thomson broken down in Cross-examination—Sketches of Mr. Anthony White, Mr. Benjamin Phillips, Mr. Guthrie and his son Charles—Summing up for the Defendant—Verdict in favour of Mr. Thomson—Effects of the "Trial"—Medical Quarrels should be kept to ourselves—Object of the publication of these "Recollections."

The tide, which had been against us for three long days, had reached its height and was about to ebb. One of Thomson's surgical colleagues presented himself to give evidence. I suppress his name, because it would not tend to add force to the moral of the tale which I am about to tell. It is sufficient that he was a man of ability and of considerable reputation. When he presented himself for examination I felt certain misgivings that our case was nearly hopeless. He was called to prove that Mr. Thomson had performed the operation of amputation of the thigh, and by his negligence had all but lost his patient from avoidable hæmorrhage. At the time of this operation, Thomson, who was a great admirer of Liston, had adopted, at the recommendation of that great surgeon, his plan of arresting hæmorrhage in amputation of the thigh by pressure of the thumbs of an assistant on the femoral artery. I recollect no case in which this was not successful in the many operations by Mr. Liston which I witnessed in the theatre of the (then called) "North London Hospital." After the witness had given an account of the operation and the considerable quantity of blood that was lost, I saw of course at once that if blame was due to anyone it was to the assistant. I asked the witness who was appointed to control the hæmorrhage, and, after some fencing with my question, he was obliged to admit that he himself was the assistant! The effect of this cross-examination was very favourable to us. I did not find it necessary to ask another question. Another witness broke down on cross-examination; this was Mr. Anthony White, the Senior Surgeon of the Hospital. His evidence was to the effect that he had been present at an operation for lithotomy on a child, and that Mr. Thomson had wounded the rectum to a serious extent, and that the consequences were fatal. The parts had been preserved by Dr. Todd, who at the time of the occurrence was the lecturer on anatomy at the school connected with the Hospital.

The preparation was produced, and handed to the chairman and his colleagues, to whom, of course, it was a mere puzzle. There, however, was the fatal incision, and it was certainly of a formidable extent. Mr. White considered that a surgeon who could commit so grave an error was ignorant and incompetent. I asked him if he founded his opinion of Mr. Thomson's skill as a surgeon on this case alone. His reply was—"No; but on many others." I said—"If you please, we will confine ourselves now to this case;" which was the only one before us in evidence. After apologising to him for presuming to cross-examine so eminent a surgeon, I said—"Might not this accident occur to surgeons of great eminence and acknowledged ability?" He thought not. I asked him if no case had come to his knowledge in which a hospital surgeon had made such a mistake. He knew of no such case. I certainly was astonished at his answer. The time for adjournment for the day had now arrived, and I asked permission to continue my cross-examination on the following morning. This was granted, and the meeting broke up. In walking home with Thomson and Edwards that evening, the former for the first time exhibited anxiety as to the result of the day's proceedings. He inquired of me whether I could on the following morning produce any cases in which a surgeon had wounded the rectum in lithotomy on a child. I said I thought I could, but I was not quite certain. It is a somewhat singular circumstance that a short time before I had to review the Jacksonian prize essay of Crosse on "Lithotomy." I had a vague and indistinct recollection of some cases in point in that essay. I had a copy of it in my possession, and after seeing Thomson home to his house in Berners-street, Edwards and

myself examined Crosse's book. We found in the appendix three cases in which the rectum had been wounded in lithotomy in children at the Norwich Hospital. Fortified by these facts I took my place on the following morning before the Board under the conviction that I would damage if not destroy the serious adverse evidence of Mr. White. I took Crosse's essay with me, and the cross-examination was to the following effect:—"Mr. White, you are well acquainted with the Jacksonian Prize Essay?" He acknowledged that he was; that he recollected the year Mr. Crosse had obtained it; that the subject was lithotomy; that that year, if not on the Jacksonian Committee, he was president, and in virtue of his office was on the Committee for examining the essays sent in by the various candidates. If he had not examined Mr. Crosse's essay he was supposed to have done so; at all events, he agreed with the award that was made in his favour. I now handed him Crosse's book, and begged that he would be good enough to refer to some cases in the appendix (mentioning their numbers). This he did, and confessed that he had not read them before.(a) This told wonderfully in our favour, and I felt pretty certain that we should get a verdict. The prosecution seemed to have lost heart, and no serious case was afterwards presented. The "trial," which had been going on for several days, now had attracted great interest, and the large board-room was usually well filled by governors of the Hospital.

After the evidence of Mr. White, the Committee, who had sat with great regularity for six hours a day, gave signs of having had "enough of it," and hinted as much to the prosecution. Amongst the witnesses was Mr. Benjamin Phillips, the Assistant-Surgeon to the Hospital; but his evidence, though intended to be adverse, rather told in our favour.(b) Mr. Guthrie and his son Charles took no active part in the proceedings before the Committee, but it was well known that they had been opposed in secret to Thomson. In fact, Thomson had been instrumental in keeping young Guthrie out of the post of Assistant-Surgeon, and was now on very bad terms with both father and son, and a desperate effort was made by them to oust Thomson, as his retirement would cause a vacancy, which it was intended Charles should fill—that is, Phillips would be elected Surgeon, and Charles Guthrie Assistant-Surgeon.(c)

At length the trial came to a close so far as the evidence was concerned. The prosecution were called upon to sum up the evidence, but this they declined to do. We were asked if we had any witnesses to call. I immediately rose. The room was crowded, excitement was at its height, and very many who were present had evidently no knowledge of the position in which we had been placed. I commenced my speech by saying that we did not intend to call witnesses—indeed, the question was almost a mockery, so far as much of this evidence was concerned. How were we to call witnesses to events, some of which had occurred many years before, particularly as we had had no notice whatever of the charges we had to meet? I complained bitterly of this, as also of the manner in which the chairman had allowed new evidence to be adduced after my cross-examination, and yet refused me leave to cross-examine on the new matter. I thanked one of her Majesty's counsel, who was on the Committee, for occasionally remarking on the injustice to which we were exposed in this particular, and regretted that our chairman seemed so completely ignorant of the rules of evidence. I characterised the inquiry as a persecution and a conspiracy—odious for its personal bias, and unprecedented in the manner in which it was conducted. I knew of no such "trial," except that of Warren Hastings; in this the evidence extended over half a lifetime—was "begun in one generation and finished in another." But Warren Hastings was made acquainted with the charges he had to answer, had time to collect evidence for his defence, and had for his counsel the most experienced and ablest advocates of the day. But we had no chance of controverting evidence of events said to have occurred many years

(a) It is remarkable that Mr. White should have been unacquainted with these cases; but I am quite certain he answered my questions with perfect candour, and without the slightest mental reservation. But it must be remembered that Sir Astley Cooper was complained of for not giving in his admirable "Lectures on Surgery" some fuller account of what had been done in his time by foreign surgeons of eminence. His reply was characteristic, and to my mind perfectly satisfactory:—"I have not time to read all that takes place abroad, and only profess to give you rather the results of my own experience than those of others." Who shall say the great surgeon was not right in the course he pursued? Anthony White was, in my opinion, one of the greatest surgeons of his day. He had almost every natural attribute for his calling. He had marvellous powers of observation; his perceptive faculties were of the very highest order; he had a calm, reflective, and suggestive mind, and was never at a loss in any emergency. He was not great as an operator, but superior to many who held a higher reputation in this respect than himself; but he was unfortunately the very impersonation of indolence. He was a martyr to the gout, and perfectly oblivious of engagements, professional or otherwise. He was scarcely ever in time for an appointment, and hobbled round the wards of the Hospital, speaking little, but always to the purpose—aphorising rather than lecturing, but aphorising with the force of Rochefoucauld and the sententiousness of "Lacon." His contributions to the literature of Surgery are meagre and few, but if he had written a work on the subject it would have taken a place with that of Watson in Medicine. As an examiner at the College he was able and just, and put his questions with a perspicuity and conciseness which were truly admirable. In spite of his painful infirmity he was kind and considerate to the candidates, whom, if he rejected, never failed to do justice to his kindness, urbanity, and consideration. "O si sic omnes." He was a good-natured, kind-hearted man; by the few who knew him intimately he was regarded with the highest esteem and affection.

(b) Mr. Phillips was somewhat advanced in life when he was appointed Assistant-Surgeon to the Westminster Hospital. To some extent he might be regarded as a disappointed man, and never obtained a high reputation outside of the Profession. He was more of a philosophical than a practical surgeon, with retiring manners, a melancholy expression of countenance, and a morbid sensitiveness, which did not tend to augment his popularity. But his work on "Scrofula" is a proof that he was a man of great learning and sagacity. I once unwittingly offended him by calling him in the *Lancet* a "literary surgeon." He came up to me at one of the meetings of the Royal Medical and Chirurgical Society, and said, in a tone of serious complaint, "You have behaved uncivil to me." "Why, surely," I replied, "you would not have thought me civil if I had called you an illiterate surgeon!" He retired from the Profession before the usual time, took a house at Hendon, and died after a prolonged and painful illness.

(c) Guthrie, who closed his career as a military surgeon at Waterloo, very early attained to a great reputation, and started in practice in London under the most favourable circumstances. He was the very antithesis of his colleague White. Shrewd, quick, active, and robust, he was always in good spirits, and most punctual in all his appointments. He retained his vivacity to the last, and might be said to have died in harness, keeping his reputation and strength to the end. Phrenologically the two men were striking contrasts. White had a large head, a somewhat heavy, overhanging brow, clear, sagacious eyes, but denoting his indoleut proclivities. Guthrie's head was rather small, but indicative of energy and self-possession. His black, piercing eyes were really remarkable; I do not recollect any member of our profession in whom these organs were finer or more characteristic. Unlike White, he was voluble to a fault. He talked as easily as Gratiano, but not an "infinite deal of nothing." Everything that Guthrie said was to the point, and practical, but his fluency tempted him occasionally to say unwise things, and frequently gave evidence of his deficiency of early training. I recollect many instances of this; but it is not necessary to recall them here. I may, however, refer to one of his remarks, because at the time it subjected him to much ridicule and annoyance. He had, chiefly from his early connexion with military men, founded the Royal Westminster Ophthalmic Hospital. This institution for many years was sustained and supported mainly by Guthrie's early friends in the Peninsular War. Guthrie was of course the chief surgeon, and he prided himself much on his skill in performing the operation for cataract. In one of his clinical lectures on this subject he foolishly said that before a man could operate successfully for cataract, he must have "put out a hatful of eyes." This foolish remark was taken advantage of by the *Lancet*, and the new hospital was called the "blind manufactory." There is no doubt that the constant repetition of this phrase, and abuse of him generally, annoyed Guthrie very much. At all events he brought an action against the *Lancet* for libel, but it never came to trial, Guthrie at the last moment withdrawing the record, and of course paying all the expenses. It is difficult to understand his conduct in this matter, for Guthrie would assuredly have obtained damages. But Guthrie's valour in a good cause, or rather in a cause in which he was not personally interested, was much more striking than when he had a personal object to serve. Then he became really pusillanimous. I never recollect him being present for any length of time during our quarrels at the Westminster Hospital, in all of which he or his son were interested; but in questions of *public* importance, as for instance those affecting the College of Surgeons, he was "the bravest of the brave." I have spoken of his readiness and fluency of language: they were to a certain extent of great value to him, but, as I have said, led him occasionally into mistakes. They served him, however, on one remarkable occasion to good purpose. I allude to his delivery of the "Hunterian Oration." Nothing could have been more striking than his remarkable delivery of this annual performance. He gave it from beginning to end without a single halt or mistake, and without notes of any kind; indeed, it was a most marvellous effort—I shall not easily forget it. He started off, *in medias res*, "Gentlemen, we have assembled on this occasion to celebrate the birthday of the great John Hunter," and to the end of the Oration, which lasted an hour, no one could fairly find fault with a phrase, or the mode of delivery. The *Lancet* were annoyed at his undoubted success, and attempted to sneer at him as "Orator Guthrie"; but he was *the* "orator," and the sneer fell powerless. I have heard many Hunterian Orations, to which I shall refer in a future article, but I remember none more worthy of the name and more to the purpose than that of "Orator" Guthrie. My first acquaintance with Guthrie commenced in the latter part of 1833, when I was a pupil of Dermott, at the Gerrard-street School of Medicine. Guthrie gave a course of lectures on Surgery every session at the Little Windmill-street (or Tyson's) School. He derived no emolument from them, and students of all the neighbouring schools were free to them. I with others attended, and was charmed with the clearness of his delivery and the sound common sense of his teaching. He invariably put on before lecturing a large check apron covering him entirely, and armlings of the same material—indeed, he was always scrupulously neat in all he did and in his dress. Years after I became acquainted with him personally in connexion with the Westminster Hospital, for some time as his antagonist, but afterwards as his supporter. The more I saw of Guthrie the more was I impressed with the excellence of his heart, and his real, good, honest nature. I was on terms of intimacy with him during the last few years of his life, and had many opportunities of testing him. He was somewhat "off-hand"—brusque, it may be said,—some went so far as to think him offensive. But whatever the *manner*, the *matter* was of the true metal—the "gold was the gold for all that." Charles Guthrie was a good surgeon, and as an operator would, if "the fates had not been against him," have taken a high place. He died in the very prime of life.

before. We had to rely, as it were, on what might turn up in cross-examination. Besides, Mr. Thomson had the disadvantage of being represented mainly by an inexperienced and youthful advocate. I nevertheless looked confidently at the result. I could not see how the verdict could be against us after the cross-examination of the last two witnesses. I denounced the disingenuousness of the former of these two, and declared that he should have been put upon his trial in that case, and not Mr. Thomson, for it was his negligence that imperilled the patient's life. I spoke with great respect of Mr. White and his evidence, but commented strongly on the position in which we should have been placed if we had not, as it were by accident, been able to demolish his evidence on cross-examination. I ventured to remind the Committee that their task was one of unusual delicacy and difficulty; that they would no doubt do justice to the best of their ability; much of the evidence they had heard would be to them difficult to understand and unravel—and finished with a quotation from the justly styled "Prince of English Surgeons" (Sir Astley Cooper), that "the merest blockhead might find fault, but it required a man of intelligence to appreciate the true character and abilities of a surgeon." I sat down after speaking for half an hour, amidst a scene of excitement such as I have rarely witnessed. The room was crowded to excess, the audience were anxious for a "division," and many calls were heard of "Divide, divide."

The chairman did not venture to sum up the evidence; but, naturally assuming that all must or ought to have heard it in its completeness, with good sense and with the highest principles of honour, left the issue with the governors. A division took place, and the charges against Mr. Thomson were negatived by a considerable majority, amidst loud and prolonged cheering. I have spoken of Mr. Thomson's rashness and want of self-control. During the trial, at which he was constantly present, he more than once embarrassed his "assessors" by his interference with the proceedings. On one occasion he rose during the examination of a witness against him, and denounced his evidence in unmeasured terms, defied the tribunal, and cared not "a fig at what decision the governors might arrive." A gentleman personally offensive to him, and who, I think, in giving evidence against him had outstepped the bounds of modesty and discretion, was denounced by Thomson in language anything but parliamentary. On going to Thomson's house in Berners-street the same evening with my colleague, Edwards, we found him in a state of great excitement, and with a new horsewhip in his hand. He informed us that he had made up his mind to inflict corporal chastisement upon the offender. We of course made an indignant protest against such a mad proceeding. It is scarcely necessary for me to say that we repudiated Thomson's most injudicious interference with the proceedings in the board-room, and we kept him quiet under the threat that Edwards and I would "throw up our briefs" if he interfered again. This had the desired effect. This "trial" had a very decided influence upon me as to the advisability of bringing our wrongs and grievances before the public. I believe that there is nothing more calculated to bring the Profession into contempt, and consequently to injure it, than "ventilating" our professional grievances or shortcomings. The public really care little or nothing for us, and, regarding us as always differing, may be amused at the doctors' quarrels, but take not the slightest interest in them. "Breaches of professional etiquette," as they are called, are common enough, but to rush into print to expose or attack our neighbours is often unjust and always unwise, for it never does good to either of the parties concerned. From a very long and extensive experience of these cases, I have come to the conclusion that both parties are usually to blame, and in the vast majority of instances the patient, ignorant and careless about "etiquette," is the prime mover in the quarrel. If we have to discuss important questions relating to the ethics of our profession, they should be discussed before an influential and impartial "Court Medical." It would be well for us on all occasions to "wash our dirty linen at home." Another result of this trial was not without benefit. It broke up to a certain extent the system of intrigue and the personal quarrels which had prevailed for many years in the Westminster Hospital. It no doubt ruined Thomson, but he stuck to his post, and died Consulting Surgeon to the Hospital.

The object I have had in view in the publication of these "Recollections" is not to give a history of the Profession, nor even a minute or "pre-Raphaelite picture" of the occurrences and the men I have attempted to describe. I have rather wished to give some gossiping accounts of them, faithful and impartial, I hope and believe, as far as they go, but open, no doubt, to the objection that they are somewhat unconnected and diffuse. But I write entirely from memory and *currente calamo* at times that I can snatch from more important work. These sketches may serve to amuse, and yet render a more important service, as they rescue from oblivion many things and the characteristics of many men which would otherwise be lost to the world of Medicine. If I speak too much of myself, this is inevitable from the nature of the articles themselves, for the truth of which I hold myself responsible, having been an actor or personal observer of every thing or person I write about.

DRUITT TESTIMONIAL FUND.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions since the 20th instant:—

	£	s.	d.
Sir William Gull, Bart.	10	10	0
Sir Henry Thompson	10	10	0
Mr. Erasmus Wilson	10	10	0
Dr. De Grave (Croydon)	10	0	0
Sir Henry Holland, Bart.	5	5	0
Mrs. Withers Moore (Brighton)	5	5	0
Mr. Cæsar Hawkins	5	5	0
Mr. Soelberg Wells	5	5	0
Dr. Morell-Mackenzie	5	5	0
Dr. G. Owen Rees	5	0	0
Dr. Philip Frant	5	0	0
Dr. Withers Moore (Brighton)	3	3	0
Dr. William Cholmeley	3	3	0
Mr. Henry Smith	3	3	0
Dr. Meadows	3	3	0
Dr. C. Currie	3	3	0
Dr. William Guy	3	3	0
Mrs. Bacot	3	3	0
Mr. E. Newton	2	2	0
Dr. Edward B. Gray (Oxon)	2	2	0
Dr. Francis Hawkins	2	2	0
Dr. Scrivener	2	2	0
Dr. Alexander Fleming (Birmingham)	2	2	0
Mr. Henry Arnott	2	2	0
Mr. Septimus Sibley	2	2	0
Mr. Critchett	2	2	0
Mr. John F. Mould	2	0	0
Rev. J. Henry Carnegie	2	2	0
Dr. Hughlings-Jackson	2	2	0
Dr. Marcet	2	2	0
Mr. D. Fletcher	1	1	0
Mr. Taylor	1	1	0
Dr. R. H. Semple	1	1	0
Dr. Hensley (Bath)	1	1	0
Dr. P. Allen	1	1	0
Dr. Langdon Down	1	1	0
Mr. Henry Thomas (Sheffield)	1	1	0
Mr. Walter Rivington	1	1	0
Prof. Turner (Edinburgh)	1	1	0
Dr. — Brown (Edinburgh)	1	1	0
Dr. Sanders (Edinburgh)	1	1	0
Mr. E. Davis (Brentford)	1	1	0
Mr. E. L. A. Clarke	1	1	0
Mr. Francis Mason	1	1	0

The name which appeared in last week's list as "Dr. Fuller," should have been "*Mr. William* Fuller."

PAUPER LUNATICS.

The Guardians of the St. George's (Hanover-square) Union some two months ago passed a resolution to the effect that the practice of "handing over poor persons suffering from temporary insanity to the parish medical officer, with the understanding that he is to be paid if he fails, and not to be paid if he succeed in restoring them, is so opposed to common prudence, common sense, and common humanity, that it is hoped the Local Government Board will see that it be discontinued." In a letter read at the meeting of the guardians on the 20th inst., the Local Government Board thus express their views upon the subject:—

"The guardians appear to misunderstand the state of the existing law upon this question. A medical officer can be required at any time by the guardians or relieving officer to give a certificate of the state of any pauper on whom he is attending, as part of his official duty and without any charge for such certificate. (See Article 208, No. 3, of the Order dated April 23, 1870.) When the pauper is lunatic, and the medical officer considers the case to be one proper for removal to an asylum, it becomes his duty to give notice thereof to the relieving officer of the district, and for this notice he is not entitled to be paid, but is subject to a penalty for omitting to give it. (See sect. 70 of 16 & 17 Vic., cap. 97.) If the relieving officer make an application to a justice of the peace for an order for the removal of the lunatic to an asylum, the justice may call upon any medical practitioner, and may consequently call upon the medical officer, to attend before him and give evidence by certificate as to the insanity of the pauper and his fitness for removal. For such attendance and examination of the lunatic the medical man is entitled to be paid a fair compensation, and if the guardians think fit they can pay the proper amount, under sect. 103 of the above-named Act. If not, the justice can make an order upon them for payment, under sect. 69.

"The Board do not see any injustice or impropriety in this arrangement, and they are not prepared to take steps to procure its alteration.

"The Board cannot entertain the suggestion that any

medical practitioner would act contrary to his professional duty and to the rules which govern honourable men, and would give notice to the relieving officer, and afterwards give evidence before a justice of the peace, that a pauper was a fit person for removal to a lunatic asylum, in any case in which to the best of his judgment the facts were otherwise.

"In conclusion, the Board may remark that in any case in which the medical officer considers that the lunatic is really 'a proper person to be taken charge of and detained under care and treatment,' he is bound to take the course already referred to, and is not legally justified in allowing the lunatic to remain at large in the hope of being able to effect a cure."

POOR-LAW MEDICAL OFFICERS AND SANITARY APPOINTMENTS.

A MEETING of the Council of the Poor-law Medical Officers' Association was held on Tuesday evening last, November 26, to consider the future action of the Society as to that part of the Public Health Bill which deals with the position of Poor-law Medical Officers in relation to public health. The following gentlemen were present:—Dr. Rogers, President; Dr. Pinder, Dr. Hall, Dr. Dixon, Dr. Bond, Dr. Jones, Dr. Birchell, Dr. Smith, Dr. Welch, and Mr. W. Barnes, Secretary.

It will be remembered that at a former meeting of the Association the question was discussed, and a majority of the members present affirmed that the Poor-law Medical Officers would be unwilling to undertake the duties and responsibilities of Officers of Health on account of possible injury to their private interests by the conscientious discharge of public duties, which would bring them into collision with interested parties in the shape of Poor-law guardians and private patients, owners of property in their respective districts. This timid view was at the time combated by some members present, and it is probable that these dissentients, dissatisfied with the opinions then expressed, promoted the present meeting for the purpose of further discussion.

At the meeting on Tuesday last an unusual number assembled, under the presidency of Dr. Rogers, and the proceedings were commenced by Dr. Thomas, one of the District Medical Officers of St. Marylebone, who proposed a series of resolutions to the following effect:—

1. That as the sanitary condition of any locality depends in great measure upon the condition of the houses which it contains, and especially those inhabited by the poorer classes, it is desirable that sanitary districts should not be too large to be regularly supervised by the Health Officer.

2. That as the Medical Officers of the Poor-law are by the nature of their duties in a position to obtain the earliest and best information with regard to sickness in general, and the existence of epidemic disease in particular, as well as all conditions among the poor affecting the public health, the sanitary state of the houses, the existence of nuisances, overcrowding, etc., the Council are of opinion that the appointment of Poor-law Medical Officers as Health Officers affords the best prospect of the Public Health Act being carried out with success.

3. That the Council, having noticed with great regret the observations put forth upon various occasions of late, to the effect that Poor-law Medical Officers are not competent to perform the duties of Health Officers, and are unwilling to take such appointments for fear of offending influential persons who may have a pecuniary interest in the non-removal of nuisances, deem it necessary to repudiate both imputations. They desire at the same time to point out that while the Act does not compel the appointment of the Poor-law Medical Officers as Health Officers (and no Medical Officer could be appointed against his will), it is much to be desired that the Medical Officers should be ready to fulfil the new and important duties prescribed in the recent orders of the Local Government Board if called upon to do so—a step that could not fail to raise the service in public estimation.

4. That it appearing from recent speeches of the President of the Local Government Board that he does not share the views of those who deem the Medical Officers incompetent to perform the duties of Health Officers, and repudiates the imputations of others that the Medical Officers would require protection in the discharge of their duties, the Council desire to place on record their grateful sense of the justice of the President's sentiments, which they believe to fairly represent the general feeling of the service.

5. That a copy of the foregoing resolutions be forwarded to the President of the Local Government Board and to the medical journals.

An animated discussion then took place; and as all the speakers supported the views of Dr. Thomas, we shall do no injustice to the individuals by presenting a summary of the arguments employed by the various speakers. It was forcibly urged that as Mr. Stansfeld appeared willing to raise the professional status of Poor-law Medical Officers, and at the same time increase their salaries, it would be highly impolitic, not to say ungrateful, to offer any opposition; that by making the District Officers subordinate to Public Health Officers with large districts, and casting upon the District Officers the responsibility of reporting all offences against public health, all the odium would attach to the reporting officers, and all such injury would accrue to their private interests as would occur if they were Health Officers—that, in fact, their position would be degraded to that of Inspectors of Nuisances, without the compensating advantages of increased professional rank and pay. It was also urged that if Medical Officers declared themselves unwilling to undertake the responsibilities of Health Officers, others would be found—such as surveyors, engineers, architects, etc.,—willing and able to perform the duties; and thus the control of the public health would pass out of the hands of the medical profession into those of persons less capable of discharging such duties.

The responsibility of reporting cases of overcrowding, and any other conditions unfavourable to public health, at present lay upon the District Medical Officers of the Poor-law as a moral responsibility; and that such reports, unsupported by a legal and definite responsibility, did more damage to their private interests than any action sanctioned by the duties of a public office.

The opinions of the various speakers here epitomised are thoroughly in accordance with the views already expressed in this journal, and we congratulate the Council upon their intention to support Mr. Stansfeld in his expressed intention to place the administration of the Public Health Act under the control of the District Medical Officers, a body of gentlemen thoroughly competent to perform such duties, and presenting a body of trained men ready at hand and willing to carry out their duties. We do not believe in the pusillanimity which would reject a proffered boon for fear of possible injury to private interest.

After all the speakers had been heard in favour of Dr. Thomas's resolutions, Dr. Rogers (President) rose to reply. He said that in the early stage of the movement he had entertained and expressed opinions similar to those of previous speakers; but he had received such a number of letters from District Medical Officers in country districts, expressing their unwillingness to undertake the responsibilities of Health Officers, that he felt bound in the interest of country Medical Officers, who were alone affected by the regulations of the Public Health Act, to enter his protest against the resolutions which he perceived they intended to pass. Dr. Rogers reminded the meeting that nearly all the gentlemen present were metropolitan officers, and that such men were more independent of individual opinion than country practitioners, and therefore he thought it would be more to the interest of District Medical Officers in the country that they should be called upon to report only to an Officer of Health having a wide district, upon whom alone the odium would fall of taking legal steps to enforce sanitary regulations, and that such Officers of Health should be made independent of all considerations of private interest by the receipt of salaries sufficient to make them independent of practice. Dr. Rogers further urged that it was impracticable to suppose that upwards of 3000 District Medical Officers should be appointed Health Officers, and, after producing some letters from Medical Officers in country districts in support of his views, concluded by emphatically protesting against the resolutions, saying that the meeting represented exclusively the opinions of metropolitan Medical Officers.

The resolutions were then formally put to the meeting, and carried unanimously; Dr. Rogers (President) being the only dissentient.

ACADÉMIE DE MÉDECINE.—M. Théophile Roussel, Member of the National Assembly, and the author of a well-known work on "Pellagra," and a recent report on "Alcoholism," on which legislative measures have been founded, has just been elected into the Section of Public Hygiene.

REVIEWS.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New edition, brought down to the present time by SAMUEL A. LANE, Consulting-Surgeon to St. Mary's and the Lock Hospitals, etc. Vols. I. and II. London: Longmans.

[SECOND NOTICE.]

WE resume our account of the article "Inflammation" at the period of the early microscopists. At this time the instrument had been discredited by Hunter; and no wonder, when Sir Everard Home made out muscular fibre to be composed of a linear series of blood corpuscles! Chief among those who made use of its powers were Dr. B. G. Babington and Herbert Mayo; but no great advance was made till the introduction of the cell-theory of Schleiden, and its application to the human organism by Schwann and Hughes Bennett. The early microscopists laid it down as an axiom—the truth of which was universally acknowledged—"that inflammation has its principal seat in the capillary vessels." With the cell-doctrine this view was changed; the most important part of inflammation was observed to be outside the vessels. It was there the fate of an exudation of blood plasma was determined; and the fate of the exudation gave its character to the inflammation. The action of vessels in the new philosophy gave place to the action of tissues. Early in this period the significance and importance of the changes in the white corpuscles attracted the attention especially of W. Addison and C. J. B. Williams, but only to be neglected for thirty years. Men's minds were still filled with the notion that cells mainly originated, not from pre-existing cells, but from granules, as described by Schleiden.

Next it was seen that the tissues themselves took part in the inflammatory process; but the first really broad views on the subject were expressed by Paget in his admirable lectures at the Royal College of Surgeons. But the doctrines of Virchow gave the *coup de grâce* to the action of vessels and to the fate of exudations. His fundamental doctrine was, and is, *omnis cellula e cellula;* and his cells he found in the omnipresent connective-tissue corpuscles. According to him, in inflammation "the composition and constitution of the part undergo changes, which alter its relation to neighbouring parts, whether bloodvessels or other structures, and enable it to attract to itself and to absorb from them a larger quantity of matter than usual, and to affect the circulation. Every form of inflammation with which we are acquainted may be explained in this way. It begins as an inflammation from the moment when the absorption of matters takes place and changes in the matters commence." But our ideas of cells had soon to be altered. Research after research made it clear that living matter might exist without cell-wall, nucleus, or nucleolus, and that so constituted it was capable of fulfilling every function of life. Foremost in attacking the cell doctrine was Lionel Beale, whose work, however, had the infelicity to be under-estimated—mainly, we believe, from his use of terms not generally adopted, and which he himself has at last laid aside. For this living matter, devoid of definite form, he proposed the term germinal matter; now he calls it bioplasm; usually it is denominated protoplasm.

We now reach a period in which the history of inflammation is hard to follow: change succeeded change so rapidly, discovery superseded discovery, that it is hardly possible to give a clear summary even in the space at the command of Dr. Druitt, still less at ours. We cannot, therefore, do better than commend our readers to turn to this portion of Dr. Druitt's work, assuring them that in it they will find each step carefully recorded in a fashion not elsewhere attainable; for in this department the article is in the meantime unique. The views now in vogue tend, however, to show that no part alone is concerned in inflammation, that the vessels undergo changes as well as their contents, that the extra-vascular tissues are affected as well as the substances in their interstices which have escaped from the vessels. In short, *vascular action, interstitialism,* and *texturalism* all seem to have a share in inflammation.

A curious chapter is that on Chemical Theories of Inflammation, but any approved form of these chemical doctrines dates back only to the time of Liebig. The two great supporters of the chemical theories in this country have been Bence Jones and Richardson. Thus, Dr. Bence Jones, in his ingenious "Lectures on the Application of Chemistry and Mechanics to Pathology and Therapeutics," holds that "Inflammation is a 'state of oxidation beyond that which occurs in health.' Neither vascular nor nervous disorder lie so near the root of inflammation as chemical disorder. This last is independent of and anterior to the others. This is shown by tracing the beginnings of inflammation in such a texture as the cornea, where neither vessels nor nerves exist. Inflammation begins as an exaggeration of a natural process. Inflammatory heat proceeds from an excess of the process which causes healthy heat. The diseased oxidation and heat production begin in the tissue outside the capillaries; the increased action soon reaches the capillaries; the oxygen-bearing red globules are attracted in excess by the demand for oxygen; hence follow increased circulation and stasis, pain and sensitiveness, and exudation of serum and fibrin. Fever may follow. 'When the increase of chemical action is excessive, the whole blood participates in it.' So said Galen. 'Peroxidation not only causes an excess of fibrin, but it produces a higher state of oxidation of fibrin than exists in health.' The blood globules become more adhesive, so that they roll together and sink more rapidly when blood is drawn, 'whilst the altered fibrin contracts more firmly than ordinary fibrin usually does.'" (*Op. cit.*, p. 85.)

"Dr. B. W. Richardson's theory of the fever accompanying inflammation was (in 1861) that it was due to a process of superoxygenation extending throughout the system at large, and that local inflammation is secondary, as are also the increased temperature of the body and the quickened respiration and circulation. The conditions which give rise to the process of superoxygenation are such as lead to arrest of the circulation in one or other of the vascular organs, and to a suspension in the process of excretion in such organs. Whenever the circulation is temporarily arrested in one portion of the body (as, for example, when the function of the skin is suppressed by exposure or cold), the circulation of the blood is shortened, according to the extent of the arrest in function, and the burden of the circulation has to be borne by the parts in which the circulation remains free. Additional labour is thus thrown on the heart, a quickened pulmonary circulation and a quickened respiration are established, and, as a sequence, there is a superoxidation of the blood and inflammatory fever. Meanwhile secretions of the decayed organ accumulate in the blood, and upon their presence in excess the local manifestation of inflammatory action depends, the character of the inflammation varying with the character of the arrested secretion.

"According to the same author, the great increase of fibrine in cases of acute inflammatory fever has more to do with the fatal result in many instances than the local inflammatory mischief. There is, he contends, a limitation as to the amount of fibrine that can make the round of the circulation. If the blood is surcharged with fibrine, a portion is left undissolved in the liquor sanguinis. The heart *churns* out the fibrine. The fibrinous deposit embarrasses the heart, and sinking symptoms succeed as the result of the obstruction to the course of the blood-stream; these concretions, when present, being diagnosable by certain distinct symptoms."

The phenomena of heat in inflammation have in all ages attracted attention, and of late more so from the impulse given to their study by the adoption of the theory of the conservation of force. They are on this doctrine intimately connected with the chemical phenomena of the system. "Briefly, it may be said that the heat of the body depends on chemical change, and this chemical change is essentially oxidation; that air and food are burnt up within us, and expelled in the shape of consumed material, whilst force in the shape of heat or mechanical work is liberated. In estimating the exact measure of these changes we encounter considerable difficulties. Thus our food does not consist of simple carbon; to render that substance available for our wants, it must be combined in certain fashions, and the heat produced by the combustion of the combined matters is not the same as the heat produced by the combustion of each element separately. Then, again, our nitrogenous food is only very imperfectly consumed—it reappears mainly as urea; but urea itself is capable of giving out considerable combustion heat, so that this also must be taken into consideration.

"Increased activity of function implies increased nutrition and oxidation, and thus increased production of heat. Thus a gland actively engaged in the process of secreting increases in temperature, contraction of muscle gives rise to increased temperature in the blood issuing from it, and as one of the phenomena of inflammation is increased through perverted nutrition, this also invariably finds expression in elevation of temperature."

The only other section we shall allude to, and that mainly

to show the completeness of the article, is the one on neuro-pathological theories of inflammation. In this is contained a summary of the most recent experiments on nerve influence as a cause of inflammation, which are well worth attention; but the author points out that the theory of inflammatory change depending on nerve action alone does not rest on mere experiment, but, as Dr. Laycock has shown, may be deduced from observation as well as experiment.

The section on treatment is full and interesting; first the author points out what is to be done by way of preventive treatment, extolling especially the virtues of the watery extract of opium. Next occurs a passage on expectation, from which we make an excerpt exceedingly characteristic of the author:—

"But there is a good deal to be said on the abuse of 'expectation,' a fault of which the late Sir John Forbes cannot be acquitted in his 'Nature and Art in the Cure of Disease' (London, 1857). There is a great deal of cant uttered about Nature, as if Nature never let patients go on from bad to worse, and as if 'Nature' in the mind of a reasonable being meant any more than 'matter of fact,' or 'what is.' In the admirable words of Porzio, 'Natura rei est Res ipsa.' (Erasistratus, Romæ, 1682.) Neither can it be denied that the 'efforts of nature' are often insufficient, as Hoffmann well showed, and sometimes as fatal as the worst achievements of meddlesome physic. What effort of art can be more mischievous than that 'effort of nature' which sets up spasm of the eyelids in ophthalmia, spasmodic cough, the spasms of dysentery, the exhausting drain of cholera, the profuse suppuration in osteitis?—all of which are to be suppressed, not as benevolent efforts of an intelligent agent, but as so many mischievous aberrations of the animal machine. Much is made of a saying of Hippocrates (*Epidem* vi., ed. Kuhn, iii., 636), Νούσων φύσιες ἰητροί,—as if φύσιες was φύσις, and as if it meant Nature was the physician of diseases, whereas φύσιες signifies 'temperaments.' That celebrated expression of Lord Bacon is recited *ad nauseum*,—'Man, the minister and interpreter of nature,' etc.; whereas, in the noble words of Torti, the physician had need be not the *minister*, but the *magister*, and ought to control the natural actions if experience shows them to be mischievous. Again, if there be practitioners who play the quack by using a multitude of useless or mischievous remedies, there are others who play the quack by an affected purism, by pretending to use 'natural' means only, and to reject 'drugs'; as if it were not 'natural' for a civilised man to use drugs, or as if leeches, opium, iron, quinine, mercury, and iodide of potass in appropriate cases could not remove diseased conditions which go on unchecked even under rest and the best-devised diet. The young practitioner should look upon this nature-worship as a kind of quackish foppery, and will, after experience, agree with the son of Sirach that 'the Lord hath created medicines, and he that is wise will not despise them.' (Ecclesiasticus, chap. xxxviii. v. 4.)"

Again he says, speaking of curative treatment,—"Before entering on this we must warn the young practitioner to avoid that tendency which the common structure of language promotes, to consider inflammation, or other disease, as something apart from the individual patient in whom it occurs, and to allow himself to use violent remedies against a supposed sthenic 'condition,' whilst after all these remedies have to be borne by a human being, and perhaps a very feeble one. I, who caution others, cannot avoid the conventional practice of speaking of inflammation as a separate entity—for instance, when I say that 'chronic inflammation causes induration,' etc. The proper correction for these infirmities of thought and speech is found in the determination to think of the patient—the living soul and body—as the thing to be treated, and not the disease."

(*To be continued.*)

Verslag over de Werking der Reglementen op de Prostitutie te Rotterdam (*Report on the Influence of the Regulations on Prostitution in Rotterdam*). By Dr. A. M. Ballot.

An attempt is made at Rotterdam to control prostitution by police regulations, the principal of which are that every woman who wishes to prostitute herself must give notice to the police, in which case she receives a little book and is registered. The public women live either in public houses (brothels) or in private lodgings. Those who live in brothels are visited every week by the doctor attached to the police; those who live in private lodgings must present themselves every fortnight to the doctor of the police for inspection.

There are two sorts of public houses—brothels and rendezvous. Everyone who desires to establish such a house must have the permission of the police.

In 1821 there were eleven brothels and six rendezvous registered by the police. (How many unregistered there were it would not be easy to say.) There were twenty-one dancing-houses.

From 1852 to 1870 the number of registered public women diminished from 300 in 1852 and 362 in 1856, to 271, 246, 263 in 1868, 1869, and 1870, whilst the population of Rotterdam was augmented from 88,800 to 123,000. Now, all authorities on this matter agree that these numbers do not give the total number of public women, but only those who are registered, or, to speak more exactly, those who are known; and that clandestine prostitution is increasing in the inverse ratio to the diminution of public prostitution.

The number of those who at the visitations were found infected with syphilitic or other venereal disorders was thus:—From 1852 to 1862 amongst the registered women, 1·86 per cent.; amongst the clandestine, 29 per cent. (when women are caught in brothels or rendezvous, who have no book from the police, they are at once taken to the police-station and examined by the doctor of the police); of the foreign women—that is, those who come from other places, and who are examined by the doctor of the police before they receive a book—20 per cent. were found infected.

From 1863 to 1870: The registered women are divided into those who live in brothels and those who live in private lodgings. Of the first were found infected 1·03, of the second 2·15 in 100 women; of the clandestine 30·7, and of the foreign women 24·4 in 100 were found infected.

Amongst the girls of the lower classes there is a great liking for finery and pleasure. They do not like to go out as servants, but many prefer to become *modistes* or seek other employment where they have more liberty.

Schools, both public and private, are in abundance in Rotterdam, and really near to perfection. A young woman who cannot read is unknown.

Because the tables of the report show a diminution of the prostitution, whereas it is generally known that clandestine prostitution is increasing, the author subjoins some tables collected at the town municipality, giving the births, deaths, illegitimate children, stillborn, etc., during forty years, with the view, if possible, of showing the increase of prostitution by reference to the increasing number of such births.

He has collected statistics of the population, births, deaths, etc., of forty years—1831 to 1870—and divided them into eight periods of five years each, of which the average number is given. The first and last periods are as follows:—

	1st period.	8th period.
Proportion of births to the population.	1 in 24	1 in 25
,, stillborn ,, .	1 in 357	1 in 490
,, illegitimate children ,, .	1 in 260	1 in 337
,, stillborn to births . .	1 in 13·6	1 in 18·2
,, illegitimate children to births	1 in 11	1 in 13·6
,, stillborn to deaths . .	1 in 13·8	1 in 15·6
,, marriages to population .	1 in 127	1 in 113

Here, also, the conclusion would be that all is for the best; but these statistics, as the other, can only be used with criticism. The number of illegitimate children is diminishing, but gradually it has become a custom amongst the lower classes to get married when the necessity is pressing, whereas in previous years such a woman was in great danger of being abandoned by her lover, whereby the number of illegitimate children was augmented. As to another cause of error, there is great suspicion that criminal artificial abortion is more frequently committed, and when this happens in the first months of pregnancy naturally no mention is made of it either in the columns of illegitimate or stillborn children.

But immorality also shows itself in the great number of infant deaths; therefore at the end of the Report a table is inserted giving the infant mortality during the same eight periods.

1. Mortality under five years, reduced to a number of 1000 deaths of all ages. The periods, beginning from the first, give the following numbers:—445, 446, 488, 489, 459, 503, 538, 527.

2. Mortality under one year; here the mortality is reduced to the number of 1000 births of the same year—211, 233, 248, 252, 256, 266, 266, 274 (after one year more than one-fourth of the children born are already dead).

3. Mortality under five years of age, reduced to 1000 births. (The table is constructed in this way:—Of the births of a year those who die in the same year belong to the deaths under one year; they who die between one and two years belong to the

births of the previous year, etc.) The resulting numbers are —394, 382, 415, 437, 434, 451, 436.

The infant mortality is therefore greatly increasing.

The writer concludes with the remark that the whole chapter of the prostitution is an ungrateful labour; that everywhere you are surrounded with fraud; and that even the statistics furnished by the best sources must be used with great caution.

GENERAL CORRESPONDENCE.

IMPROVEMENT IN INHALING MACHINES.

LETTER FROM DR. ROBERT J. LEE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you permit me, through your columns, to communicate an improvement in inhaling machines which I believe will be found useful in those cases where it is necessary to employ inhalation as a remedial agent. It must have occurred to many that if we could obtain a good current of vapour without the trouble of drawing it by an effort of inspiration from a receptacle, it would be possible to use such a current in cases of croup, tracheotomy, and other diseases of childhood which are not reached by the inhalers in use. In practice it will be generally found that the ordinary kettle gives too much moisture, and, besides, is difficult to get ready in an emergency; while it is impossible to use any kind of closed vessel to which the mouth is to be applied without producing a certain amount of fatigue and discomfort. The means by which such a current of warm vapour may be obtained are well known to engineers, and are employed in the familiar instance of the locomotive to give draft to the furnace. It will be seen, on reference to the accompanying illustration,

that the same plan of producing a powerful current of vapour —that is to say, of atmospheric air slightly moistened—may be conveniently applied to inhalation. There is a small jet contained within the tube from which the vapour issues, and, as this jet communicates with the boiler, as soon as steam is generated the air is drawn in at one end of the tube and expelled at the other, in consequence of the motion produced by the jet of steam.

Various applications of this current of vapour will occur to those who perceive the advantages it offers for the treatment of all kinds of disorders of the respiratory organs. For young children it is better to introduce the tube within the curtains of the bed, and so warm the enclosed atmosphere, which is constantly kept in motion and renewed by the machine, and in this way a temperature of 80° or 90° may be kept up for any length of time. As various medicated fluids, such as carbolic acid, etc., will pass out with the steam, there is no difficulty in administering such remedies by mixing them with the water in the boiler.

An ingenious foreign artist has carried out the plans I furnished him with in the manufacture of the machine, which is really so simple and convenient that I can recommend it to the attention of the Profession with confidence that it will be found to answer perfectly the purpose for which it is intended.

I shall be glad to send you at some future time the strength of the solutions which may be used for inhalation. Messrs. Maw, Thompson, and Co., of Aldersgate-street, will be ready at any time to show the inhaler to those who may wish to see it.

A fair trial has been given of the machine for a year in the Westminster Hospital, in order to see whether the patients, who are not particularly intelligent, would be able to manage to use it. I am glad to say that both nurses and patients are perfectly satisfied with it. I am, &c.,

ROBERT J. LEE.

PATHOLOGY OF HYSTERIA.

LETTER FROM MR. METCALFE JOHNSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—After a perusal of an article in the *British and Foreign Medico-Chirurgical Review* on the above subject, I am induced to offer a few remarks, seeing that the various authors whose works are passed in review do not make this suggestion, which has occurred to my mind for some time.

The name hysteria presupposes the existence of ὕστερον (*husteron*); but as the symptoms of this disorder very frequently occur in the male sex, where no ὕστερον exists, the nomenclature is manifestly erroneous.(a) As I have already elsewhere shown, and shall hereafter show, this train of symptoms is resulting from abnormal states of the ganglionic nerve, I would propose to substitute the name "ganglionism" as giving a clue to its pathology, and in most cases promising a better chance of relief and cure.

It is manifest that the organs which, when diseased, give rise to the train of symptoms known under this title are under the control of the sympathetic or ganglionic nerve. Every one is aware that the great mass of hysterical symptoms arise from some lesion of the genital organs in the female, and most frequently this disorder is traceable to either functional or organic mischief in the ovary. Nevertheless, these organs by no means monopolise the cause of these anomalous symptoms; but frequent cases show that the gastro-intestinal tract is in fault; and some of the most distressing cases of disordered and unnatural æsthesia are those in which the uterus and its appendages are to all intents and purposes in a state of perfect integrity.

If we refer to those cases of eccentric and unhealthy sensation which have been noticed and spoken of as fasting girls and other similar instances, we shall find that in many of them the uterine and ovarian functions only partake of the general disturbance, and are by no means manifestly the cause of the disorder. But an examination of them will show that the seat of mischief is in the gastro-intestinal tube, which, under the influence of the great sympathetic nerve, communicates its effect to the sensorium, and produces the train of symptoms so well known as disorders of sensation, thought, and emotion. In the *Medical Times and Gazette* for October 28, 1871, I have, amongst other cases, recorded one in which a train of symptoms in some measure similar to those of the then celebrated "fasting girl" were evinced. In this case the cause of the train of symptoms, so far as post-mortem section would lead us to diagnose, was due to the lodgment of large quantities of scybalous matter in the lower bowel; and the uterine and ovarian derangement were only a part of the general disturbance, and by no means the cause of the anomalous mental peculiarities by which the case was marked.

In other papers, which I have published from time to time both in the *Medical Times and Gazette* and the *Lancet*, I have recorded cases in which the effect of ganglionic insanity is pointed out; and one case especially occurred in the person of a young lad of gentle nurture, who from apparently some disorder of a ganglionic nature conceived a taste for following the most revolting parts of a butcher's trade. It will be common to every medical man's experience to see cases of hysteria in which the uterus and ovaries are fulfilling their proper duty, but where disordered feeling receives the name of hysteria as its diagnostic. There is perhaps no class of diseases which claim our more

(a) ὕστερον literally, according to Liddel and Scott, refers to the afterbirth (χορίον), and is hence still less appropriate.

frequent attention than those in which hysteria in some of its forms developes itself, and I am inclined to the opinion that if we treat them with such means as are calculated to relieve an oppressed sympathetic nerve we shall have the greatest prospect of success in our practice.

The use of the word hysteria, as misleading as to its pathology, seems to me to be a "custom more honoured in the breach than in the observance," and I would suggest that in its place the term "ganglionism" should be employed, as embracing not only the nerve through which the symptoms are developed, but pointing to the various organs under its control through which the various symptoms are excited. The pathology of ganglionism is constant only in one point, and that is in its effects upon this part of the nervous system.

I may perhaps be here accused of "riding a hobby," but I cannot but repeat what I have before observed in a paper in the *Lancet*, in September, 1868, "that the ganglionic nerve has not received that attention that it deserves in our considerations of the great subject of pathology."

If you can find space at an early date for these few remarks you will oblige Yours, &c.,

Lancaster, November. METCALFE JOHNSON, M.R.C.S.E.

THE RECENT MEETING OF THE COUNCIL OF THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

LETTER FROM DR. J. ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As President of the Poor-law Medical Officers' Association—the report of whose council-meeting, held last night, you will in all probability publish in your this week's issue—I trust you will permit me to explain why I was compelled to differ from the resolutions which were brought forward. It will be noted that not a single member of our provincial council was present, and therefore no one competent to appreciate and explain their position, which, from actual experience and much correspondence, I know to be absolutely and entirely different from that enjoyed by the metropolitan District Medical Officers, in common with those of all large towns. The District Medical Officer in the metropolis, and his *confrères* in provincial cities or populous places, may fearlessly report the existence of overcrowding, and generally the neglect of sanitary requirements, because if he affronts the owner or occupier of such property, such owner is but a unit among, it may be, thousands in the locality. In rural districts and small provincial towns the District Medical Officer lives among and by his attendance on the very classes, some of whose property he will have to condemn. Now, it is competent for a provincial Officer to report that such and such causes of disease exist in his locality, if his functions end there, and he be not called on to determine what shall be done, with its consequent pecuniary outlay, and certain resentment thereat.

Though thus compelled to differ from my friends of the London council, I can understand and fully appreciate their sense of the injustice which has been done them since the passing of Sir B. Hall's Act, by their being the unremunerated medium through whose agency our several metropolitan Medical Officers of Health have obtained reputation and emolument for their apparently painstaking earnestness in publishing information as to the insanitary condition of their respective districts.

The other points referred to in the resolution I do not consider it to be necessary to touch on, however much I may object to the conclusions. I am, &c.,

33, Dean-street, November 27. JOS. ROGERS.

SEA-VOYAGES IN PHTHISIS.

LETTER FROM MR. T. E. SCOBELL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I was much interested in reading in the *Medical Times and Gazette* of November 16 a letter from Mr. Hermann Jones on "Sea-voyages in Phthisis," and should like to make a few observations on the same.

Three years ago, on account of a tendency to tubercular consumption, I was advised to take a sea-voyage to Australia, having previously wintered in the South of France. I accordingly determined to follow the advice given me, and was fortunate to pay my way as surgeon in charge to a large passenger vessel belonging to one of the best mercantile firms in London. I had under my charge several passengers who were undertaking the voyage for the same purpose and complaint as myself, two of whom were in the second stage of pulmonary phthisis, one in the first stage, and one in the third. The latter died, and of the remaining three one is working as a curate in a large parish, another has returned to his business, and the third—viz., myself—has been working as a general practitioner in the country, exposed to all kinds of weather.

I so far agree with Mr. Hermann Jones in that, if cases of pulmonary phthisis are far advanced, not only is it useless to send them on a long sea-voyage, but absolutely cruel to advise them to leave their native land, friends, and home comforts, to die amongst strangers on board ship, where nursing and comforts so requisite in such cases are out of the question; but, on the other hand, I am of this opinion: that if a case of pulmonary phthisis is not far advanced, the greatest possible benefit must accrue to such patients in voyaging to the Antipodes in a well-victualled, ventilated, and roomy ship.

I am, &c., T. E. SCOBELL, M.R.C.S. Eng.

Plympton St. Mary, Devon, November 22.

CLINICAL TEACHING IN GLASGOW.

[To the Editor of the Medical Times and Gazette.]

SIR,—The communication which appeared in your last number on "Clinical Teaching in Edinburgh" animadverts upon a system which exists to a greater or less extent in all hospitals in which the attendance of students is large. In Edinburgh the fact that certain special privileges are enjoyed in the matter of clinical tuition by some of the physicians and surgeons must necessarily conduce to the overcrowding of their wards with students. A system which was some years ago introduced into the Glasgow Royal Infirmary by the managers has been attended with most advantageous results. Under our former method I believe that two of the physicians and two of the surgeons, in rotation, undertook the duty of giving qualifying clinical instruction, while the others were for the time being precluded from any part in the work. The consequence was that the students (some 300 on an average), divided as they were into four groups, overcrowded the wards, and anything like thorough or methodical bedside instruction was almost an impossibility. The principle of the system now pursued may be described as free trade in clinical teaching, all the physicians and surgeons being, in respect of liberty of teaching, perfectly on a parity; while, on the other hand, the student may elect to attend the *clinique* of any teacher whom he chooses, the certificates of all of them being recognised by the qualifying boards. In a hospital with upwards of 500 patients, with five physicians and five surgeons, there is perfect scope for the working of this system. Four of the physicians and an equal number of the surgeons have the winter clinical classes, so that the evil of the aggregation of students in unwieldly classes is greatly diminished. It is doubtless true that some of the teachers have larger classes than others. This, however, is inseparable from a system of open competition, and, provided the largest classes are manageable in size, not necessarily an evil. I believe that the honourable rivalry which now exists in the Glasgow hospital has been attended with the most satisfactory results, both to teachers and students. It is a noteworthy fact that the classes are every year becoming more nearly equalised in point of numbers. I am, &c., A SENIOR STUDENT.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 12.

Mr. J. A. KINGDON, Vice-President, in the Chair.

DR. W. OGLE, of Derby, communicated a paper by Dr. Arthur Ransome, Consulting Surgeon to Lloyd's Hospital, Altrincham, entitled "On the Respiratory Movements in Man; with an account of a New Instrument for measuring the Movements of the Chest." Exact numerical records of the movements of the several parts of the chest-wall are needed, both as physiological data and in the study of disease. All the methods of mensuration of these movements hitherto in use, when passed in review, are found to be faulty for many purposes, in that they record either the simple gross enlargement of the circumference

of the chest, or merely the resultant of the true dimensions of the motion. Most of the movements on either side of the sternum take place in three planes at right angles to one another; and, owing to the variations in even healthy breathing, it is important to measure all the dimensions of the motion during one act of breathing. An instrument for doing this had been devised by the author. [Its construction and the mode of its application having been demonstrated, the possible sources of error in its use were pointed out, and graphical representations of the several motions were shown.] The small extent of costal motion in ordinary breathing, remarked by Haller, Hutchinson, and Sibson, rendered it necessary to observe chiefly forced respiration. In this action, in points near the ends of the sternal ribs the chief motions were forward and upward, the forward movement being most equable and starting much more rapidly at first than the upward rise, which took place chiefly at the latter portion of the act of breathing. The ordinary action of the diaphragm seemed first to be increased; then the lower ribs, in most of the cases examined, seemed to have the precedence in rising, and were straightened at the angle between them and the costal cartilages; the spinal column was curved backwards; and finally there was a forced raising of the whole bony cage. In expiration after this effort the phenomena were reversed in order. This account differs in some respects from that of several authors, who, however, differ among themselves, probably in consequence of the control which the will can exercise over the several motions. The order of movement of the ribs was examined, both by means of tapes and by Dr. Sanderson's stethograph, and the different types of breathing were observed in males and females by the same method. The differences in the rates of motion forward and upward were accounted for partly by the mechanical conditions of the action, the ribs being considered as rigid bones, partly by other considerations. The chief regions examined were the sternum at its upper, middle, and lower portions, the clavicles, and the third and fifth ribs. Tables showing the extent of motion in these parts in adult males and females, in childhood and old age, and in different positions, were drawn up, and a want of perfect parallelism in the sternal movement was shown to exist in some cases. The sternum moves usually more than the clavicle, and the ratio of the forward to the upward motion is somewhat greater; the lower end moves slightly more than the upper, but there is evidence of some retarding influence from the action of the diaphragm, a conclusion supported by Traube's experiments. The clavicles move most in the final effort of breathing—they have no outward motion,—and this movement only grows distinct on the second and third ribs, increasing as we descend. The forward push of the ribs is very remarkable. The fifth and seventh, and sometimes the second and third, have more forward movement than the sternum, and this dimension of the motion often equals the upward rise. There is much evidence of independent movement in the several ribs. In women and children the ordinarily high ratio of the forward to the upward dimension is still further increased, but in old age it is diminished to the lowest point compatible with any rise of the ribs. In most of the women examined the motions on the left side exceeded those on the right; in men the contrary was the case. Position materially influences the movements, and muscular strength is also an important element. In disease the motions are naturally less extensive than in health, but there were several cases of pleurisy and phthisis in which there was evidence of an exaggeration of motion over sound parts to compensate for loss of motion elsewhere. Loss of movement was chiefly conspicuous in emphysema and asthma, but also in chronic bronchitis, although the proportions of the several dimensions of the movement were but little altered. In phthisis it was remarkable usually how small was the extent of motion even on the healthy side, and in both males and females one of the earliest indications of disease was diminution of movement over the part immediately affected. The ratio of the forward to the upward motion was much lessened, except in some very chronic cases, in which large, dry vomicæ existed, and the disease was for the time quiescent. Practical deductions may often be made from these records, and they are useful both in tracing the course of disease and in estimating its virulence.

Dr. Sibson said this instrument registered three movements it was true, but were all these accurate? One error would certainly arise from the compression on the skin, hence the difficulty of examining fat people. He had, therefore, adopted the plan of compressing with the thumb, and applying his instrument to the thumb-nail. Dr. Sibson also criticised the points which had been selected for testing the movement of the ribs. In emphysema that movement was even reversed, and the intercostal spaces were drawn inwards. Below the sternum, at its lower part, there was little lung to expand, and so movements were restrained. Low down, too, the ribs did not move so much forward in inspiration, owing to a portion near the vertebræ extending backwards in inspiration. The paper contained, he was pleased in one way to see, no material alteration from his own views expressed thirty years ago. He referred to the fixation of the ribs over an inflamed spot; this might be due to nerve influence or to want of air. He should not think of compressing by bandages under such circumstances, though slight support might do good.

Dr. Powell said in emphysema the fixation of the chest was not due to rigidity, but to over-distension. In phthisis he thought a little restraint might do good. Pain had great influence in restraining movement, and so, in one sense, pain here might do good by favouring restraint.

Dr. Anstie said in pleurisy restraint was of use, especially in the shape of a stout pitch-plaster. This might even prevent the return of the acute stage. So in peritonitis, arresting the motion of the intestines by opium was of great service.

Mr. Barwell said it was impossible to measure the movements of bones under skin, as the skin slipped away as the bone moved.

Sir W. Gull, Bart., communicated a paper by Dr. J. Lockhart Clarke "On Progressive Muscular Atrophy, accompanied by Muscular Rigidity and Contraction of Joints, with Examination of the Brain and Spinal Cord." A man at the age of 30 became affected with frequent vertigo, which lasted for three years. From this period he found that he was obliged to be very slow in all his movements, and that if he attempted to move his limbs quickly they trembled very much. Subsequently he felt weakness in the left leg, so that he would suddenly fall down, without feeling giddy; and the calf of that leg began to waste. Then the muscles of the right leg wasted, and four months later he noticed wasting of the muscles of the left shoulder. He complained of severe dragging pain in the arms and legs. These symptoms gradually increased through a number of years, so that at the age of 58 he was quite unable to stand, or even turn in bed, or feed himself. There was great muscular rigidity. Almost all the muscles of his body were much wasted, especially those of the upper extremities. The respiratory movements were very feeble. There was no trouble with his bladder, nor any noticeable alteration of cutaneous sensibility, but electric sensibility was almost abolished. His speech was indistinct and nasal. Deglutition became difficult, and at last almost impossible, and saliva ran from his mouth. The fibrillar tremors and rigidity of the muscles wholly disappeared during the last week of his life. Parts of the cerebral convolutions were thickly interspersed with corpora amylacea, and many of the blood-cells of the white substance were enlarged. The cells of the grey substance were not altogether healthy. The pons Varolii was somewhat below the average size; its bloodvessels were much dilated, and in some instances had partially or wholly undergone disintegration at particular spots, leaving empty tubular spaces. The corpora amylacea were thickly interspersed. The medulla oblongata was about one-fifth below the average size in the adult; all its nuclei were decidedly smaller than usual, and their cells were more or less affected by pigmentary degeneration. The diameter of the spinal cord was at least one-fourth less than the average in the adult. The grey substance, from one end to the other, was severely damaged by a variety of lesions and degenerations. In all regions of the cord the nerve-cells of the anterior grey substance had undergone considerable degeneration—some of them had wholly disappeared by gradual pigmentary wasting, or by falling into heaps of granules; of those that remained the processes were either lost or reduced considerably in size.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, November 16.

Hy. Letheby, M.B., M.A., President, in the Chair.

The minutes of the last meeting having been read by Dr. Vinen, one of the Honorary Secretaries, a discussion ensued as to the right of associated members to vote on any occasion, they having voted at the last meeting upon a motion put from the chair.

A letter from Mrs. Aldis, acknowledging the vote of con-

dolence passed at the former meeting, was read and ordered to be entered upon the minutes.

Mr. Liddle's acceptance of the office of Treasurer, in the place of the late Dr. Aldis, was also signified.

Dr. Tripe moved the following resolution:—"That every member who shall subscribe to the funds of the Association shall be entitled to vote upon any motion put from the chair."

Dr. Iliffe seconded the motion.

Mr. Burge opposed it, and proposed, as an amendment—"That none but ordinary members shall be entitled to vote upon any occasion."

Dr. Hardwicke seconded the amendment.

Dr. Dudfield thought in such cases that no subscriptions should be received from associated members, as it appeared rather hard that those who subscribed to the funds of an Association should have no voice in its proceedings.

Dr. Tripe replied that there were at present only four associated members; but whatever the number, they should either be allowed to vote or their money should not be taken. If they were not contributing members, they would have no more claim to a voice than visitors had; but as long as they contributed they were, to all intents and purposes, members.

The amendment was carried.

The President then proceeded to remark that he had received several requests from chairmen of quarter sessions throughout the country to know what salary analysts should receive and how they should be paid, and he submitted to the meeting the following suggestions, with a view to collecting the sense of the Association in replying to such inquiries. He estimated there would, on an average, be required about 250 analyses from each analyst appointed under the 5th Section of the "Adulteration of Food, Drugs, etc., Act." The analysts might be paid either by salary alone, or partly by salary and partly by fees, or by fees entirely. He therefore suggested that if paid wholly by salary, each analyst should receive £175 per annum; if partly by allowance and partly by fees, then at the rate of £1 1s. each for the first 100 analyses and 10s. 6d. each for the remainder; if paid wholly by fees, then the scale should range from 2s. 6d. to 10s. 6d. per analysis, that being the scale of fees required by the Act to be paid by any purchaser of articles of food, etc., desirous of having such articles analysed.

Dr. Tripe approved of the suggestions.

Dr. Stevenson also approved the scale.

Mr. Burge found that some vestries had already appointed analysts at merely nominal salaries, and thought they had been premature. He also advocated the establishment of public laboratories.

Mr. Liddle thought that Medical Officers of Health, as a rule, would not be found generally competent. At all events, he spoke for himself.

The question was then put and approved.

The President then called attention to the fact that the 5th Section required that analysts should be persons of "competent medical, chemical, and microscopical knowledge." Appointments had been made in the metropolis of persons without medical knowledge. The Secretary of the Local Government Board should have his attention drawn to such.

Dr. Iliffe thought that chemical knowledge was more required than medical.

Dr. Hardwicke thought that every medical man was competent to acquire in a very short time the requisite chemical knowledge.

After a few remarks from Dr. Woodford and from Dr. Gibbon, who hoped that the fees should not be dependent upon convictions under the Act, as was contemplated by at least one of the metropolitan vestries, it was resolved that a copy of the suggestions under Section 5 be forwarded to Mr. Stansfeld.

An interesting paper, entitled "A Narrative of the first Year's Work of the Sanitary Aid Society at Hastings," by Mrs. Blomfield, was then read by the President. The contents were too voluminous for insertion *in extenso*, but the main object of the Association appears to be to prevent the spread of infection by the adoption of disinfecting processes—keeping children who had suffered from scarlet fever, small-pox, etc., from returning too early to school; providing for them healthy retreats during their convalescence; purifying their person and their clothes; teaching in detail to the parents the application of disinfectants; and yet inculcating this knowledge and doing this work in subordination to the doctor. Mrs. Blomfield pointed out most forcibly and lucidly how, by immediate attention to every case as it arose, and especially by disinfecting articles of clothing before they left the sick-room, and again at the laundry before washing, the infection itself was speedily stamped out. With regard to the expenses incurred in this good work, thirty-three cases of scarlatina cost £27 10s. 7½d., one case of small-pox £2 7s. 9d., four cases of slighter illness 11s. 11½d., clothes for giving away 5s. 7d., printing and postage 8s. 8d., unavoidable carriage £1 0s. 8d.—in all £32 5s. 2d. from February to July (both inclusive), from July to December 30 *nil*. In this cost is included a supply of such articles as beef-tea, oranges, milk, etc. The following winter's work cost in round numbers about £18, including the cost of convalescent retreat. In one case all the bread-earners of a family were disabled except one. It is right to add that the Board of Guardians liberally supplemented the efforts of Mrs. Blomfield. The risks saved to the well-to-do public may be briefly summarised in the absence of the reeks of poisonous wash-tubs in public thoroughfares, and the avoidance of contagion spreading in public places—such as churches—by contact with infected neighbours; the prevention of corpses being carried to the cemetery in public cabs; and the requirement of forty days' quarantine of all patients thus under supervision. Mrs. Blomfield appeals for co-operation in her good work.

Mr. Liddle proposed a vote of thanks to Mrs. Blomfield.

Dr. Hardwicke seconded the motion, and highly eulogised the assistance that the medical profession derived from such voluntary aid.

Dr. Dudfield and Dr. Gibbon also spoke to the same effect.

The latter took occasion to allude to the Druitt Testimonial Fund, which he hoped would be energetically promoted.

The President said he only knew of the movement through the public papers, but he was sure the Association would gladly receive any invitation from the Testimonial Committee to co-operate in its object.

OBITUARY.

DR. GRIFFITH HOOPER GRIFFITHS.

Dr. Griffiths was a pupil of the late Charles Fowler, Esq., F.R.C.S., Senior Surgeon of the Cheltenham Hospital, from whose tuition he proceeded to St. Bartholomew's. Here, in 1848, he gained the Botany Prize presented by Dr. F. J. Farre, the Wix Prize for the "best essay on the connexion between the study of ancient and modern literature and the studies of medical science," and otherwise distinguished himself. Having completed his medical education in 1849, he was for eight years sole officer of the very large union of Leominster, Herefordshire, consisting of eighteen parishes, obtaining there the high approbation of the guardians and the confidence and affection of his patients. In the year 1862 he became a Licentiate of the Royal College of Physicians at Edinburgh, and a Doctor of Medicine of St. Andrews. He retired from the Profession in 1867, through failing health, and afterwards devoted himself entirely to science, several branches of which he had cultivated with ardour from his early youth. He was for four years Honorary Secretary of the Worcestershire Naturalists' Field Club, and a honorary member of the Leeds, Worcester, and Birmingham Scientific Societies, to all of which he sent contributions either of papers or specimens. A work on British Bryology was in course of preparation, but his labours were suddenly arrested by the increasing malignity of his disease. He died of cancer in the head, on November 19, aged 49, at his native town of Cheltenham.

ROBERT ARTHUR ELLIOTT, M.R.C.S., Etc.

Only in July last we recorded the death of the father of this gentleman, Mr. Robert Elliott, F.R.C.S., Senior Surgeon to the Chichester Infirmary; it is with great regret we now add that of the above amiable member of our profession, which took place suddenly on Wednesday, November 13, from an attack of hæmatemesis which commenced on Sunday evening. The subject of this notice pursued his professional studies at Guy's Hospital, and on July, 4 1856, was admitted a Member of the Royal College of Surgeons, soon after which he acted as Assistant-Surgeon under his father at the above Infirmary, when, having obtained on May 30, 1857, through the kindness of the Duke of Richmond, an assistant-surgeoncy in the army, he soon after proceeded with his regiment (the 95th) to India, where he at once became an especial favourite with his brother-officers. He had not been in that country long before his liver became seriously affected; but he refused to leave his post until a year or two since, when, after nearly fifteen years' service, he returned home, hoping to obtain his well-deserved promotion. This no doubt would have been the case but for his death at the early age of 40 years. He leaves a young widow for whom he had been unable to make any provision.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 21, 1872:—

Brown, Frederick Warren, Uppingham.
Hill, Thomas Wood, South Kensington.
Measures, John William, Holloway.
Wilson, Samuel, Newcastle-on-Tyne.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Burchell, Edward, Leeds School of Medicine.
Tomlin, Robert Francis, Guy's Hospital.
Trevor, Frank Wollaston, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BERKHART, J. B., M.D., M.R.C.P. Lond.—Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria-park, E.

BEVERLEY, MICHAEL, M.D., M.R.C.S.—Assistant-Surgeon to the Norfolk and Norwich Hospital, Norwich.

BULLER, F., M.D. Toronto, M.R.C.S. Eng.—House-Surgeon to the Seamen's Hospital, Greenwich.

DOUGLAS, WILLIAM, M.D., Edin.—Assistant Medical Officer to the Female Department of the County Asylum, Sedgefield, Durham.

ELLIOTT, THOMAS, A.B., M.B. Dub. Univ.—Assistant House-Surgeon to the Bristol General Hospital.

MCNALTY, FRANCIS CHARLES, A.B. Dub., M.B., C.M., L.A.H., and L.M. Dub.—Assistant-Physician to the Metropolitan Free Hospital, Devonshire-square, City.

MUNRO, WILLIAM STEWART JAMES HOME, M.D. King's Coll., Aber., M.R.C.S. Eng.—Medical Officer for the Nettlebed District of the Henley Union.

SUTTON, JOHN MAULE, M.D., F.R.C.P.E., M.R.C.P. Eng., M.R.C.S., L.S.A., L.M.—Medical Officer to the Friendly Societies' Medical Institute, Northampton.

WEBSTER, WILLIAM, M.R.C.S.E., L.S.A.—Medical Officer for the South District of King's Lynn Union, Norfolk.

WRIGHT, J. FREDERICK, M.R.C.S. Eng., L.S.A.—Assistant Medical Officer to the Hanwell Lunatic Asylum.

MILITARY APPOINTMENTS.

WAR OFFICE.—MEDICAL DEPARTMENT.—Staff Surgeon-Major J. A. W. Thompson, M.D. to be Deputy Inspector-General of Hospitals, *vice* Thomas Guy, M.D. who retires upon half-pay; Staff Surgeon-Major A. D. Home, C.B., V.C., from the Seconded List, to be Staff Surgeon-Major, *vice* Staff Surgeon J. J. Henry, placed upon half-pay; Staff Surgeon W. S. Whylock, M.D., having completed twenty years' full-pay service, to be Staff Surgeon-Major, under Article 342 of the Royal Warrant dated December 27, 1870; Assistant-Surgeon J. H. Whittaker, from the 69th Foot, to be Staff Surgeon, *vice* Staff Surgeon-Major J. A. W. Thompson, M.D., promoted; Assistant-Surgeon F. H. Dunbar, M.D., from the 67th Foot, to be Staff Assistant-Surgeon, *vice* J. G. Rogers, M.B., appointed to the 67th Foot.

BREVET.—Deputy Inspector-General of Hospitals T. Guy, M.D., who retires upon half-pay, to have the honorary rank of Inspector-General of Hospitals.

BIRTHS.

BELL.—On November 23, at Perry-hill, Catford-bridge, the wife of W. R. Bell, M.D., of a son.

DUFF.—On September 24, at Ross, Westland, New Zealand, the wife of A. Groves Duff, M.D., formerly of H.M.'s Bengal Army, of a son.

GODFREY.—On November 14, on board the *Owen Glendower*, New Mole, Gibraltar, the wife of F. Godfrey, L.R.C.P. Edin., L.R.C.S., of a son.

LYFORD.—On November 16, at Round-hill-crescent, Brighton, the wife of H. G. Lyford, M.D., of a son.

SANDS.—On November 16, at 5, Gordon-cottages, Holland-road, Brixton, the wife of J. Lee Sands, M.D., H.M.S. *Endymion*, of a son.

WARD.—On November 21, at Saltburn, Twickenham-common, the wife of Martindale C. Ward, M.D., of a daughter.

MARRIAGES.

BRUMWELL—WILKINSON.—On November 20, at St. Michael's and All Angels, J. R. Brumwell, M.D., of Homelands, Ryde, formerly of Ceylon, to Mary, only daughter of the late William Wilkinson, Esq., Swanmore, Ryde, Isle of Wight.

CLOTHIER—MCDERMOTT.—On November 26, at St. James's Church, Piccadilly, Edward, second son of James Clothier, Esq., of Pall-mall, to Jane, only daughter of the late John Bryen McDermott, Esq., and granddaughter of the late David Rees, M.D., of New Cross, and 8, Craven-street, Charing-cross.

DAVIES—HUMPHREYS.—On November 7, at St. James's, Holloway, W., Bowen Davies, L.R.C.P. Lond., of Llandrindod Wells, Radnorshire, to Louisa Jane, youngest daughter of George Humphreys, Esq., of Chelmsford.

DEATHS.

GODFREY, BENJAMIN, M.D., F.R.A.S., at Carlton House, Enfield, on November 22, in the 44th year of his age.

GRIFFITHS, GRIFFITH H., M.D., at Apsley Villa, Cheltenham, on November 19, aged 49.

HARWOOD, ALFRED, M.R.C.S. Eng., youngest son of the late Richard Harwood, Esq., of Cambridge, at 15, Emmanuel-road, Cambridge, on November 18, aged 29.

KILROY, ALEXANDER, M.R.C.S. Eng., late Staff Surgeon R.N., at 6, Shaftesbury-terrace, Kensington, on November 22, aged 63.

KEALL, JANE, widow of the late John Powell Keall, Esq., surgeon, Ramsgate, and eldest surviving daughter of the late Captain Cubison, R.N., at 1, Avenue-terrace, Hammersmith, after a few days' illness, on November 22.

MACKIE, MARY ELIZABETH, wife of John Mackie, M.D., and only daughter of William Biddecombe, Esq., of Bittern, Hants, at Brechin, Forfarshire, on November 23, aged 29.

SCHOLFIELD, WILLIAM, of the Inner Temple, second surviving son of Edward Scholfield, M.D., of Doncaster, aged 27.

SEWELL, ALLEN, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., youngest son of William Cooper Sewell, Esq., of 17, Euston-square, on board the ship *Clarence*, on a voyage to Melbourne, on August 30, aged 26.

SKINNER, GEORGE, M.R.C.S. Eng., L.S.A., at his residence, Bath, on November 12, aged 75.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

CHARING-CROSS HOSPITAL.—Chloroformist. Candidates must be qualified to practise under the Medical Registration Act. Applications, with testimonials, to Henry Woolcott, Esq., Secretary, on or before Dec. 4.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Dispenser and House-Surgeon's Assistant. Applications and testimonials to David Hartley, Esq., Resident Surgeon.

HUNTINGDON COUNTY HOSPITAL.—House-Surgeon. Applications, with testimonials, to Dr. Ward, Huntingdon, on or before November 30.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE, W.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Applications, with testimonials, to Francis Baily, on or before December 12.

KILDALTON, ISLAY.—Medical Officer. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen, Islay.

OWEN'S COLLEGE, MANCHESTER.—Assistant-Lecturer in Chemistry, and Junior Demonstrator in the Chemical Laboratory. Applications, with testimonials, to the Council (under cover to the Registrar), on or before December 3. Further information may be obtained of the Principal, J. G. Greenwood, Esq., or from Professor Roscoe, Owen's College.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Junior House-Surgeon. Candidates must possess a medical or surgical qualification from one of the examining boards of the United Kingdom. Applications, with testimonials, to the Secretary, on or before December 4.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Candidates must be legally qualified and duly registered. Applications, with testimonials, to the Assistant-Secretary, on or before January 6, 1873.

ST. GEORGE'S DISPENSARY, 59, MOUNT-STREET.—Resident Medical Officer. Applications, with testimonials, to Dr. Wegg or Dr. Sutherland, at the Dispensary.

ST. MARY'S, ISLINGTON.—Medical Officer of Health and Analyst. Applications, with testimonials, to J. Layton, Vestry Clerk, before December 2. Further particulars may be obtained at the Vestry Offices.

ST. THOMAS'S HOSPITAL, S.E.—Medical and Surgical Registrars. Applications, with testimonials, to R. G. Whitfield, Esq., Medical Secretary, on or before November 30.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon. Candidates must be Members of one of the Royal Colleges of Surgeons of the United Kingdom, or Licentiates of the Faculty of Physicians and Surgeons of Glasgow, and also Licentiates of the Apothecaries' Company, or Licentiates of the Royal College of Physicians of London, and duly registered. Applications, with testimonials, to Medical Staff of the Infirmary, care of the Secretary, on or before December 3.

TIVERTON INFIRMARY AND DISPENSARY.—House-Surgeon and Dispenser. Applications, with testimonials, to the Honorary Secretary, Tiverton.

WESTERN GENERAL DISPENSARY, 10, LISSON-GROVE, N.W.—Resident Surgeon and Apothecary. Candidates must be Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Society of Apothecaries, and duly registered. Applications, with testimonials, to the Secretary, on or before December 9.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Alderbury Union.—Mr. Samuel Swabey has resigned the Sixth District; area 480; population 9038; salary £75 per annum.

Kingston Union.—Dr. Story has resigned the New Hampton District; area 1000; population 1500; salary £25 per annum.

Stourbridge Union.—Mr. E. S. Pearse has resigned the Second Kingswinford District; population 12,792; salary £80 per annum.

Woodbridge Union.—Mr. George F. Meadows has resigned the Fourth District; area 13,850; population 3875; salary £78 per annum.

APPOINTMENTS.

Fulham Union.—Walter Pippette, L.S.A., L.R.C.P. Edin., L.R.C.S. Edin., to the Fifth District.

Guildford Union.—Thos. J. Schollick, M.R.C.S., L.S.A., to the Second Guildford District.

Todmorden Union.—Charles W. Thorp, L.K. & Q.C.P.I., L.R.C.S. Ire., to the Todmorden District.

Mr. E. G. Pitt has been appointed Medical Officer of the South District of St. George's-in-the-East, at a salary of £230 per annum.

Dr. Gueneau de Mussy was entertained by a number of the leading physicians and surgeons of London at a farewell dinner on Wednesday last week. Sir Thomas Watson occupied the chair.

Analyst Appointments.—Dr. Whitmore has been appointed public analyst for the parish of St. Marylebone, and Dr. Bernays, of St. Thomas's Hospital, for the parish of Camberwell.

"The British Pharmacopœia" is the subject for the annual prize to be competed for in May next by apprentices to apothecaries in Ireland.

We regret to learn that Dr. Alfred H. McClintock, of Dublin, has been seriously ill since Sunday week, when an attack of fever, with some symptoms of an intermittent character, set in. From the latest accounts we are glad to hear that Dr. McClintock is progressing favourably.

City of Dublin Hospital.—On Tuesday last the Lord Mayor of Dublin presided at the inaugural ceremony of the present session of the Hospital, and distributed medals and prizes to the successful candidates as follows:—Ophthalmic Surgery—Senior Medal, Mr. McCloghry; Junior Medal, Mr. Richard T. Hearn; Special Prize, Mr. W. Gubbins. Medicine—Senior Medal, Mr. James Ross; Certificate, Mr. George Beamish; Junior Medal, Mr. J. Eberle. Surgery—Senior Medal, Mr. George Beamish; Junior Medal, Mr. R. T. Hearn. Dr. Martin's Prizes (of Portlaw)—First Year Students, Mr. Arthur Benson; Second Year Students, Mr. James Ross; Third Year Students, Mr. W. Gubbins.

Lawyers' and Doctors' Fees.—In a paper upon the compulsory medical tariffs of fees which prevail in different parts of Germany, Dr. Kollosser (*Deutsche Klinik*, November 2), after complaining of their utter inadequacy and the insufficient pay granted by them for night-work, points out how much better the legal fraternity has been provided for. Thus, in Prussia a doctor and a notary will leave in the same carriage after eight in the evening to visit a patient dangerously ill; and while the doctor does his best for him, the notary draws up the will, which the doctor witnesses. Both return together, and it is found that while the doctor's legal charge is between 3 and 4 thalers, that of the notary amounts to 15 thalers. The night-hours of the doctor count from 10 p.m. to 6 a.m., those of the notary from 8 p.m. to 8 a.m.

"Irish Hospital Gazette."—We believe we are not premature in announcing that a new bi-monthly medical journal with the above title will appear for the first time on January 1 next. The journal, like the former *Dublin Hospital Gazette*, is to be mainly devoted to the cultivation of practical Medicine and Surgery, and political or personal discussions are to find no place in its columns. Each number will contain Hospital Reports, Pathological Observations, Original Communications, Original Lectures, Extracts from British and Foreign Journals, Reviews and Notices of Books, Abstracts of Reports of Societies, and Sanitary and Meteorological Notes. We understand that a large number of leading hospital physicians and surgeons, both in Dublin and in the Irish provinces, have promised their support to this new venture in medical literature.

Small-pox in Vienna.—The epidemic, though somewhat diminished in violence, still prevails in great severity. In reference to vaccination, as ascertained by the unanimous testimony of all the hospital officers, its benefit is most conclusive. This proves—1. That the mortality has been ten times greater in the unvaccinated than in the vaccinated. 2. The intensity of the disease has also, as the general rule, been very much greater in them. 3. Cases of hæmorrhagic small-pox occurred much more frequently in the unvaccinated. 4. In the Children's Hospital, where the mortality has been so enormous, and has specially prevailed in the hæmorrhagic form, its fatal course has chiefly been among the unvaccinated. These facts will, at a later period, be demonstrated by the publication of the full statistical data, and it is hoped that they will teach the opponents of vaccination a much-needed lesson.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Anthrax.—Bryant's "Surgery" or Holmes's "System."

A. B. C.—We cannot recommend a surgeon for any particular operation. Consult any hospital surgeon.

F. O. D.—At Hausard's, Great Queen-street.

Anatomy.—The dissections by Pettigrew are in the Museum of the Royal College of Surgeons.

Saxon.—The climate is said to be genial—neither too hot in summer nor too cold in winter.

Bibliopole, Manchester.—The eighth edition of "Hooper's Medical Dictionary" was published in 1818, and edited by Dr. Klein Grant.

Mr. Marshall.—You will find the subject treated in the clinical lectures of Dr. Todd, published in the *Medical Times and Gazette*, vol. xxv.

H. F. S.—The name of St. Vitus is not to be found among the *Sanct Canonizati*. Fabricius says that St. Rupert and St. Vitus were the reputed patrons of dogs, and not cats.

A Foreigner.—C. Ballard, "Traité des Maladies des Enfants, etc." Paris, 1828.

P. N., Plymouth.—The columnar layer, or membrana Jacobi, after its discoverer, Dr. Jacob, of Dublin, who described it in the *Philosophical Transactions*, 1819.

Zeta, Aberystwith.—The testimonial was presented on Monday, May 31, 1852, and bore the following inscription:—"Presented to James Paget, F.R.S., in testimony of high regard and esteem, by students who were resident in the College during the period of his wardenship."

F.R.S.—Sir Henry Holland, Bart., is the oldest Fellow of the Royal Society, having been elected in 1816, and has held the office of Vice-President three times. This venerable member of our profession is Physician-in-Ordinary to the Queen.

Mesmer.—Bertrand says that Mesmer was born at Vienna; but another account, which is adopted by Mr. Colquhoun, states him to have been a Switzer by birth. However, he took his degree at Vienna in 1766, and wrote his inaugural dissertation "On the Influence of the Planets on the Human Body."

Used-up.—"With curious art the brain too finely wrought
Preys on herself, and is destroyed by thought;
Constant attention wears the active mind,
Blots out her powers, and leaves a blank behind.
The greatest genius to this fate may bow."

An Old Fellow and an Old Subscriber.—You will find an account of the sale of John Hunter's chairs by the Council of the College of Surgeons in vol. xxv., p. 347, of the *Medical Times and Gazette*, and can judge for yourself, by reading it, whether we spared flagellation. Dr. Aclaud purchased two, as did Messrs. Wormald and Stone, at one guinea each. Professor Goodsir had one. We cannot state where the others went, or whether there are any still on sale. Inquire of Mr. Stone. The wood of which they were made was brought to this country by Captain Cook, the great circumnavigator.

Midwifery Practice and the Princess Charlotte at Claremont.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Those who can go back with me to November 5, 1817, when this charming Princess, the nation's hope, breathed her last, and for whom the nation gave expression of great disappointment and sorrow, may with me, on reading the life of that almost more than man in mental power, Baron Stockmar, who was then at Claremont, and describes this sad event of primary childbirth, be anxious to learn more particulars concerning the facts of that then most interesting case. After fifty-two hours' labour the Princess gave birth to a dead male child. In five hours after, the Princess, under much pain, and suffering jactitation and restlessness, sank into death. Sir Richard Croft and Dr. Baillie were present. She was well plied with wine. Baron Stockmar, residing officially with Prince Leopold and the Princess, thought the Princess before her confinement was not sufficiently sustained as to dietetic support by her physicians; but as to her labour, may I inquire whether we have any information as to her support during it—of the presentation fœtal, of any subsequent hæmorrhage, or of any supposed or discovered rupture of the uterus, which the after symptoms would really give suspicion of. The Baron, who was Prince Leopold's physician, and who turned out to be a most valuable friend and adviser to the leading members of our Royal house, says nothing about uterine conditions, which have an immense importance in this as in all similar cases. I happened to be in the Museum of the Great Windmill-street School on that memorable day, when the grave announcement by Mr. Wilson of the event not only cast a deep gloom over our minds, but that same deep gloom went over the length and breadth of the nation.

I am, &c.,

An Old Accoucheur.

P.S.—The query is, and has been, could this daughter, I will say, of the nation have been saved? We want particulars.

COMMUNICATIONS have been received from—

Mr. J. Beswick-Perrin; Mr. J. Chatto; Dr. E. Copeman; Dr. J. Hughlings-Jackson; Dr. Moxon; Dr. Fayrer; Professor Flower; Dr. Robert J. Lee; A. R. C.; Anthrax; Dr. D. Nelson; Mr. Jabez Hogg; Dr. Playfair; Mr. W. W. Reeves; Mr. J. F. Wright; Mr. M. A. Adams; Mr. Scobell; Dr. Sykes; Mr. Haynes Walton; Mr. J. Liddle; Dr. Rogers; Mr. A. B. Macdowall; Mr. J. Turner; Mr. Groves.

BOOKS RECEIVED—

A Manual of Elementary Chemistry, Theoretical and Practical, by George Fownes, F.R.S., late Professor of Practical Chemistry in University College, London; Eleventh Edition, revised and corrected by Henry Watts, B.A., F.R.S.—Introduction to Inorganic Chemistry, by Wm. George Valentin, F.C.S., Principal Demonstrator of Practical Chemistry in the Royal School of Mines and Science Training Schools, South Kensington—Transactions of St. Andrews Medical Graduates' Association for 1871, edited by Leonard W. Sedgwick, M.D.—Preces Veterum cum Hymnis, collegit et edidit Joannes F. France, F.R.C.S., F.S.A.—De Ostéomyélite dans ses Rapports avec l'Infection Purulente, par M. Demarquay—Report on the Sanitary Administration of the Punjaub for the year 1870—An Inquiry into the Theory and Practice of Antiseptic Surgery, by James Cumming, M.D., M.R.C.P.E., L.R.C.S.E.—Transactions of Edinburgh Obstetrical Society, Sessions 1869-70-71—Report on the Sanitary Condition of Whitechapel District for the Quarter ended September 28, 1872, by John Liddle, M.R.C.S. Eng., L.S.A., Medical Officer of Health—Manual of Surgical Anatomy, by W. Roser, Professor of Surgery in the University of Marburg, translated from the fourth German edition by John C. Galton, M.A. Oxon., M.R.C.S. Eng., F.L.S.

PERIODICALS AND NEWSPAPERS RECEIVED—

Sydney Morning Herald, August 10—Anti-Game-Law Circular—Pharmaceutical Journal—Buxton Advertiser—Journal of the Gynæcological Society of Boston, U.S.A., October—Croydon Advertiser—Lincoln Journal.

APPOINTMENTS FOR THE WEEK.

November 30. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

December 2. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Dr. E. Symes Thompson, "A Case of Pneumo-thorax, with Empyema, necessitating Operation." Dr. Sansom, "A Case of Infantile Paralysis treated by the Continuous Current." Dr. Douglas Powell, "A Case of Mediastinal Tumour." Mr. Thos. Bryant, "Fracture of Neck of Thigh-bone."

3. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Anthropological Institute, 8 p.m. Meeting.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Mr. Butlin, "Molluscum Fibrosum (a living subject)." Dr. Julius Pollock, "Obstructed Circulation in the Left Arm, with Wasting (a living subject)." Dr. C. T. Williams, "Mediastinal Tumour and Dilatation of the Bronchi." Mr. Nunn, "Cast of the Lower Extremity showing Curvature of the Femur." Mr. Arnott, "Epithelioma of the Labium Pudendi in a girl aged 20." Dr. Robert King. "Extreme Aortic Stenosis; Stomach from a Case of Poisoning by Hydrofluoric Acid." Dr. Goodhart, "Caneer of the Tonsil." Dr. Silver, "Fatty Degeneration, with Calcification of the Panereas, from a case of Diabetes." Mr. Spencer Watson, "Five Recurrent Fibroid Tumours (the sequel of a ease previously reported to the Society)."

4. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

Obstetrical Society, 8 p.m. Dr. Edis, "On the Systematic Examination of the Abdomen with a view to the Rectifying of Malpositions." Dr. Squarey, "On Flexions of the Uterus." And other Papers.

Royal Microscopical Society, 8 p.m. Meeting.

Society of Arts, 8 p.m. Mr. J. A. Huggett, "On the Manufacture of Horse-nails by Machinery."

5. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

6. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Microscopical Society (College Dining-hall, St. Bartholomew's Hospital), 8 p.m. Meeting to Sanction Rules, Elect Officers, Receive Names of intending Members, etc.

Medical Society of London, 8 p.m. Meeting of Council.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 23, 1872.

BIRTHS.

Births of Boys, 1121; Girls, 1156; Total, 2277.
Average of 10 corresponding weeks, 1862-71, 2061·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	647	630	1277
Average of the ten years 1862-71	792·2	781·9	1574·1
Average corrected to increased population	...	...	1732
Deaths of people aged 80 and upwards.	...	...	52

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	2	...	1	3	1	2	1	2
North ...	751668	4	1	2	...	8	...	3	...	3
Central ...	333887	1	...	1	...	1	...	2	1	2
East	638928	2	3	9	2	4	...	4	2	1
South	966132	6	5	11	2	10	...	3	...	6
Total	3251804	13	11	23	5	26	1	14	4	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·327 in.
Mean temperature	43·9°
Highest point of thermometer	57·0°
Lowest point of thermometer	32·3°
Mean dew-point temperature	40·9°
General direction of wind	S.W.
Whole amount of rain in the week	0·70 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 23, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Nov. 23.	Deaths Registered during the week ending Nov. 23.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2277	1277	57·0	32·3	43·9	6·61	0·70	1·78
Portsmouth ...	115455	12·1	76	36	56·2	27·4	43·8	6·55	1·40	3·56
Norwich	81105	10·9	51	46	54·5	31·0	40·4	4·66	0·89	2·26
Bristol	186428	39·8	125	66	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	55	41	53·3	31·4	41·6	5·33	0·98	2·49
Birmingham ...	350164	44·7	290	181	57·6	34·4	42·6	5·89	1·68	4·27
Leicester	99143	31·0	81	54	56·0	31·5	41·4	5·22	1·05	2·67
Nottingham ...	88225	44·2	67	35	53·3	28·3	40·3	4·61	1·06	2·69
Liverpool	499897	97·9	370	276	55·0	34·9	42·7	5·95	0·59	1·50
Manchester ...	352759	78·6	258	197	55·0	31·0	41·4	5·22	0·64	1·63
Salford	127923	24·7	102	66	55·5	30·0	41·0	5·00	0·62	1·57
Oldham	84004	20·2	54	55	52·0	...	...	...	0·59	1·50
Bradford	151720	23·0	125	62	54·6	31·6	42·3	5·73	0·80	2·03
Leeds	266564	12·4	283	156	52·0	31·0	41·1	5·06	0·69	1·75
Sheffield	247847	10·9	210	125	55·0	28·0	41·7	5·39	0·79	2·01
Hull	124976	35·1	98	80	55·0	27·0	40·1	4·50	1·04	2·64
Sunderland ...	100665	30·4	137	45	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	73	66	52·0	35·0	40·8	4·88	1·60	4·06
Edinburgh	205146	46·3	142	98	46·0	31·7	38·4	3·55	1·30	3·30
Glasgow	489136	94·8	393	281	49·5	28·9	40·6	4·77	1·26	3·20
Dublin	310565	31·9	157	139	56·8	28·8	43·2	6·22	1·34	3·40
Total of 21 Towns in United Kingd'm	7393052	34·0	5424	3382	57·6	27·0	41·5	5·28	1·10	2·54

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·33 in. The highest was 29·58 in. on Thursday at noon, and the lowest 29·01 in. on Saturday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D.,
Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

LECTURE IV.

MORAL INSANITY (SO-CALLED).

I HAVE now to direct your attention to a very important form of insanity which, it has been truly said, "more than any other has puzzled the psychologist, perplexed the advocate, and disconcerted the divine." It does not appear that, as our psychological and pathological researches are extended, we have any clearer ideas than formerly of that derangement to which Dr. Prichard gave the unfortunate name of *moral insanity*, defining it to be "a morbid perversion of the natural feelings, affections, inclinations, tempers, habits, moral dispositions, and natural impulses, without any remarkable disorder or defect of the intellect, or knowing and reasoning faculties, and particulaly without any insane illusion or hallucination."

Under the term *manie sans délire*, Pinel had previously described a madness involving no intellectual disturbance, the emotional or affective nature alone being implicated. Subsequently, Esquirol, with that love of new nomenclature which is almost a professional disease, introduced the term *monomania*, making it, in defiance of its significant Greek derivative, to embrace two varieties—instinctive and affective. Modern writers have still further multiplied varieties and terms, the result being that when this technical phraseology is introduced by a medical witness into our law courts, modern judges become alarmed, and hint to him the undesirability of "getting into the clouds." Fine feathers, it is thought, make fine birds, and I suppose complex divisions and sub-divisions make fine nosologies, and convey to outsiders the idea of great erudition.

In whatever shape, however, we may frame our classification, or in whatever words we may think fit to clothe our differential expressions of disease, it is beyond a doubt, as Esquirol pointed out, that moral alienation is the proper characteristic of mental derangement. This great psychologist declares that, whatever the difficulty about detecting hallucinations or delusions, there is no exception to the rule of perversion of the passions and moral affections. This perversion is the substratum of every deviation from the normal standard of mental integrity. "To insist, therefore, upon the existence of delusion as a criterion of insanity is (Dr. Maudsley writes) to ignore some of the gravest and most dangerous forms of mental disease."

And yet it may be doubted whether, in all cases of what is termed moral insanity, there is not mixed up some faint element of delusion. For instance, no class of lunatics are so confident in the soundness of their own condition. Here, then, is something very like a delusion *in limine*. Certainly (as Dr. Blandford has remarked) the absence of the moral sense does not prove or constitute insanity any more than its presence proves sanity. "It is perfectly true (he writes) that it is absent in many lunatics, all notions of duty, propriety, and decency being destroyed in the general overthrow of the mind; but it is also true that we can find perfectly sane people who, either from early education and habit—the habit of continual vice—and also hereditary transmission, are devoid of moral senso to an equal or greater degree. Probably greater wickedness is daily perpetrated by sane than ever was committed by insane men and women; so that when immorality makes us question a man's state of mind, it must be remembered that insanity, if it exists, is to be demonstrated by other mental symptoms and concomitant facts and circumstances, and not by the act of wickedness alone." It is not to be wondered at that society is very jealous of the admission of moral insanity as a distinct form of disease, and has regarded its plea as little else than a frequent apology for crime, devised by the cunning of "mad doctors." I confess that I have more than once looked upon the distinctions attempted to be drawn by alienist physicians as too fine and too subtle; and to this circumstance I attribute the present unpopularity of those specialists who are supposed from the nature of their calling to regard everybody who breaks the law through a mad focus. The plea of insanity raised in the case of Arthur O'Connor in the month of April last is not, as it seems to me, calculated to raise us in public respect and estimation.

Your sensational experience in the perusal of the daily press has already made you acquainted with the fact that what is termed moral insanity at times derives great and spasmodic interest from its association with great crimes. It is of importance that when brought in contact with cases of this nature you should set at once about inquiring as to the antecedents, both personal and ancestral, of those whose actions you are called upon to judge. And you will very commonly find that there is an hereditary taint of madness transmitted from one or—fatal combination—both parents. If there is not direct evidence of this, there is at least very much to show the existence of a neurotic temperament, either in the shape of what is termed eccentricity, or hysteria, or epilepsy, or some other form of deviation from that stable condition of nerve-element which cannot be too highly estimated. There is no reason, indeed, why the insane temperament or (as some have phrased it) *diathesis spasmodica* should not be of idiopathic origin. All the ailments to which we are subject must have a starting point, although their full development as a somatic entity is commonly the result of accumulated and transmitted forces, acquiring increasing volume with increasing years.

The characteristics of this temperament are, for the most part, vanity, restlessness, capriciousness, impulsive action, with general eccentricity of thought and feeling, and not infrequently a singularly inharmonious physiognomy. If you will let them, the subjects of this diathesis will absorb much of your time and attention, and think you could not be better employed than in attending to them. The groove in which they run has a border-line on either side, mapping off the land of genius and the land of insanity. And when they get off this groove (as they so often do), the odds are twenty to one that they topple over to the wrong side of what has been called the "thin partition." Having no "capacity to establish an equilibrium between them and external conditions," their ideas of achieving greatness are anything but the measure of their performances, which merge into the realities of disappointing littleness. Obviously the outcome of this temperament is largely conditioned by the social and other surroundings of the individual man; so that to one, from serene and gentle influences, will arise not the evolution of positive insanity, while to another, from far different and tumultuous dispositions, will be generated a ceaseless provocative to disease.

I have under my eye a most instructive case of this form of insanity, which will be to us its most fitting illustration.

A. B., a solicitor's managing clerk, aged 56, married, with a large family, has always been of an eager, restless, and excitable temperament. No ascertained hereditary taint. Has now for some years kept his family in constant hot water, as well as in bread and meat. The supply, indeed, of the former has, I understand, been the more liberal. Is vain, jealous, suspicious, captious, and easily moved to demonstrative anger. After some of these demonstrations he will decline to speak to members of his family for weeks, during which time he will occupy himself with Utopian schemes for their separation or the complete reorganisation of his home arrangements. These schemes he will commit to paper, couching them in elaborate legal phraseology. He is singularly neat and precise in his dress and general habits, as also in his forms of speech. He is much given to a weakness for the other sex, and if he passes a nice-looking woman, he will probably take off his hat, fancy she is in love with him, and do his best to gratify his wife by telling her his opinion. You perceive by such traits as these and others, that he has exaggerated notion of self-importance. He makes notes and preserves written records of occurrences relating to his own condition, and surroundings, and prospects. There is an unmistakable alienation of this man's entire moral nature. This state of things is, of course, incompatible with steady perseverance in business. A change is noticed at the office in his habits, in his temper, in his manner of taking instructions from his superiors, and of executing the same. He criticises, and almost dictates, where once he submissively performed without doubt or question. He quarrels with his fellow-clerks, and make everyone about him so uncomfortable that his employers are necessitated to dispense with his services. Matters at home are not improved by this measure, which deposes the chief bread-winner of the family. His temper is greatly aggravated, and he becomes violent and threatening, and is placed in an asylum. The history of the case up to this period is the history of three years. There is, you will observe, as I have narrated and as I have received it, no evidence of intellectual disturbance, but simply a morbid perversion of thought and feeling, an exaggerated self-estimate and love of notoriety.

Beyond this the intelligential faculties do not appear to be implicated. But now for the first time—as, according to my experience, happens sooner or later in all cases of what is termed moral insanity—we have distinct delusions. There is not only the delusion that he is not insane (to which I have before made reference), but there is a fixed belief that his family is in a conspiracy against him, and that his son, who has been taken into the office of his late employers as an act of kindness, has supplanted him by false representations. After a residence of eight or nine months in a London asylum, where he was exceedingly exacting and troublesome, he was transferred to Colney Hatch. On admission it was clear at a glance that he was "saturated with insanity." His physiognomy was unmistakable, and such as objective experience, and not verbal description, will alone impress upon you. It was amusing in the extreme to watch my new friend take stock of his new physician. He had evidently got himself up for the occasion; he expected I was going to trot him out, try his paces, and then by a prompt and decisive measure baffle the machinations (as he termed them) of his friends, and confirm his judgment of his own soundness by immediate dismissal and freedom. But there is no occasion to trot out lunatics of this type; their whole life is an exposition of abnormal conduct, revealing itself by look and gesture and language, and countless eccentricities, which go to make up that complex form of insanity which we have now under consideration. This individual has now been under my care about six months, during which time he has written me about 200 letters, some of them long and elaborate, and couched in legal phraseology, their envelopes bearing the words "Important," or "Official," or "Immediate." At times he sends me a document addressed to the Secretary of State and other persons of official distinction, to whom he makes known his case of unjust and "illegal incarceration" (as he phrases it), and appeals for his discharge. When I see him he seriously asks me as to each letter sent, and expresses surprise that he has received no answer. The silence of their correspondents does not deter patients of this class from writing again. They are persevering to an extent which would be highly laudable in a better cause, and their zeal leads them to send out letters by surreptitious means if they can possibly manage it. You should be told, by the way, that all the letters to and from the insane inmates of an asylum are supposed to pass through the hands of the Medical Superintendent. Your experience will soon teach you the necessity of such a measure.

A few more words respecting this illustrative case, and I have done with it. Our friend (as I told you before) is intensely vain, and places upon himself a very high market value. All the women on the premises are, he thinks, in love with him. He is given (after the manner of the morally insane) to what is termed "smutty" conversation, and to acts which trench at times upon the indecent.

Cases of this kind require great colloquial tact and management, the more so as they are commonly permanent institutions. In other words, they do not often recover when the disease is of any standing. They require a happy mixture of firm but conciliatory treatment. You must let them feel the rein, but you must at the same time moderately and playfully humour them.

Sometimes moral insanity is characterised by a great and shameless depravity, of which the above case yields no indication. Women of good social position and education will manifest an utter disregard of all the decencies of life. Spasmodic intemperance and sensuality will for a time destroy all the proprieties which are ordinarily regarded as having imperious claims. Often allied with some form of neurosis, such as hysteria or epilepsy, this distressing malady will give scandal and notoriety to a neighbourhood. Its subjects will break all the commandments of the Mosaic law, and many others (not written upon tables of stone) which society has set up for her protection. In the sex endowed with a child-bearing organ exacerbation takes place at the menstrual periods, and erotic symptoms are very marked. Impulses of depravity will manifest themselves in exposure of the person, in disgusting language, and in various acts of indecency which need not be particularised. So also impulses of violence and destructiveness will be evidenced by broken windows, torn clothes and bedding, and even self-mutilation. At such times women will introduce foreign bodies into the vagina, swallow pins, eat and drink the excretal residua of previous eatings and drinkings, and disclose endless varieties of vitiated taste and feeling. I had a patient who, for purposes of wanton mischief, secreted a large nail in his rectum, and destroyed with it, in one night, a new-padded room. His satisfaction in the morning was charming to witness; his regret a month later, when he was for a few weeks in a fairly normal state, was touching.

But I must direct your attention briefly to a form of impulsive insanity in which there is no intellectual disturbance, but yet some abnormal condition of nerve-element which conditions a thorough perversion of the affections and feelings. It is of great importance that you should make a careful study of those cases in which there are no delusions proper, for they frequently involve all kinds of medico-legal differences. Formerly delusions—the existence of delusions—were regarded as the proper test of insanity. But only in some obscure legal minds can such a theory now find a place. No doubt, in a large proportion of those who have homicidal or suicidal impulses, such impulses result from hallucinations or delusions. But in others there is simply impairment of volition, from perversion of feelings and desires and appetite. With every inducement to avoid a criminal act, and a complete knowledge of its wickedness, one is yet impelled irresistibly to its achievement. There is no relief for the pent-up destructive energy but in an "irresistible utterance of action." "The act of violence (Dr. Maudsley writes), whatever form it may take, is but the symptom of a deep morbid perversion of the nature of the individual, of a morbid state which may at any moment be excited into a convulsive activity, either by a powerful impression from without producing some great moral shock, or by some cause of bodily disturbance—intemperance, sexual exhaustion, masturbation, or menstrual disturbance. There are women, sober and temperate enough at other times, who are afflicted with an uncontrollable propensity for stimulants at the menstrual period; and every large asylum furnishes examples of exacerbation of insanity or epilepsy coincident with that function. In fact, where there is a condition of unstable equilibrium of nerve-element, any cause, internal or external, exciting a certain commotion, will upset its stability, just as happens with the spinal cord under similar circumstances. By his acts, as well as by his speech, does man utter himself. Gesture-language is as natural a mode of expression as speech; and it is in insanity of action that this most dangerous form of affective insanity is expressed—most dangerous, indeed, because so expressed."

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

ON INFLAMMATION OF THE LUNG AS A CAUSE OF CONSUMPTION.

By ARTHUR ERNEST SANSOM, M.D. Lond., M.R.C.P.,
Physician to the Royal Hospital for Diseases of the Chest, City-road, and to the North-Eastern Hospital for Children.

(*Continued from page* 567.)

The plain teaching of the two classes of cases which we have hitherto considered appears to me to be this—that ordinary inflammatory irritations of the lungs induced by various causes can produce the early symptoms and signs of pulmonary phthisis, which may nevertheless pass away; that such irritations may go on to produce a condition analogous to that of chronic phthisis, such as is present in cases of ordinary tubercle. Those who hold that pulmonary consumption is essentially tubercular can only reply that the inflammatory process may have awakened a latent tendency to tuberculosis. Against such a view we have the facts that patients in no sense presenting the signs of a predisposition to tuberculosis have become subjects of phthisis, whilst others who have shown signs of a strong predisposition thereto have presented the early signs of pulmonary consolidation, which have nevertheless passed away. For further evidence we will now turn to two cases, which, apart from any facts which they may bring to bear upon the main question, present many points of intrinsic interest.

Class III.—Condensation and Infiltration of Pulmonary Tissue—Symptoms of Advanced Phthisis—Collapse of, or Destruction of, Portions of Lung—Arrest of Phthisical Symptoms.

Case 8.—*Condensation of Right Lung—Recovery, with Partial Retraction of Chest-wall.*

Thos. P., aged 3 years, was admitted under my care as an in-patient at the North-Eastern Hospital for Children on October 15, 1870. I had first seen him in the out-patient

room some days before, when he presented signs of advanced marasmus, and it was thought that he was dying. The limbs were extremely attenuated, the abdomen large and distended, cough very frequent. He presented the characteristic "old man" physiognomy, and could only (on account of the great wasting) be carried about upon a pillow. His father's family was phthisical, mother and sister having died of phthisis. Illness had commenced with measles six weeks previously; an eruption of ecthyma had followed, and very rapid wasting with increasing cough.

Physical Signs.—Right side of chest completely dull front and back; dry tubular breathing over dull area; a few râles only over the upper lobe. No evidence of pleuritic effusion.

Treatment.—Cod-liver oil ʒj., sulpho-carbolate of sodium gr. v., t. d. s.; counter-irritation of right back by pigmentum iodinii; plentiful milk diet.

The case at this time appeared hopeless; the child presented all the signs of tuberculosis; it was quieted only by the bottle, and was constantly wet from urination.

On October 22 coarse râles appeared over the right base, but on the 29th the sounds were dry and tubular as before. Vesication by liquor epispasticus was adopted.

November 5.—There had been improvement in the general signs in the interval, and râles of resolution about the base were manifest, which on the 9th were general throughout the lung, tubular breathing persisting over the upper lobe.

On the 12th, though there had been decidedly some general improvement, the child was so constantly fretful, and gave such incessant trouble, that the parents were allowed to remove it from the Hospital. It was then brought to me again as an out-patient.

On the 23rd it had gained considerably, though cough was very troublesome. Moist sounds still heard over the base; tubular breathing over the front of the chest.

30th.—Child had so much improved as to be able to walk and play; cough bad only at night. Appetite returned, and there was progressive improvement; but on December 14 signs of dense consolidation remained over the right upper lobe.

In January, 1871, there was continued improvement in the general signs till the 11th, when purging supervened, which was controlled in a week by astringents, and he returned to the oil and sodium sulpho-carbolate. Improvement continued throughout February, but still the dulness of the right chest persisted. Cough occasional and paroxysmal.

March 8.—It was noted that the right chest-wall, from the nipple downwards, was incurved so as to produce a concavity of the ribs and a deep furrow of the abdominal wall, where the false ribs were retracted. Over this area were no abnormal sounds; a bronchial puff existed only over the right supra-scapular region. Sulpho-carbolate of iron (gr. iij.) was now given with the cod-liver oil. Improvement took place throughout April and May, when the cough almost ceased, and the child was muscular and sturdy.

He was not brought to me again until November 8, 1871. He then suffered from another attack of violent paroxysmal cough. I found, however, that the area of former dulness was rather super-resonant, and no other signs than some rhonchi existed. The attack developed into one of severe pertussis, from which he still suffers. He presents the appearance of a big, fat boy, though he is far less stout than he was at the commencement of the attack of hooping-cough.

Case 9.—Pleurisy—Condensation of Upper Lobe of Right Lung—Excavation, Suppuration, Abscess pointing externally—Evacuation of Pus, followed by great General Improvement.

Sarah S., aged 13 months, was brought to me at the North-Eastern Hospital for Children on April 29, 1871, for cough and dyspnœa, with extreme wasting—large hard stomach. She had been gradually ailing since two months previously, when her mother died in confinement. The mother, though pregnant, had continued to suckle her. The child presented every appearance of tuberculosis.

Physical Signs.—Complete dulness of the whole right chest; breath-sounds very faintly heard, but at the apex harsh tubular breathing. The diagnosis was ordinary tubercle with pleurisy.

May 6.—Pleuritic friction was manifest over the right upper lobe.

Treatment.—Counter-irritation by pigmentum iodinii; cod-liver oil (ʒj.) with iodide of potassium (gr. j.) three times a day.

24th.—The signs of pleurisy had passed away, leaving dulness most complete over the upper lobe. Sulpho-carbolate of sodium (gr. v.) with cod-liver oil (ʒj.) were given three times a day. The child continued to get weaker and thinner, with high pyrexia.

In July there was slight improvement in the general signs, but in September again retrogression. Cod-liver oil could not be given by the mouth; the body was well rubbed with it twice a day.

On October 18 there was much fever; oïdium appeared in the mouth.

During the succeeding fortnight the child seemed to be at the point of death; signs of density of the upper lobe of the right lung continued, but near the sternal articulation of the second rib localised moist râles became manifest. Just below this situation, in the intercostal space, a prominence tender to the touch was noticed, and this began gradually to "point." Auscultation over it revealed large gurgling râles. As the skin became thin I observed that the fluctuant swelling receded on inspiration, and especially on the deep inspiration preceding a cough it disappeared altogether. Poultices were applied, and on November 11 the child was ordered to become an in-patient. Just previously to admission, however, the abscess burst spontaneously, and gave exit to a large quantity of pus. Though one could not say conclusively that this abscess proceeded from and communicated with the lung, the facts seemed strongly to favour this view. Mr. Waren Tay found the probe to penetrate so deeply that he thought it unadvisable to push it further, particularly as there was a danger of its being sucked in by the deep spasmodic inspirations of the child. It was noticed, however, that on coughing large air-bubbles came with the pus from the wound. Except in the neighbourhood of the aperture there was now vesicular breathing to be heard over the upper lobe in the front, but diffuse bronchial breathing occurred at the back. Free suppuration occurred for three days, and then the discharge became greatly diminished; cough became far less troublesome.

November 17.—The following note was made of the physical signs:—"Dull right front, except within an inch around spontaneous aperture; here percussion gives a clear note; axilla dull; upper lobe back dull. Tubular breathing loud (? cavernous near opening) over upper portion of lung as far as opening; below this breath-sounds feeble. No moist sounds."

The discharge ceased on the 21st, and the child again became an out-patient. Child manifested much improvement, and great gain of flesh.

December 6.—Carbolised oil to the wound, and sulpho-carbolate of iron (gr. ij.) t. d. s. Child still continued to gain flesh. The chest-wall over the upper lobe of the affected lung became progressively flattened. Pus exuded from the opening only at intervals. The child is still under my care; there has been rather more cough lately, but no wasting.(a)

Of the two last-mentioned cases the former is no doubt one of chronic pneumonia occurring in a strumous child. Commencing, as commonly it does, with measles, it is remarkable that the density of the lung, though persisting for five months, should have ultimately passed entirely away. The cause of the retraction of the thoracic wall is an interesting question. Was it collapse of a portion of the lung or absorption of exudation, or had there been a pleurisy in the case which we failed to detect? Niemeyer quotes a case in which a similar deformity was produced. He says—"In one of my cases, after an attack of hæmoptysis, which was of immediate danger to life, and had been difficult to stop, the whole lower lobe of the left lung became infiltrated, and shrank afterwards to such an extent that a few months later the patient came to consult me on account of the deformity by the *rétrécissement* of the thorax, which was caused by the considerable contraction of the diseased lobe of the lung.(b) I am unable to say which of the causes produced the result in my case.

In the second case, seeing the cachexia of the child, the gradual onset, the localisation of the signs, and the indication of softening of the lung tissue, I think there can be little difficulty in concluding that it was one of caseous pneumonis. Cases of tuberculous cavity suppurating, and ultimately pointing and discharging outwardly, are exceedingly rare; but this seems to be one. It was clear from the resonance of the lower lobe at the back, and the ease with which the breath-sounds were distinguished, that we had not to do with an empyema. From the signs of lung-softening near the point at which the discharge took place, and the symptoms subsequently, there can be scarcely any doubt that this was a

(a) A subsequent suppuration took place over the base of the lung. The child continued well nourished, and was exhibited at the Medical Society of London on December 2, 1872.

(b) "Lectures on Phthisis," New Sydenham Society's translation, p. 36.

suppurating cavity. The recovery after the external opening was extraordinary. Would such have occurred if the cavity had emptied in the usual way into a bronchulus? I think ordinary experience is much against such a view.

Taking these two as clinical examples, I consider that at the period when they first came under care the differential diagnosis from ordinary phthisical consolidations would have been impossible. The exudations, however, wholly in one case and partially in the other, became absorbed as in the cases previously noted which presented phthisical tendencies. These observations confirm Niemeyer, who says "the fact cannot be denied that in certain cases more or less extensive consolidations of the lungs of phthisical patients disappear altogether" (p. 10). Conversely, I contend that it would be impossible to predict of any person, whatever his build, habit, or idiosyncrasy, whether or no he might become the subject of pulmonary phthisis. In face of these facts how can the theory of a "special diathesis predisposing to phthisis" stand? Yet this is the theory enunciated by Laennec, who said—"A multitude of facts proves that the development of tubercles is the result of a general disposition, that it occurs without previous inflammation;" and Sir Thomas Watson, in the fourth edition of his "Lectures on Medicine" (vol. ii., p. 220), expressed his opinion that thoracic inflammation will not produce tubercles in the lungs of a person who has not the scrofulous diathesis. The answer to this drawn from anatomical sources is, that any inflammatory lesion of the lung can lead on to cheesy degeneration, which is neither more nor less than ordinary yellow tubercle; that from clinical sources, that the subjects of phthisis are drawn from persons of all kinds of diathesis whose symptoms have been due to various initial causes. So I incline to agree with Niemeyer, who says—"I consider the almost universal opinion that pulmonary consumption arises independently of accidental or immediate exciting causes, in consequence alone of a diathesis, to be as unproved as it is dangerous" (p. 27). I think the cases which I have yet to notice will further corroborate this; and I will go so far as to say that it is as legitimate to assert that the subjects of scarlatina or typhoid carry about with them a diathesis predisposing to these diseases respectively, which is called into activity by local circumstances, as it is to maintain that the subjects of phthisis are under the domination of an unexplained tendency to tubercle.

If we reject the diathesis theory, we have yet to consider how the inflammatory lesion leads on to destructive disease of the lung. We have to account for—(1) the local lesions which in phthisis persist or result in decay of lung tissue; (2) the consecutive appearances of various foci in other portions of lung. We learn from pathological researches that the exudations which result from inflammation may degenerate and become converted into imperfect cells which have undergone a partial fatty transformation. But in virtue of what conditions does this degenerating change take place? Dr. C. J. B. Williams, in his latest work ("Pulmonary Consumption," Longmans, 1871), advances the theory that the cause is a lowered vitality of the exudation cells—the bioplasm—which under normal conditions should operate the repair of tissue; these he terms "phthinoplasms" (wasting or decaying forming material); they may be thrown out locally (*i.e.*, at the spot of initial lesion), or may arise in various parts of the lymphatic system, which is a great receptacle of bioplasm. The difficulty here seems to me that this, like the diathesis theory, assumes a general systemic condition—*i.e.*, one of lowered vitality of the materials of repair. Now, we find that inflammations in those who present bad powers of repair frequently do not result in tubercular phthisis; the exudation in acute pneumonia, even in feeble and ill-nourished persons, often goes through its changes without degeneration to tubercle; exudations in those eminently strumous do not invariably do so; and frequently in those manifesting tubercle in all its stages certain local consolidations pass away. Unless, therefore, we endow the bioplasm of certain localities with peculiarities which it does not possess in certain others, I think there is a difficulty in the reception of the theory. We see, on the other hand, that persons manifesting signs of good nutrition, and good powers of repair, may nevertheless succumb to phthisis.

(*To be continued.*)

We observe that the future meetings in connexion with the Metropolitan Hospital Sunday movement will be held under the auspices of the Lord Mayor, who takes much interest in it.

RECORD OF IRREGULAR MUSCLES

NOTICED IN THE DISSECTING-ROOM AT KING'S COLLEGE, LONDON, DURING THE SESSIONS 1868-69, 1869-70, AND 1870-71.

By J. BESWICK-PERRIN.

I have carefully noticed the irregularities in the subjects which have come under my notice during the above-mentioned periods. Some few of the more particular varieties I have already published, and these I shall only incidentally mention, in order that the exact number of irregularities in each subject may be accurately estimated. It seems to me more advisable to describe the irregular muscles found in each subject, rather than treating them in groups. By this method the contrast between different individual subjects will be more readily apparent. I have adopted a rough and arbitrary kind of classification—viz., into adventitious, heteromorphous, and absentaneous muscles. Under the first term I include muscles not common to man; secondly, the various departures of the muscles from the average arrangement; and, thirdly, those which are present as an average rule, but occasionally aberrant. There are a few muscles which I have not mentioned, which undergo variation in a minor degree—such as the flexor longus pollicis, which may be minus or plus a coronoid attachment; the latter is the average arrangement. The extensor minimi digiti is another specimen which we may easily dismiss, by saying that the single tendon is less frequent by far than the double tendon, and the latter is much more frequent than the treble or further differentiated tendon. The extensor ossis metacarpi pollicis has most frequently two tendons—one variable in length and size. When present they are attached to the metacarpal base of pollex and trapezium respectively. When two tendons are spoken of this is understood. If other attachments, etc., they will be mentioned. The terms "pollex" and "hallux" are used to signify respectively the thumb and great toe.

SESSION 1868-69.

Subject I. (Very muscular male.)

Adventitious Muscles.

1. Two additional fusiform muscles—the longest arising from the vertebral border of the scapula, and joining by its other extremity the tendon (third) of origin of levator anguli scapulæ; the shortest arising by a broad thin fascia over the dorsal surface of the serratus posticus superior, and joining the fourth tendon of origin of levator anguli scapulæ.

2. *Sternalis brutorum.* On both sides.

3. *Extensor carpi radialis intermedius.* Detached from the extensor carpi radialis brevis, and joined, to be inserted with the longior.

4. *Abductor ossis metatarsi quinti* (of Wood). Right side only.

Heteromorphous Muscles.

1. *Omo-hyoid.* Additional attachments from clavicle. Both sides.

2. *Biceps brachii.* Third head from capsular ligament of shoulder-joint. It is small, and joins the coracoid factor.

3. *Trapezius.* Aborted on both sides at eighth dorsal spine.

4. *Latissimus dorsi.* Achselbogen on both sides. On right side joins the tendon of insertion of pectoralis minor; on left the pectoralis major.

5. *Extensor ossis metacarpi pollicis.* Double tendon of insertion, and additional one gives a slip of origin to abductor pollicis, and is inserted into trapezium.

6. *Extensor primi internodii pollicis.* Aborted on right side. Simply represented by a tendon from extensor ossis metacarpi. On left side it is a distinct muscle with two tendons—the outer one inserted into pollex metacarpal base with extensor ossis metacarpi; the inner and smaller one had its average attachment.

7. *Extensor secundi internodii pollicis.* Double tendon of insertion, left side only. Normal attachment.

8. *Abductor pollicis.* Additional origin from extensor ossis metacarpi.

9. *Interosseous muscle.* Third palmar (double) inserted into opposed sides of third and fourth digits.

10. *Flexor communis digitorum* (*pedis*). Three tendons only to three outer toes.

Absentaneous Muscles.

1. *Palmaris longus.* On both sides.

2. *Second lumbrical* (*pedis*). Both sides.

Subject II. (A spare female.)

Adventitious Muscles.

Levator claviculæ. Left side only. Attachments: Clavicle below, immediately external to sterno-cleido-mastoid; above

to the transverse processes of second and third cervical vertebræ. Width half an inch.

Serrato Atloid. Left only. Origin from fascia covering serratus posticus inferior and seventh cervical spine. Inserted with upper tendon of origin of levator anguli scapulæ into transverse process of atlas.

3. *Chondro-epitrochlearis.* Right side only.(a)

4. *Extensor carpi radialis intermedius.* From extensor carpi radialis longior to brevior. It is simply a tendon.

5. *Extensor brevis manus.* Right hand only.

Heteromorphous Muscles.

1. *Biceps* (third head or factor).—This was a very eccentric specimen. It is questionable whether or not it ought to be considered as a third factor of the biceps. It arose from the humerus immediately below the insertion of coraco-brachialis, some of the fibres of the latter muscle being directly continuous with it. It continued its course parallel with the inner border of the biceps nearly as far as opposite the elbow-joint, when it became tendinous and arched over the brachial artery. The latter evidently divided the tendon into two portions—an outer and smaller one, which joined the tendon of the biceps; and an inner and larger, which continued its course for a short distance as an isolated tendon, then, becoming expanded, joined the bicipital fascia, and followed the usual disposition of that fascia. I am inclined to believe that this muscle represents something more than a mere factor of the biceps. It is certainly not a continuation of the coraco-brachialis. Contrasting it with various degrees of development of the chondro- and dorso-epitrochlear muscles which I have met with, it simulates, and that materially, an unusually large specimen of one or other of them unaccountably aborted at its proximal part. The only other solution of the question is, that it is an eccentric form of brachio radialis. But there are many objections against regarding it in the latter light.

2. The *supinator longus* and *extensors carpi radialis longior* and *brevior* were blended inseparably together at their origin on the right side. Distally—with the exceptions of an intermedius already mentioned, and the tendon of the brevior being inserted into the opposed sides of the second and third metacarpals—they had their usual distribution.

3. *Flexor sublimis digitorum.* Double coronoid origin. Right side.

4. The tendon of the *extensor communis digitorum* going to index digit differentiated into four.

Subject III. (A spare male.)

Adventitious Muscles.

1. *Extensor medii digiti.* On left side only. Large, well developed. Arose below the extensor indicis, from ulna. Divided into two tendons; the radial one was inserted into the dorsal carpal fascia, and the ulnar one joined the common extensor tendon of the third or middle digit on its inner side, and was disposed exactly as the indicator tendon.

2. *Flexor accessorius longus (pedis).* This peculiar muscle was well developed. It arose by fleshy fibres from the middle two-fourths of the fibula, and from the septum between the peroneus brevis and the flexor longus hallucis. About an inch above the ankle-joint it terminated in a long thin tendon, which passed under the annular ligament, superficial to and parallel with the tendon of the flexor longus hallucis. It joined the tendon of the flexor longus digitorum immediately internal to the fibres of the flexor accessorius brevis. Wood has described a similar specimen.(b) This was on right side only.

3. *Psoas parvus.* Both sides large.

4. *Abductor ossis metacarpi quinti.* Left side only.

Heteromorphous Muscles.

1. *Splenius colli.* Sent a slip of attachment deeply behind the digastric muscle (posterior belly) to the jugular process of the occipital bone. Left side.

2. *Splenius capitis.* Afforded a slip which joined the preceding on its inner side. Left only.

3. *Biceps.* The long tendon of origin. Immediately after its exit from the capsular ligament gives off from its radial side a long thin tendinous band of fibres, which continues its course as far as the bend of the elbow, where it becomes expanded into a broad fascia over the supinator longus. This tendinous representative of a muscle has nothing in common with the chondro- or dorso-epitrochlear, in the brachio-radialis muscles. It is the analogue of the bicipital portion of the flexor longus alaris of the bird. Left side.

4. *Latissimus dorsi.* Muscular slip, half an inch long, joining teres major, about an inch and a half above inferior angle of scapula.

5. *Extensor indicis.* On left side had three tendons—the first joined the radial side of the common extensor tendon; the second, the average arrangement on the ulnar side; the third is inserted into the radial side of the base of the first phalanx of the middle (third) digit. This latter is an aborted extensor medii digiti, less perfect than the muscle which I have already described under the adventitious class. It is too arbitrary to classify this aborted form with the latter class, inasmuch as it was virtually a part of the extensor indicis, whatever its signification and true character.

6. *Extensor ossis metacarpi pollicis.* Double distal tendon on both sides—one average, and the other attached to trapezium and opponens pollicis.

7. *Extensor minimi digiti accessorius.* Arose from a sling of fascia extending between the tendinous origin of the average extensor minimi digiti and the ulnar—close to the origin of extensor ossis metacarpi pollicis. The muscle divided above the posterior annular ligament into two tendons—one joined the common extensor tendon of the ring digit on its ulnar side, and the other joined the outer tendon of the two of the average extensor minimi digiti on its radial side.

If we consider the ordinary extensor minimi digiti as a part of the common or superficial extensor, then this is undoubtedly as much a deep and special extensor of the fifth digit as the indicator is to the second or index digit. Virtually, the individual in question had an almost perfect series of deep and special extensor muscles.

8. *Pyriformis.* Tendon of insertion blended inseparably with that of gluteus medius. Both sides. This is so common, and probably accidental, that it is scarcely worth considering as an irregular arrangement.

9. *Extensor primi internodii hallucis.* This was a more perfect specimen than is usually found. It arose by a thin fleshy belly, from the anterior ligament of ankle-joint opposite astragalus, which soon terminated in a slender tendon. This tendon passes forwards, lying between the tendon of the tibialis anticus and the extensor proprius hallucis. It is inserted into inner side of base of proximal phalanx of great toe. Right only.

10. *Peroneus brevis tendon.* Had too lateral tendinous slips of insertion besides its larger average one. The inner joined to be inserted with the peroneus tertius, and the outer one into the under surface of cuboid bone. Both sides.

Absentaneous Muscle.

1. *Palmaris longus.* Absent on left side only.

(*To be continued.*)

(a) Vide *Journal of Anatomy and Physiology*, No. viii., second series.

(b) "Variations in Human Myology," Royal Society's *Proceedings*, May, 1867.

ON THE PATHOLOGY AND TREATMENT OF SMALL-POX.

By ROBERT H. BAKEWELL, M.D.,
Late Medical Officer of Health for the Colony of Trinidad,
President of the Medical Board, and Medical Attendant of the Small-pox Hospital of Port of Spain, etc.

(*Continued from page* 515.)

I now pass on to the consideration of the hæmorrhagic form of variola. This is divided from the simple form by a broad and clear line of demarcation—the existence of red blood-corpuscles in the fluid of the varioles. There were three species of hæmorrhagic variola among the cases I saw. In the first, which is the least dangerous and malignant, the varioles are of the usual size and form, but have a black or dark purple spot in the centre. In the second they have not only this black centre, but they are small, flattish, and irregular in shape, often oval or semi-confluent on the trunk and limbs, and the fluid in them is always reddish and often quite black from effused blood. In the third, and most malignant, patches appear all over the body before the eruption of any varioles. Death may ensue before these appear; when they do appear, they present the same characters as in the second form.

In all these forms the black centre is formed by a complete stasis of the blood in a cluster of engorged and congested capillaries. If the cuticle be dissected off one of these varioles, the cluster of capillaries can be distinguished by a low power of the microscope. Some of them have been ruptured; and, whenever this black centre is seen, I have without exception found red corpuscles in the fluid of the varioles, although to the naked eye it appeared perfectly colourless. It is for this reason that I term all these cases hæmorrhagic. There may be no hæmor-

rhage from any other part of the body, but there is invariably hæmorrhage from the skin.

In the first, or benignant form, the varioles go through the usual process of development, but the constitutional symptoms are more severe than in a simple confluent case with a similar amount of eruption. Some of these cases recover.

In the second form the eruption developes slowly, and the patient, according to my experience, invariably dies.

Case 3.—E. P., female, coloured, aged 19. Admitted 23rd November, 5 p.m. Unvaccinated. Fever came on 20th or 21st. Eruption appeared to-day (?). (Probably not noticed yesterday.)

Present State.—Face, arms, and lower extremities covered with minute reddish vesicles; on all parts of the body numerous bruised spots; is expectorating saliva tinged with blood from gums; passes blood from rectum, vagina, and bladder; temperature 103° Fahr.; pulse 117; respiration 30; tongue brownish, much furred in centre, not dry; delirious all last night. Bark and nitric acid mixture. Lime-juice *ad lib.* 8 p.m.: Pulse 117; temperature 103·6°; sleeping; has passed blood continuously.

24th.—8 a.m.: Vesicles only much more dark and petechial; face much swollen; eruption not much more developed. Pulse 120; temperature 102°. Night: Pulse 105°; temperature 102°.

26th.—Has not slept at all; lies restless and moaning; vesicles everywhere dark purplish or black, with large ecchymoses in various places; still passes blood from all the mucous membranes; feeds with difficulty; the eruption is confluent nearly all over the body, but flat and badly filled. Temperature 101·7°; pulse 124; respiration 27. Night: Temperature 102·5°; pulse 112; respiration 40. Rum ʒj. every four hours.

27th.—Much the same. Temperature 102°; pulse 126; respiration 42. Evening: Eruption much blacker. Pulse very feeble, 120; temperature 102°; respiration 48. Died 6 a.m. next morning.

The following is a typical case:—

Case 143 (Small-pox Hospital).—P. F., male, aged 20, unvaccinated, white.

February 3rd.—Every part of the body is covered with a perconfluent eruption of exceedingly small vesicles, like seed-pearls in shape and size, with a deep red or purplish base, the colour not entirely disappearing on pressure; intermixed with these are large blebs, having a black spot in centre. Tongue covered with varioles; delirious; pulse 112. To have two drachms of syrup of chloral hydrate every hour for three times until he sleeps.

February 4th.—Took the three doses of chloral before he slept; required a strait-jacket; is now sleeping. 1 p.m.: Blood under microscope—red copuscles form amorphous masses; do not nummulate; are numerous and not ill-formed, and so also are white corpuscles; varioles contain the usual corpuscles and red blood-corpuscles.

5th.—Slept all night; pock ripening.

6th.—Is lying about on the floor, delirious, naked, pulling every article of clothing off him; refuses everything; spits out whatever is given. Potassii bromidi ʒss. stat.

7th.—The whole of the skin of the back is rubbed off, and the back is raw all over; large patches in other parts of the body are likewise rubbed raw. Refuses all nourishment, and spits everything out; extremities cold. Died same day.

A few cases occurred in Trinidad, not however under my care, where the patient died after the appearance of the petechiæ, but before the eruptions came out, from convulsions followed by coma.

Case 206.—C. F., aged 12, female, coloured. This was the only case in which I saw the petechiæ appear before the variolous eruption, although several cases came under my notice in which this was stated to have occurred.

The father of this girl was one of my assistant sanitary inspectors, and most indefatigable in the performance of his duties. He was much exposed to contagion; the house was overcrowded, and in the gutter of the street he lived in there was a constant accumulation of black, foul, and horribly stinking mud. (a).

The child had had small-pox before in the epidemic of 1861. She was attacked with fever the day before I saw her. When I saw her there was high fever, great restlessness and jactitation, hot dry skin, delirium, minute petechiæ all over the body, but *no varioles*. Thought it to be a case of malignant typhus, as the child had had small-pox before. There was obstinate constipation, and she had not slept at all the previous night. Ordered hydrochloric acid, lemonade to drink, morphia, and beef-tea.

Next day same restlessness; no sleep; vesicles appeared on face, hands, etc. The day following the varioles were developed; the petechiæ more abundant, jactitation and delirium incessant. Absolute sleeplessness, in spite of large doses of morphia.

She continued in this state until the next day but one, when she died. At that time the eruption was semi-confluent, and of the flattish irregular kind common in hæmorrhagic variola.

In all these forms, hæmorrhage may take place from the mucous membranes, and in the second and third forms there is always hæmorrhage from some of them. In some it was from the bowels; in some there was vomiting of blood; in some from the kidneys and bladder; in women, always from the vagina; in some, epistaxis; in some, from the mouth; and in the most malignant, from all combined.

The hæmorrhagic form occurred most frequently in prostitutes, hard drinkers, and persons neither one nor the other, but who had been living on bad food, in densely overcrowded houses, and breathing air foul from decomposing animal and vegetable matter. But some cases were seen amongst persons of good position, who lived in airy houses, and whose food was not necessarily bad, although the excessive fondness of the creoles for salt fish leads them to eat far too much of that most indigestible and innutritious food. In some of these cases I believe that excessive fright had its share in producing this kind of small-pox.

There could be no doubt that the hæmorrhagic variola differed from the variola simplex, not in any peculiar malignancy of the variola poison, but in the superaddition of another poison. That this poison was produced by the foul emanations from decomposing animal and vegetable matter prevailing throughout the town—plus, in many cases, the emanations from the bodies of other patients, crowded together in ill-ventilated huts—I have no doubt. It was, in fact, the same condition of things which produces the malignant bilious remittent, the yellow fever, the acute dysentery, the gaol fever, the lazaretto fever, and the ship fever, all of which are complicated with hæmorrhage. Those who have watched these forms of disease in the tropics would know when and where to look for hæmorrhagic small-pox. Precisely the same kind of persons who fall victims to the former are the subjects of the latter.

It would seem that in these cases the system has been for some time in a condition of ill-health: the blood has suffered alteration in its constituents, the red corpuscles (possibly from some change in their electrical condition) have lost wholly and entirely their tendency to adhere by their sides, and form large amorphous masses, instead of *rouleaux;* the capillaries are weakened, so that when the variolous poison sets up the primary fever, the increased rapidity and force of the heart's action cause rupture of the capillaries at those points where the eruption appears, and subsequently, in the severer forms, in the mucous membranes.

The hæmorrhagic form may be artificially produced in a case of simple variola by putting the patient in an overcrowded hospital or house. During the early days of the Port of Spain Hospital, we occupied an old house until suitable buildings could be erected. The influx of patients was so much greater than was anticipated that this house was soon filled and very much overcrowded. It was extremely difficult to turn the cases away, as no one ever applied for admission during the first two months who was not absolutely destitute and friendless. Besides, some were sent from the gaol and some from the Colonial Hospital, whom I was obliged to admit. Notwithstanding the abundant ventilation, and the use of carbolic acid to an extraordinary amount, I saw that the patients began to suffer, and I noted in some cases that petechiæ showed themselves in the varioles after admission. I therefore wrote officially to the Government, and declared that no more cases could be admitted without adding greatly to their own danger, and to that of the patients already in the hospital. I was authorised to refuse admission to any more cases. After the numbers were reduced, and the new buildings were erected, although the epidemic increased in severity, I never saw any more cases of petechiæ appearing after admission. Out of the 203 cases admitted under my care into the Small-pox Hospital, 49 were hæmorrhagic, or upwards of 24 per cent. Of these 49 cases, 41 died, and 8 recovered.

As it is now some months since my first paper on small-pox appeared in the *Medical Times and Gazette*, (June 22), and as since it was written I have made many more examinations of small-pox matter, I will briefly recapitulate the microscopical characters of the various matter.

(a) The gutters were under the control of the Borough Council, and there was no possibility of getting that body to do its duty.

In the form I have called variola simplex, the contents of the vesicles (commonly called papules), within twenty-four hours of their first appearance, to the naked eye are a perfectly clear and limpid fluid. Under the microscope it will be found that even at this early stage corpuscles a little larger than red blood-corpuscles are formed, containing one to four nuclei; there are also brightly refractive globules of the same size as the nuclei, and others still smaller. These have no apparent structure. There will also be found cells belonging to the rete Malpighii. At a later period of the eruption, up to the fourth day, the corpuscles vary much in size; many are filled with granular matter, and have no distinct nuclei; the granules refract light brightly; the corpuscles have a tendency to form groups of six or eight; there are masses of granules, and many free nuclei; in the coloured races pigment cells from the rete Malpighii are found at this period abundantly. The writer has just been examining a specimen, preserved from a negro treated in Trinidad, put up in April, and having the characters above described well marked now (October 10). Acetic acid renders the granular contents of the corpuscles somewhat brighter. If matter taken at an early stage of the eruption—say on the third day—be examined immediately, it will be found that there are very few corpuscles; but if some of the matter be preserved in a capillary tube, and kept in a warm place, they will rapidly increase in number, until the fluid is, even to the naked eye, of a somewhat milky tinge, like milk and water. The change in colour is caused by the development of the corpuscles, which in two or three days will be found to crowd the field.

The same change may often be observed in vaccine lymph taken on the eighth day.

The matter taken from varioles on the lower extremities generally contains fewer corpuscles, and is more watery than that on the trunk, head, and upper limbs. These varioles often dry and shrink up without bursting.

As the varioles become opaque, and "pustular," as they are called in the books, the corpuscles no longer float about freely in an abundance of clear fluid, but the fluid itself, purulent to the naked eye, is in small quantity, and the corpuscles crowd the field of the microscope. The glass cover must be pressed closely down, or a drop of serum or diluting fluid mixed with the matter, if a good view is to be obtained.

As the varioles ripen, the contents consist of large cells (about $\frac{1}{1000}$ inch in diameter), with three or four nuclei in them, and generally some exceedingly minute granules as well, filling up the cell; second, of smaller cells, with a granular nucleus, separated from the cell wall by a clear space; third, of smaller corpuscles, the size of or less than a red blood disc, containing many bright granules. Besides these we find proliferous cells, from $\frac{1}{300}$ to $\frac{1}{700}$ inch in diameter, containing three or four other cells. Sometimes these proliferous cells are seen in the act of bursting and discharging their contents; and I have seen perfectly structureless circular membranes exactly like an empty cell of this description.

In addition to these we find the other matters—pigment cells, epidermic cells, tissue *débris*, etc. About the eleventh day of the eruption, as it is beginning to dry up and scab, those varioles which have not burst contain a very thick matter, in which all the cells are about the same size; the proliferous cells have all disappeared; there are no free nuclear bodies, and no granules, but we find the large empty cell walls (?) of which mention has just been made. I have notes of a case in which the existence of numerous proliferous cells is noted on the tenth day of the eruption; and on the eleventh it is observed that they have all disappeared; but the empty cell walls are to be seen.

This is the last phase of existence of the variolous corpuscles as growing bodies. After this they are found dried up in the scabs. They can be readily distinguished in the dust of small-pox wards. I have collected dust deposited at a height of seven or eight feet, and which must, therefore, have been floating about in the air; and in this dust, amid all the various and curious particles that are usually found, the minute scabs, with their epidermic scales and variolous corpuscles, could be easily seen, especially when moistened with serum or glycerine and water.

The hæmorrhagic form of variola differs from the simple form by the fact that red blood-discs are invariably found in the fluid of the varioles—sometimes in such quantity as to tinge it with colour visible to the naked eye; and that in the two severer forms of the disease there is an absence of proliferous cells. This may rise from the fact that in these malignant cases the patient never lives to that stage at which proliferous cells are formed. It is curious to notice, also, that when the contents of a hæmorrhagic variole are collected in a capillary tube, the red corpuscles invariably gravitate rapidly to the lower side or end of the tube. When recently taken from the variole they agglomerate in masses, but do not accumulate.(b) When the matter of hæmorrhagic small-pox has been kept for some time in a capillary tube, very beautiful blood-crystals are formed. I have before me now preparations in which all the various forms figured in Beale's work may be seen. In the aqueous form, as I have said above, there is no other difference than the smaller proportions of corpuscles to the fluid contents of the varioles.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

LONDON HOSPITAL.

A SERIES OF CASES ILLUSTRATIVE OF CEREBRAL PATHOLOGY. CASES OF INTRA-CRANIAL TUMOUR.

(Under the care of Dr. HUGHLINGS-JACKSON.)

Continued from page 599.)

Case 3.—*Epileptiform Seizures, beginning in the Right Cheek—Epileptic Loss of Speech and Epileptic Hemiplegia—Double Optic Neuritis, without Impairment of Sight—Syphilis—Temporary Recovery after the use of Iodide of Potassium.*(a)

This case, like the last, is one of convulsion beginning unilaterally, but the fit began in the cheek, on the *right* side, and there was affection of speech; there was what I have called "epileptic aphasia." In some slight attacks there was no affection of speech. I suppose it depends on the severity of the fit—on the quantity of the discharge—whether speech suffers or not. The arm fell powerless, without spasm. I have several times noticed this in cases of spasm limited to the right side of the face.

Fits beginning unilaterally, *when there is also double optic neuritis*, depend mostly on *syphilitic* disease of the convolutions, but of course occur with other kinds of new growths there seated. The association—not optic neuritis alone, nor the kind of convulsion alone—is very useful empirical evidence of syphilis. In this case, however, the patient's body presented evidence warranting the diagnosis of syphilis. There can be no doubt that there is (at least, has been) syphilitic disease of convolutions near to the left corpus striatum. One point of interest in the case is, that the patient has recovered, in the sense that he has got rid of his symptoms. That he is cured of syphilis no one would suppose; and that the syphilitic changes in his brain have been reversed is at least doubtful. In Case 4, however, there is, I think, evidence that syphilitic material has been absorbed—the convolutions remaining permanently damaged—and the same may have happened in this case. I have, however, little doubt that the patient will after a while suffer again from nervous symptoms, although possibly and probably from a new style of symptoms. I say this because in such cases the patients frequently do suffer again after their "recovery."

It is to be observed that in this patient there never was any defect of sight of consequence *from first to last.* I examined his eyes before he had neuritis, during the neuritis, and after the changes had disappeared, so far as could be ascertained by *indirect* examinations (most unfortunately, I did not examine his eyes by the direct method before neuritis supervened). Had I not used the ophthalmoscope it could not have occurred to me to suppose that he had optic neuritis. And were I to examine his eyes to-day for the first time, by the indirect

(b) I have now before me a drawing made in Trinidad of the microscopical appearance of matter from a hæmorrhagic case (No. 196), in which the agglomerated masses of red corpuscles are well seen. Some of this matter was put up in a tube. Not a single red corpuscle can be discovered, but abundance of blood-crystals and variolous corpuscles, free nuclei, etc.

(a) Perhaps some apology is needed for reporting in this series a case uncompleted by autopsy. I report it as a good illustration of the fact that double optic neuritis may come on and pass off without there being at any stage any defect of sight. It is well known to those who use the ophthalmoscope by routine that sight may be good when there is acute neuritis, but I do not think it is widely known that neuritis may pass away, leaving sight unimpaired; atrophy does not always follow neuritis. Cases completed by autopsy, and in all other essential respects like Case 3, will be shortly reported.

method, I should not be able to say that he had had it. I may here mention that the patient's eyes were examined in the acute stage, not by myself only, but also by Hutchinson and Brudenell Carter.

The treatment in this case was that instituted by Dr. Hearnden, of Sutton, who was so good as to send the patient to me—large doses of iodide of potassium.

February 9, 1871.—A man, 39 years of age, of healthy build, was seized December 22, 1870, when at tea, in the following manner:—He had suddenly a quivering in the right cheek, and next observed that his bottle of tea had fallen out of his right hand, which limb became powerless. The face was the only part which twitched; the arm was still. He tried to speak, but could not get out a word, although he was not unconscious. His men took him to Dr. Hearnden, but he could not speak to this gentleman. He was sent home, and in about three hours from the time of the loss of speech he had a convulsion. In this attack his wife noticed twitching of the right side of the face, and that his right arm was bent and placed in front of him. He could not speak, but was quite sensible; nodded his head in return to questions, and cried. He then went upstairs and had a violent convulsion; he was unconscious. He did not, he says, bite his tongue; his wife says he did. When he came to himself, after this fit, he could speak, but only indistinctly. The arm was paralysed, and remained useless for several weeks; the leg was weak, but soon recovered. About fourteen days ago he had a second attack of loss of speech, preceded by quivering of the right cheek, but the loss of speech only lasted half an hour. A few days ago he had a third and similar seizure. In all three, besides the quivering of the right cheek, there was also a sensation of largeness of the tongue; in none of these three was he insensible. He unfortunately did not try to write or to read in any of the attacks of loss of speech. There was no valvular disease of the heart. The first attack came on when he was in seeming good health, and at work. Since, but not before, the first attack, he has had much headache, chiefly frontal. The optic discs are quite normal.

He had three scars—one on the lower sternal region, about two inches square; one on the right side of the chest; and one on the *left* side of the head, about an inch from the middle line and over the posterior part of the parietal bone. The last-mentioned scar was irregular in shape, and the skull was slightly dented, but there was no evidence that he had lost bone. This had begun as a pimple some months ago; there was afterwards a hard lump and much pain—he thought he should have gone mad with the pain. There had probably been a node here. He had never had a blow on the head.

I agreed with Dr. Hearnden in the opinion that the patient's symptoms were owing to syphilitic disease of the brain, and I advised a continuance of the iodide of potassium he was taking. The scars were the only evidence of syphilis. The patient had had gonorrhœa twelve or thirteen years ago, but he said he had never had a sore. There was no scar on the penis. He had had no constitutional symptoms—the scars excepted—and his family history did not supply any facts to confirm the diagnosis of syphilis. There was nothing to suggest congenital syphilis. His corneæ were clear, and his upper central incisors were normal in shape.

At a later date (May 7) Mr. Hutchinson drew my attention to white markings in the cheeks with much puckering.

When I saw him his speech was scarcely abnormal, but he complained of it. He had, he said, catchings in his speech. I could find no distortion of the face nor tongue. The right arm was decidedly much weaker than the other. He could, he said, "clench," but could not use the hand for the scissors in his business.

April 14.—No further attack of consequence. He has not lost speech, but has had twitches in the right side of his face. In reply to a question about the twitch, he said he had had a "bitch" of it, quickly correcting it to "a bit of it." Such a mistake, however, is not very uncommon in healthy people. He said his speech was not so good as it used to be, but I heard nothing wrong except the one mistake mentioned.

He has now further symptoms—viz., pain at the back of the head where it joins the neck, and with it noise in the ears. It seems this is occasional. He said the noise in the ears would come on and makes his "head" so stiff that to look on one side he had to turn his body. These symptoms are of a different series from those described at his first visit.

29th.—He has still had no more fits, unless the following account is of a slight one:—He was sitting one day last week, when a sensation came across his forehead, attended by "buzziness."

May 7.—Mr. Hutchinson was kind enough to see the patient, and he agreed in the opinion formed by Dr. Hearnden and myself that the symptoms must be attributed to syphilis. The patient had, he told me, whilst waiting for an examination, an attack of twitching of the right cheek, but it did not, he said, affect his speech. He looked apathetic and dull, and complained of much pain at the back of the head near the neck. There was nothing wrong observable about his sight, judging from his manner, but he said that he could not read for many minutes together, and that he saw badly across the road. I therefore looked at his discs, and, finding neuritis, tested his vision. When near the window he could read with each eye No. 1 of Jæger. He read slowly, and made one or two mistakes, but corrected them when they were pointed out to him. The discs were much swollen; the edges were lost. The veins were large and tortuous; there were irregular white patches and several recent hæmorrhages. How long these appearances had existed I could not tell. The discs were normal at his first visit. I have to blame myself for neglecting to examine his eyes on April 14 and 29.

May 16.—He could still read No. 1 of Jæger and No. 1½ of Snellen. He read slowly, and made four mistakes in about four lines—*e.g.*, he said "space" for "spade," which, however, he corrected himself. Still he complained of his sight. He said "it comes over like a cloud now and then," and that when he looked at the newspapers "it comes over a mist." His sight never failed altogether. He had occasionally "specks" in the left eye. There were no "colours." He recognised the colours in the coloured types of Snellen very well. His field of vision was normal. The left optic disc was much swollen, the veins large, and knuckling over the edge of the disc. The arteries were obscured. There were very small shapeless white patches and scattered blotches of blood. The right optic disc was in about the same condition. There were no changes at the yellow spot. There was no albuminuria. He had had a slight giddy seizure.

25th.—Can read the same type as before, but more easily. Ophthalmoscopical appearance about the same.

June 3.—Reads smallest type easily. Less swelling of discs. He has had no fits except slight movements of the mouth, and all the paralysis of the right side has gone. He is "as strong as ever." He has had no further fits, nor any kind of nervous symptoms.

The discs gradually cleared up—indeed, on June 26, to a careless observer, the appearances would have seemed normal, but the edge of the disc was slightly indistinct; the arteries were traceable and the veins were not tortuous. By direct examination streaks were seen along some of the vessels. There was "silvery-looking" matter near the entrance of the vessels in small quantity; there was also a little streaking of the adjacent retina.

On October 24 I put the atropine into the left eye in order to be more certain of the results of the direct examination, but the appearances were not obviously different from those above mentioned. I had never dared to use atropine before in this case, because I feared that if the patient's sight had been much troubled after the use of atropine I should have seen no more of him, and full dilatation of his pupil was not necessary for treatment.

December 13.—He now (since the above was written for the press) comes to me for an ulcer on the upper part of the scar on the sternum. He has been taking only small doses of iodide of potassium.

20th.—After taking ten grain doses of iodide of potassium the ulcer is scarred over.

March, 1872.—He feels quite well, and looks well. He is still taking iodide of potassium, but in small doses, and is to give up its use very gradually.

May 14.—He is still apparently quite well.

August 5.—He keeps well. The ophthalmoscopical changes, to indirect examination, are *nil*; and to direct examination they are no greater than those mentioned in the report of Case 2.

Closing of the Dublin Exhibition of 1872.—On Saturday, November 30, his Excellency Earl Spencer, Lord Lieutenant of Ireland, after an imposing public ceremonial, declared the Exhibition finally closed. His Excellency conferred the honour of knighthood upon Mr. Edward Lee, the manager, to whose efforts the great success of the Exhibition has been largely due. In the six months during which the Exhibition had remained open its collections of science and art treasures were visited by some 420,000 persons.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
„ „	*Six* „	0 14 0
The Colonies and the United States	*Twelve* „	1 10 0
„ „	*Six* „	0 15 0
India	*Twelve* „	1 15 0
„	*Six* „	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, DECEMBER 7, 1872.

MEDICAL TEACHING.

We have recently directed attention to what we conceive to be a mistaken estimate of the scope and character of information to be expected from ordinary medical candidates for diplomas conferring the right to register as legally qualified practitioners. Our remarks had their origin in the fact that so large a number of medical students fail to satisfy their examiners. We did not in any degree suggest that the standard of examination in all that goes to form a knowledge of the profession, in surgical and medical anatomy, in the great principles of physiology, in the facts of histology, pathology, and therapeutics, or in practical medicine, surgery, and obstetrics, is too high; we believe that in such subjects it might yet be raised with advantage, but we think that the examinations of the present day are too diffuse, that the student is required to be ready to answer questions, written or *vivâ voce*, either upon matters of science clearly outside professional learning, or upon points of detail or of minute investigation or doubtful utility in the fundamental sciences upon which Medicine rests, whilst his overstretched memory fails to grasp with tenacity the great facts and broad principles of those sciences. Of course we fully acknowledge that by far the largest part of the blame must be laid upon the students themselves. The continuous mental effort necessary to acquire the principles of Medicine, Surgery, and the collateral sciences, in the short space of three winter and two summer sessions, is to few lads pleasant, and it requires an amount of determination which many find it very difficult to put in force. That they ought to make the effort and exercise the determination is clear, but it is not the less true that it is not a slight effort or an easy exercise.

The object of all medical teaching should be to stimulate and direct the effort, and to facilitate the exercise. The question we propose now to consider is, how far the present standard of medical teaching fulfils these indications. Far be it from us to describe that standard of medical teaching as a low one. We know that with regard to the subject matter taught it is not. But it is no less a fact that in a large number of cases the present medical teaching fails to arouse and direct the mental energies of the student, which are only at last called into play by the approach of examinations, which he knows he must pass or fail conspicuously in the race of life. We think that a few hints or suggestions for the improvement of medical teaching will not be inopportune.

First, with regard to the ordinary system of teaching by lectures. We maintain that as commonly conducted it can hardly be called a system of teaching at all. A professor addresses or reads to his audience of students, to whom the whole or a vast part of the matter is new, a discourse of one hour's duration, wherein (if it be worth anything) are contained not merely the results of his own investigations or observations on a particular subject, but those of contemporary and deceased investigators and observers. Say the subject is anatomy, or physiology, or chemistry, and the audience one of first year's students. How much of such a discourse will a first year's man of eighteen understand, and how much will he remember? In the first place, the duration of time is too long. One hour is too long for fixed attention to a speaker, either with or without the added labour of taking notes, especially when the process is repeated three or four times a day. Time was when sermons in church were an hour long. Fortunately for the present generation of church-goers the clergy have found out their mistake, and have considerably curtailed their eloquence—at least to the increase of their hearers' satisfaction, and, we may charitably hope, of their profit. Then a lecture in which there is not constant repetition may be oratory, but it is not teaching. Neither is a system in which there is not constant personal intercourse between the professor and the taught—an intercourse which shall apprise the former of the amount of instruction which he has imparted, and shall confirm and root in the latter the knowledge which he is acquiring.

At least in the case of the four preliminary sciences—anatomy and physiology, chemistry and botany—we are convinced that a much larger proportion of students would acquire them in a very real degree—not merely get them up for pass examinations—if a plan of short lectures and constant class examinations were adopted. We would suggest that, as now, the time of the meeting of the class should occupy an hour; but that a little more than half an hour only should be occupied by the lecture, which should always commence with a short recapitulation of the main points taught at the previous meeting. During the lecture the professor should make a point of going over his ground at least twice, and, when a lesson is one of intricacy or difficulty, three times; and the remainder of the hour should be devoted to *vivâ voce* examination and conversation on the subject. During the time thus obtained there would be plenty of opportunity, in the case of anatomy, for examining each student in turn on the dissected subject, and in the case of chemistry, of making each in turn perform and show a knowledge of the method and results of simple experiments. In other words, we would combine the professorial with the tutorial mode of instruction, and let both be conducted by the same ripe and experienced teacher. It would be easy to show that, under such a mode of instruction, combined with a strict system of registration of attendance, no student could help acquiring a considerable amount of information. Moreover, it would call into healthy and enduring action the spirit of emulation and healthy ambition, which is now too often only roused into spasmodic effort towards the end of a session by the bait of some ephemeral distinction.

But it is not only in the anatomical lecture-room that we think the course of medical teaching might be improved. We believe that the mode in which the student's education in the dissecting-room is conducted is often neither the easiest nor the best. A first year's man, as soon as he has obtained a slight

knowledge of the bones and has tried to get by rote the names of some of the muscles attached to them, is allowed to put his name down we will say for a lower extremity. He takes his new "Dissector," and commences by making the prescribed incisions, and after laying back the flaps of skin begins to search out and trace the cutaneous nerves. Now, this process of following out the fragile branches is neither an easy nor an interesting one to a student who does not know what a nerve is or what purpose it serves—who has never before met with the names anterior crural, genito-crural, or saphenus, and to whom the lumbar plexus is as much a *terra incognita* as the North Pole. However, after two or three days spent in this way, and after he has satisfied his conscience that he has made out as much as he could, and himself that dissecting is rather a bore, he is next directed to make a careful dissection of the saphenous opening and the parts connected with femoral hernia. But he knows nothing about a hernia, has the most nebulous idea of a sac, soon finds that he has dissected away all the cribriform fascia without knowing it, and begins to feel that he must give up the whole thing in despair. A week is taken up before he begins to clean the muscles, and the "part" already begins to show the effect of chemical forces. By the time our first year's man has got to dissect the structures with which he has had any previous acquaintance by name—the muscles and ligaments—and has begun to trace the course and branches of the great vessels and nerves, he is bodily and mentally utterly sick of his bargain, and at last, very likely, is tempted to scamp the sole of the foot entirely. He has the very vaguest idea six weeks afterwards of the relation of the parts covered by the great gluteus or of the positions of the vessels and nerves in the popliteal space. The thing which probably he remembers best—for he did it when his zest and ardour for work were fresh—is the distribution of the cutaneous nerves and vessels, a knowledge which will serve him but little in Medicine or Surgery. For all this waste of energy, disappointment and failure, the system, not the student, is responsible. How different would the whole matter appear to him if, before he was allowed to dissect himself, the whole part had been demonstrated before him by the professor, and he himself had acquired some general knowledge of the muscular, circulating, and nervous systems. What has appeared a hard drudgery would have then been a pleasure, and dissecting would have rooted indelibly in his mind the facts which he had already been carefully taught.

Chemistry is one of the most dreaded subjects of examination. One reason we believe to be because it is too often taught the medical student without any reference to his particular requirements, especially to toxicological chemistry, animal chemistry, and the chemistry of Materia Medica. The same is true of natural philosophy and botany.

The clinical teaching of the Royal Infirmary at Edinburgh may be taken as a model of public instruction, which we commend to our clinical teachers in England. The students, as is well known, are divided into groups, and each in turn is required to examine the patient and to make a diagnosis of his case, which is afterwards either confirmed or disallowed by the professor. We have very recently in our columns published a recommendation that the same system—of course, if necessary, modified to suit the requirements of surgical practice—should be applied to surgical clinical teaching. We would again urge it upon the attention of hospital surgeons.

To conclude, the great defect of medical, and in fact of all, education in the present day is its diffuseness, its hurry, its *memoria technica* character, and its want of thoroughness. Education used to be a gradual, not a spasmodic process. The great scholars, the great improvers of science, have not been made by competitive examinations. An oak-tree was never grown in a hot-house. The acquisition of knowledge which is to be retained must be like the development of the brain itself—a growth, not an inflation.

UTERINE HYDATIDS.

One does not need to dip very deeply into the history, ecclesiastical or mundane, of the middle ages to discover stores of strange stories of monstrous births, and stranger theories of demoniacal possession, with other weird and quaint devices whereby our forefathers strove to defend the fair fame of the ladies of those days, or to relieve them of the opprobrium which was then the lot of those who ushered into the world such things as moles and monsters. But as the faith in witchcraft died out, this explanation at least was discredited, and, taken altogether, the ancient theories were wont to lean, if not to virtue's side, at least to that of pity. But when experimental philosophy and modern science began to investigate the arcana of reproduction, it must be owned that for some time the new light shone harshly upon, and did but scant justice to, the fairer portion of humanity.

For many years hardly anyone took the trouble to inquire into the true nature of those curious masses which escape from time to time from the human uterus. It was for a long time enough that a woman should slowly increase in size, and then, after uterine pains, more or less quickly reduce her bulk by the passage of something per vaginam, to satisfy observers, both medical and non-medical, that there must have been the intervention of a male progenitor. Those who did take the trouble to inquire did, it is true, find that clots of blood and dysmenorrhœal membranes, fibroid tumours, and the like often assumed strange shapes, and counterfeited early fœtal forms, under circumstances where the supposition of sexual intercourse was at least gratuitous and improbable. Gradually the light of science began to explore the dark corners of uterine pathology, and to investigate the true nature of the masses known as moles and hydatids or vesicular cysts.

And at first, as often happens, the verdict of science seemed a harsh one. The curious masses of little bladders of larger and smaller size, sometimes developing one within the other, and clustering almost like currants round something like a stem, were often met with along with a blighted ovum, or under circumstances which led irresistibly to the conclusion that they were at least parts of an ovum. The researches of Cruveilhier, Mettenheimer, Gierse, Meckel, Graily Hewitt, Barnes, Braxton Hicks, McClintock, Hahn, and many others who might be mentioned, have shown us that the majority of the hydatids (so called) of the uterus are merely cystic degenerations of the chorion. If we do not mistake, the first clear and succinct account in English of their mode of formation was published by Sir James Paget in his "Lectures on Surgical Pathology." But obstetric teachers and practitioners had long before recognised this mode of origin.

Whether, as Mettenheimer asserts, the growth of the mass be due to enlargement of the cells of the chorion villi, or whether, as Gierse and Graily Hewitt assert, it is due to simple distension of the villi themselves by a dropsical fluid, can scarce as yet be deemed a settled point. We ourselves are inclined to believe that both views have a certain amount of truth; whilst we think a great majority of authorities are now inclined to admit that the death of the ovum usually precedes the cystic degeneration. McClintock is especially strong upon this point; he says—"In very few of the recorded cases of the disease was there any vestige of an embryo. Its absence would seem to be the rule; its presence the exception." This should, at least, lead us to be very cautious in maligning the character of a patient in any doubtful case. The numerous cysts met with in the ovaries, testes, breasts, and other organs, place these growths in a large class of growths which would appear to derive their origin and their tendencies from the very beginnings of life in the discus proligerus of the ovum. Whilst the general characters of the growths lead us almost

irresistibly to the conclusion that, as a rule, they are the products of conception, and fully admitting that "spontaneous generation" has met with no advocate amongst obstetricians, and, amongst its own supporters, none hardy enough to apply it to the mammalia, we still protest strongly against a hasty impeachment of character founded upon the nature of a disease upon many points of which scientific observers are yet at variance. This is still more a matter of wisdom rather than of mere caution, because the discovery of echinococci in a vaginal discharge by Dr. Braxton Hicks, in 1866, was followed by the discovery of true hydatids in the uterus by Dr. Graily Hewitt in 1870. Nor does the fact rest upon the bare word of these gentlemen, competent as they are; for both were confirmed by other skilled observers. This important discovery appears to have attracted less notice than it deserved.

It would certainly seem, on *à priori* grounds, that there could be no especial reason why true hydatids should not be found in the uterus, since between the rectum and the bladder, and other contiguous situations, they are sufficiently common. And if curiosity be once aroused on the subject, no doubt many other cases will be discovered and recorded. The limits of our article do not permit us to do more than indicate a few other points of interest on this question of hydatids. Their diagnosis, except when portions are passed per vaginam, or can be recognised by a digital examination, must always be difficult. The experienced accoucheur knows how little reliance can be placed upon the absence of fœtal pulsation and fœtal movements, or upon an alteration in the quality of the placental souffle. Almost all the other signs of pregnancy are met with, and the supposed pathognomonic sign of hæmorrhage is, we need hardly say, not pathognomonic at all. If the patient be under continuous observation, the irregular and peculiar growth of the mass and the existence of general disease would lead us to make a vaginal examination. As regards the treatment, there can be but little doubt that the sooner in reason, and by any safe method of procedure, the uterus is emptied of these abnormal visitors, the better for both patient and doctor. Mechanical means, ergot, and the injection of astringent fluids appear the most feasible modes of effecting this; and in doubtful or difficult cases plugging appears a sensible procedure, whether by the old-fashioned tampon or by Barnes's dilators. But it has been suggested, with some justice, that the degeneration of the ovum in the common form of hydatidiform degeneration of the chorion is often merely a localisation of a general dropsy, due to cardiac or renal disease or anæmia, or some kindred form of dropsy. These cysts certainly occur, as a rule, in pluriparæ; there is often some general disease, or there has been hæmorrhage, or an accident, or the history or probability of syphilis, or of some other exanthem: they sometimes, however, occur in the unmarried, and without any apparent pre-existing disease. It is much to be regretted that many of the published cases are so imperfect, and we hope that in future those who record them will at least note the presence or absence of cardiac, renal, or other complications, as well as of the more acute diseases, and will subject the masses expelled to careful microscopic examination, either by themselves or by competent examiners. In the meantime, till we know more about them, let the subjects of this curious disease at least have the benefit of our charity.

THE WEEK.

TOPICS OF THE DAY.

The case of death from an overdose of hydrate of chloral which was reported in the daily papers last week suggests one or two reflections. The circumstances are briefly these. A tobacconist, one David Gomez Silva, living at Greenwich, who was addicted to drinking, applied to a chemist named Part for something to cure the sleeplessness resulting from chronic alcoholic poisoning. The chemist prescribed thirty grains of hydrate of chloral in a draught, which at first had the effect of procuring sleep. After a time the chloral lost its effect, and the dose was increased until ultimately the tobacconist was taking 100 grains of hydrate of chloral at once. At last the customer, or "patient," got Part to supply him at one time with two draughts, each containing 100 grains. This was on a Sunday evening. On Monday morning the tobacconist was found dead in his bed, with one empty phial in his hand, and another empty phial was found on the washstand. At the inquest Part said that he had warned Silva not to take both draughts at one time, and to be careful; and that he had also told Silva's wife to watch him when under the influence of the medicine, and if he overslept himself to send for a medical man. This Mrs. Silva denied. But, whether it were so or not, we have here a chemist prescribing for a tradesman addicted to drinking a powerful medicine which he incautiously increased in strength until the dose was no longer medicinal but poisonous. To make the matter worse, the chemist, well knowing the man's habits, trusts him with two of the poisonous doses at once. We have not seen for a long time a more striking instance of the danger to which the ignorant public is exposed at the hands of these unqualified practitioners. It is most probable that chloral was quite unsuited for the man's condition. But, be that as it may, no medical man would have given a drunkard 200 grains of chloral hydrate with which to dose himself at pleasure. The jury appended to their verdict a censure on Part for supplying poison in such a quantity, and the Coroner remarked that it was a question whether he had not rendered himself amenable to the law in so supplying it. There is reason to believe that the injurious habit of taking chloral is largely fostered by the reckless way in which it is recommended and sold by chemists. We probably possess no narcotic which produces so profound a change in the animal body, and which ought to be prescribed with greater care and vigilance. But every chemist thinks he has a right to sell this most powerful and uncertain drug to all comers. There are certain poisons which the law prevents anyone but a pharmaceutical chemist from selling, and permits him to do so only under certain regulations. It is a question whether a law which would prevent anyone but a medical practitioner from prescribing or dispensing certain drugs for any bodily ailment, except when ordered in a physician's prescription, would not be more effective for the protection of the public.

The death of the unfortunate barrister, who died from lung disease induced by privation and exposure in a workhouse hospital, reminds us of a want which seems not to be sufficiently supplied even by the numerous charities of London: we mean a nursing home for men affected with chronic diseases, such as phthisis, which are not admitted into ordinary hospitals. Of course Brompton and Victoria-park are open to such cases, but they do not sufficiently meet the case. There are many nursing homes for sick women, conducted by sisterhoods and other charitable agencies; but if the father of a family above the pauper class falls ill of phthisis or some chronic disease, we know of no place except the consumption hospitals—which are always full—where he can be nursed and tended, and he simply becomes a burthen upon his wife, and the whole family ultimately come upon the parish. We think there are already too many medical charities in London, some of them of very questionable merit; but we believe that a nursing home, where decent men, the victims of chronic disease, might be taken care of on easy terms of admission, would be of greater benefit to the community than the opening of twenty dispensaries and out-patient departments for the indiscriminate distribution of drugs.

The City Commission of Sewers has appointed Dr. Letheby the Public Analyst for the City at a salary of £175 per annum. At the last meeting a report was read from Dr. Letheby, in

which he recommended that the fee to be demanded from a purchaser who brought an article to an inspector under the Act for analysis should be 6s. This, however, was considered too high a charge by some of the members of the Commission, and they unanimously determined to fix the charge for analysis at 2s. 6d., the minimum allowed by the Act. As the example set by the City of London will probably be followed by other towns, we think it is to be regretted that the sum to be paid throughout the country for scientific labour is so inadequate. Our only consolation is, that the cheap rate at which the public can have their goods analysed will perhaps induce them to avail themselves extensively of the privilege, and may put a check upon the dishonesty of trade. But this in nowise affects the question from the analyst's point of view.

The Society of Arts has issued a declaration for the signature of its members, calling attention to the great success which has attended the experiment of the Bethnal-green Museum. That Museum, situated in the poorest and most wretched quarter of London, has attracted in the space of three months 700,000 visitors—a number probably greater than that of all the visitors to all the other metropolitan museums and galleries in the same space of time. With this proof of the appreciation of art and science by the poor and artisan classes, they urge the Government to obtain from Parliament grants for the encouragement and support of museums in large centres of the population. The Society of Arts in this declaration will obtain the support of all who value popular education or the advancement of science and art. But the document is equivalent to a protest against removing the collections of the Natural History Department of the British Museum from Bloomsbury to South Kensington. In the former place at least they are within reach of the masses of the East-end of London.

A letter from Sir Henry Holland in the *Times* of Wednesday supplies some valuable personal recollections of the venerable Scottish gentlewoman who died a few days ago at Naples, after for more than sixty years holding a place of pre-eminence in European science. Mrs. Somerville died when she wanted only a month to the attainment of her 93rd year. As long ago as 1811 she received a medal in Edinburgh for her proficiency in mathematics. Three years ago only she published her "Molecular and Microscopic Science," and last year she was pursuing her studies in the higher mathematics, having obtained from England Professor Hamilton's "Calculus of Quaternions." The life of such a woman is an answer to the noisy allegations of which we have heard so many of late, that English institutions prevent the development of female genius and hinder women from obtaining the highest intellectual status. When Laplace, remarking upon the mathematical school of England, said there were only two persons in England who understood his "Mécanique Céleste," and these were two women—Mrs. Greig and Mrs. Somerville—he meant one and the same person, for Mrs. Somerville's first husband was a Captain Greig. And yet this women, Sir Henry Holland tells us, was an adept with her needle, and was distinguished for all those feminine accomplishments and graces which are held up to ridicule by the advocates of women's rights.

FORMATION OF A MEDICAL SOCIETY FOR THE WEST RIDING OF YORKSHIRE.

Last Friday evening a very large and important meeting took place at the Great Northern Railway Station Hotel, at Leeds, for the above object. Dr. Chadwick presided, supported by most of the leading practitioners of Leeds and many gentlemen of influence from several towns in the West Riding. The Chairman stated that he had received about thirty letters from medical gentlemen in different parts of the Riding who were not able to be present, expressing their strong approval of the proposed society, and intimating their readiness, if it be formed, to become members. After speaking of the importance of such a society and the benefits it would confer upon the Profession, he called upon Mr. Samuel Hey, who proposed the following resolution:—

"That a society be formed in Leeds, to be called the Leeds Medico-Chirurgical Society, whose object shall be to promote the study of Medicine and Surgery among practitioners by the communication of clinical and therapeutical facts, and by the exhibition of pathological specimens, and discussions thereon." He referred to the existence of similar societies in London and elsewhere, and also made allusion to two associations of a somewhat similar character in Leeds, which, he said, had done good work, and had probably laid the foundation of the society now proposed to be formed. From such a splendid meeting as was gathered together on that occasion, he thought they ought to be able to institute one of the most efficient societies in the country, and one which would conserve the information and practical experience so valuable in their profession. Dr. Heaton, in seconding the resolution, spoke of the great value of similar societies in bringing together the information and experience of the many practitioners of the Profession, and said he should do what little he could to promote the success of the Society. Upon this resolution an amendment was proposed by Dr. Scott, and seconded by Mr. Wade, to the effect that the Society should be named the "Leeds and West Riding Medico-Chirurgical Society." After a discussion of some length the amendment was put and carried by a large majority. Dr. Chadwick was elected first President of the new Society; Mr. Samuel Hey and Dr. Heaton, Vice-presidents. The following office-bearers were also appointed:—Mr. Jessop, Mr. McGill, and Dr. Symes, Secretaries; Dr. Heaton, Treasurer; and a Committee of the following gentlemen: Dr. Clifford Allbutt, Mr. Edward Atkenson, Dr. James Braithwaite, Mr. Chorley, Mr. Corrie, Mr. Jessop, Mr. Nunneley, Mr. Henry W. Price, Mr. W. N. Price, Mr. Scattergood, Mr. Wheelhouse, and Mr. C. J. Wright, whose duty it shall be to draw up rules for the guidance of the Society, etc. It was explained by the mover and seconder of the resolution that the Committee named was only provisional, and that when the rules had been formed a meeting of the members would be called together, the rules considered, and a new committee appointed. A hope was expressed by the chairman and others that the formation of this new Society would not interfere with the British Medical Association. After a vote of thanks to the chairman the meeting terminated.

ROYAL INSTITUTION OF GREAT BRITAIN.

The following are the lecture arrangements of the Royal Institution of Great Britain for the ensuing season:—*Christmas Lectures* (adapted to a juvenile auditory).—Six lectures by Professor Odling, M.A., F.R.S., "On Air and Gas," on December 28 (Saturday), December 31, 1872; January 2, 4, 7, 9, 1873. *Before Easter*, 1873.—Twelve lectures by Professor Rutherford, M.D., F.R.S.E., "On the Forces and Motions of the Body," on Tuesdays, January 14 to April 1. Three lectures by Dr. Debus, F.R.S., "On Oxidation," on Thursdays, January 16, 23, 30. Four lectures by Dr. H. E. Armstrong, F.C.S., "On the Artificial Formation of Organic Substances," on Thursdays, February 6 to 27. Five lectures by A. Vernon Harcourt, M.A., F.R.S., "On the Chemistry of Coal and its Products," on Thursdays, March 6 to April 3. Six lectures by Edward A. Freeman, D.C.L., "On the Comparative Political Institutions of Different Nations," on Saturdays, January 18 to February 22. Three lectures by Professor W. K. Clifford, M.A., "On the Philosophy of the Pure Sciences," on Saturdays, March 1, 8, 15. Three lectures by Professor Max Müller, LL.D., "On Darwin's Philosophy of Language," on Saturdays, March 22, 29, and April 5. *After Easter*.—Three lectures by John Morley, Esq., "On the Limits of the Historic Method," on Tuesdays, April 22 to May 6. Four lectures by J. H. Parker, C.B., "On the Evidence for the Traditional History of Rome from

Existing Architectural Remains," on Tuesdays, May 13, 20, 27, and June 3. Six lectures by Professor Tyndall, LL.D., F.R.S., on Thursdays, April 24 to June 5. Four lectures by Professor Odling, M.A., F.R.S., on Saturdays, April 26 to May 17. Three lectures by Edward Dannreuther, Esq., "On the Development of Music in Connexion with the Drama," on Saturdays, May 24, 31, and June 7. *Friday evening discourses* during the season will probably be given by Wm. Spottiswoode, Esq.; the Rev. Professor T. R. Birks; Edward Dannreuther, Esq.; R. H. Scott, Esq.; Robert Sabine, Esq.; Sir H. Rawlinson, K.C.B.; Professor Clerk Maxwell; James Dewar, Esq.; E. J. Reed, C.B.; J. Emerson Reynolds, Esq.; Professor W. K. Clifford; Professor Tyndall; Lord Lindsay; Professor Odling; and others. The Friday evening meetings will commence on January 17.

AN UNHOLY ALLIANCE.

The *South London Press* of Saturday last contains the following, which requires no comment. We think the Judge of the County Court evinced by his decision that he thoroughly appreciated the merits of the case.

"The case of 'Brown *v.* Hindmarsh,' which came before the Southwark County Court, revealed some extraordinary proceedings as to how medical cases are got up. Plaintiff was Dr. Brown, of Nelson-square, Blackfriars-road; defendant being Mr. George Hindmarsh, who resides at 18, Cornwall-place, Cornwall-road. Mr. Hicklin appeared for defendant, and in the course of a long cross-examination elicited some rather curious facts. It appeared that defendant, requiring the services of a medical man to attend his wife at her accouchement, made application to a Mr. Pearson, who resides at 44, Stamford-street, who had been represented to defendant as being a properly qualified medical practitioner. When the time arrived for Mr. Pearson's services being called in requisition, he gave defendant a note to take to his 'surgery' in Stamford-street, the latter presuming that the object of his mission was to procure some medicine, but singularly enough he was followed by plaintiff, who had evidently come in response to a note that had been sent by Pearson. Defendant demurred to this singular proceeding, and his suspicions became aroused as to the status and legal authority of his medical adviser, Mr. Pearson. A warm demurrer followed, and defendant was threatened afterwards that for his insolence he would be required to pay Dr. Brown three guineas as a fee."

In the course of the inquiry it was elicited that Pearson had been at one time a clerk in a gas office, then an ink-maker in Prince's-street, Stamford-street, before he had attained to his present high position in the medical world. His Honour, after giving the case a patient hearing, found for defendant, with costs, expressing his astonishment that Dr. Brown should enter into such a connexion.

POKING FUN AT THE DOCTORS.

We are always liable to be the subjects of the fun and ridicule of our lay brethren. When in good health they can afford to laugh and make fun of their medical attendants. The most facetious of them, however, "when affliction clouds the brow," are, as a rule, the most demonstrative of their gratitude to their preservers. We have no doubt that the editor of the *West Country Lantern* would be amongst the foremost, notwithstanding his funny remarks, to acknowledge "benefits received," if occasion required it, from his family doctor:—

"The dinner of the Plymouth Medical Society took place on Tuesday week last at the 'Duke of Cornwall'; about thirty doctors present, a good spread, and general satisfaction. We have not heard how the *serious cases* got on that evening, but hope they all did well. We may remark they all had good appetites (ask the waiters), clearly indicating they did not take any of their own physic. Some toasts were quietly drunk—'May diseases be frequent, but not fatal,' 'May doctors flourish at the expense of the undertakers,' etc., and a visitor present proposed 'The health of the sick.' We believe there was no one present who held shares in the Cemetery or the West Hoe Sea Baths."

SURGICAL SOCIETY OF IRELAND.

The opening meeting of the present session was held in the Albert Hall of the Royal College of Surgeons on Friday evening, the 29th ult. The President (Dr. Frederick Kirkpatrick) delivered an inaugural address, in which he alluded with regret to the losses sustained by the Society in the resignation, from failing sight, of Dr. Charles Benson, one of the Honorary Secretaries, and in the recent death of Dr. Thomas Edward Beatty, formerly President of the Society. He then selected as the theme of his discourse the impropriety of meeting in consultation with homœopaths or other irregular practitioners. His remarks were received with much applause by a numerous and influential audience. Several interesting surgical and pathological specimens were afterwards exhibited, after which Dr. Morgan read a most able paper on "Anæsthetics," with more especial reference to the comparative value of two agents of this class—chloroform and ether. Dr. Morgan's conclusions were in favour of the latter agent for producing insensibility to pain, for it acted, not as a depresser, but as a stimulant of the heart; it was generally quicker in its action than chloroform; it was not often the cause of nausea; and it but rarely produced excitement.

THE GLASGOW MEDICAL OFFICERSHIP OF HEALTH.

Dr. Gairdner has declined the post of Consulting Medical Officer to the Board of Police of Glasgow. It will be recollected that a few months ago the Board rescinded the appointments of its medical staff, but expressed a wish to retain the services of Dr. Gairdner in the post of Consulting Medical Officer, with a salary £100 a year. Dr. Gairdner, however, as he states in a letter to the Lord Provost, by the advice of his friends, and to avoid "a divided and not well-defined responsibility," has determined not to entertain the proposal. The Committee of the Board of Police, on receiving Dr. Gairdner's decision, passed a resolution conveying thanks to him for his services, and regret at parting with him. There is good ground both for their thanks and regret. Dr. Russell has been chosen as Medical Officer to replace the former staff.

SENSATIONAL PARAGRAPHS.

The correspondent of the *Morning Post* at Rome, in reference to a sensational paragraph in one of our contemporaries, declares that the statement therein contained respecting the health of Rome is anything but correct, and that in that city the public health is excellent just now, and that "the climate offers a most enjoyable contrast to the hideous weather which newspapers and private letters inform us now afflicts the North of Europe, and especially the British Isles."

AN EXAMPLE DESERVING OF IMITATION.

Mr. Milward, one of the District Medical Officers of the Cardiff Union, having been incapacitated by serious illness from attending to his parochial duties, was compelled to engage the services of a gentleman to act for him. The Board of Guardians, on learning that he was ill, generously intimated that they would pay the salary of his substitute—an act not only creditable to them, but indicative of their sense of the value of the services rendered by Mr. Milward in his capacity of Poor-law Medical Officer.

CHAIR OF THEORETICAL AND PRACTICAL SURGERY, ROYAL COLLEGE OF SURGEONS, IRELAND.

Dr. William Hargrave has resigned this chair, after spending many years in the conscientious discharge of the honourable duties connected with it. The election to the vacant Professorship is fixed to take place on Christmas-eve, the 24th inst. As candidates the names of Mr. William Stokes, jun., and of Mr. Croly have been mentioned.

FEMALE EDUCATION IN EDINBURGH.

The daily newspaper press has recently been in a state of editorial agitation regarding the policy of Edinburgh University on the subject of female education. The issue of Sir Alexander Grant's address to the "Edinburgh Ladies' Educational Association" will, to a certain extent, counteract the bad effects of an unlimited use of injudicious and undeserved censure. Principal Sir Alexander Grant, supported by Sir Robert Christison, asserts that the policy of Edinburgh University, with regard to female education, is particularly liberal. Many of the University professors have for a considerable time conducted classes for ladies in precisely the same manner as they adopt in the management of their University teaching. At the same time it is alleged, with regard to female medical education, that the time of the medical professors is too fully occupied to admit of their undertaking the medical education of women. Our daily contemporary, the *Scotsman*, asserts that this is an insufficient reason for exemption. It bases this assertion on the ground that the spare time of all University professors is about equal, inasmuch as "not a half of the medical professors are in practice." This statement is misleading in two ways. First, it is totally untrue. Of the twelve medical professors who lecture and examine for medical degrees, eight are engaged in more or less active practice, two are fully occupied with academic duties neither light nor indefinite, and two more have shown by their professional history that their time has not been given up to idleness.

In the second place, there is not a professor engaged in the teaching of medical science who does not spend at least three hours a day in university and clinical teaching, which, by involving two journeys, may be fairly assumed to cost each professor four hours daily. On the other hand, no Arts professor is engaged professionally for a longer period than two hours, and many have only one hour of daily teaching for five days a week. Under these circumstances it can scarcely be doubted that Arts and medical professors are not on the same footing with regard to the time they can devote to the performance of supplementary duties. But, in addition, our Edinburgh contemporary calls for a reason why, in the event of medical professors not having time to devote themselves to the teaching of women, other lecturers should not be permitted to undertake the task. The answer to this is, that no medical professor has prevented or can prevent any teacher from instructing women in medical science. The real question is, not whether the University will allow women to be educated in Medicine, but whether it will permit them to graduate on the strength of an extended measure of extra-mural teaching? If the cause of female medical education cannot be advocated without glaring misstatements and deceptive insinuations, a discriminating public will soon discover that such an agitation is beneath their notice.

PATHOLOGICAL SOCIETY OF DUBLIN.

At the first ordinary meeting of the Society for the present session, held on Saturday, November 30, the President, Dr. George H. Kidd, announced that the subject chosen by the Council for competition for the Gold Medal, to be awarded to the best essayist in April, 1873, was "The Diagnosis and Pathology of Abdominal Tumours."

CHAIR OF PRACTICAL MEDICINE, ROYAL COLLEGE OF SURGEONS, IRELAND.

On Tuesday, the 3rd inst., the Council of the College elected Dr. James Little, Physician to the Adelaide Hospital, Dublin, to this chair, vacant by the resignation of Dr. Charles Benson.

FROM ABROAD.—DISTRIBUTION OF PRIZES AT THE ACADÉMIE DES SCIENCES—M. JULES SIMON'S LETTER TO THE FACULTY OF MEDICINE OF NANCY.

The Académie des Sciences last week held its anniversary meeting, and as the calamities of the times prevented it fulfilling this last year, it has had to announce the prize-holders both for 1870 and 1871. Two *éloges* were also delivered, one upon the celebrated Italian mathematician, Baron Plana, which many of the audience found rather wearisome, not only from their ignorance of the special studies of the *savant*, but also from the utter want of elocutionary power in the orator, M. Elie de Beaumont. They were, however, richly recompensed by an admirable oration on Geoffroy St. Hilaire, delivered with the admirable eloquence which many of our readers know M. Dumas to be possessed of. We hope on a future occasion to reproduce this brilliant address.

In the meantime we here give the names of the recipients of the prizes:—1. The Bréant Prize (5000 fr.) for 1870 to Professor Chauveau, for his experiments on viruses and virulent diseases. The same prize for 1871 is divided between M. Grimaud, for his researches on the transmissibility of cholera, and M. Tholozan, for his work, "A New Origin of Asiatic Cholera." 2. The Montyon Prize in Medicine and Surgery for 1870 consists of two sums of 2500 fr. each—one of which is awarded to M. Gréhaut for his physiological and medical researches on human respiration; and the other to M. Blondlot for a series of memoirs on litigated questions in medicine, toxicological chemistry, and physiology. Three honourable mentions of 1500 fr. each are awarded—(1) to M. Bérenger-Feraud for his work on Direct Immobilisation of the Fragments in Fractures; (2) to M. Duclout for his Report on Cases of Vesico-Vaginal Fistula; and (3) to M. Colin for his treatise on Intermittent Fevers. Two prizes of 2500 fr. each are decreed for 1871—the one to MM. Lancereaux and Lackerbauer for their treatise on Pathological Anatomy; and the other to M. Chassagny for his work entitled "The Method of Continued Traction: the Forceps considered as an agent of Prehension and Traction." *Encouragements* of 1200 fr. each are also awarded to (1) MM. Coze and Feltz for their work on Infectious Diseases; (2) to M. Jousset for his experiments with the venom of the scorpion; (3) to M. Decaisne for his memoirs on the Temperature of Children and on the Influence of Alimentation on the Human Milk; and (4) to M. Desprès for his work on Ulceration and Ulcers of the Cervix Uteri. 3. The Godard Prize of 1000 fr. for 1870 is given to M. Jolly for his work on Cancer of the Prostate; that for 1871 is given to M. Mauriac for his work on "Symptomatic Reflex Neuralgia in Gonorrhœal Orchi-epididymitis." 4. The Montyon Prize for Experimental Physiology for 1870 is divided between M. Chantrau for his observations on the natural history of lobsters, and M. Gris for his memoir on the Medulla of Ligneous Plants; honourable mention being accorded to M. Méhay for his investigation on the sugar-beetroot, and to MM. Chéron and Goujon for their researches on the functional properties of the nerves and muscles during intra-uterine life. For 1871, the prize is decreed to M. Raulin for his chemical studies on vegetation. 5. The Montyon Prize (2500 fr.) on Unhealthy Occupations for 1870 is given to M. Goldenberg for sanitary appliances in metal works; an *encouragement* of 2000 fr. being also awarded to Mademoiselle Garcin and M. Adam for their automatic sewing-machine, and to M. Louvel for his procedure for the preservation of grain *in vacuo*. For 1871 the prize is given to M. Guibal for his system of ventilation applied to mines. 6. The Jecker Prize in Chemistry for 1870 is not awarded, but an *encouragement* of 1700 fr. each is given to MM. Clermont, Gal, and Grimaux for their works on Organic Chemistry. For 1871 the prize is given to M. Schutzenberger for his works on Organic Chemistry. 7. The Barbier Prize for 1870 is decreed to M. Personne for his researches on chloral; and that for 1871 to M. Duquesnel for his memoir on Crystallised Aconitine. 8. The Desmazières Prize in Botany for 1870 is given to M. Notaris for his "Epilogo della Briologia Italiana"; and a honourable mention is made of M. Roume-

guère's "Cryptogamie Illustrée." In 1871 an *encouragement* of 500 fr. is given to M. Husnot for his works on the Cryptogamic Flora of Martinique. 9. The Thore Prize for 1870 is awarded to M. Schiodte for his work on the Metamorphosis of Coleoptera. 10. The Bordin Prize of 1870 is given to M. Vaillant for his works on Annelides. 11. The Savigny Prize for 1870 is divided between M. Issel for his "Malacologia del Mar Rosso," and Dr. MacAndrew for his researches on the Malacological Fauna of the Red Sea. 12. The Montyon Prize in Statistics for 1870 is given to M. Potiquet for his work on the Institute of France, etc.; and a honourable mention to M. Castan for his memoir on the Influence of Temperature on the Mortality of Montpellier. For 1871 the prize is given to M. Cadet for his work "Marriage in France," and the honourable mention to M. Ely for his work "The Army and Population." 13. The Changussier Prize for 1871 is awarded to M. Tardieu for his works on Legal Medicine.

The new Medical Faculty of Nancy, which has been constituted by a transference of the Strasburg Faculty, and an incorporation of the Medical School already existing at Nancy, was formally opened on November 15. The number of professors, *agrégés* and *adjoints*, is very large, so much so that there will at first,—as the school will probably not be a very large one—we should suppose, be considerable difficulty in finding employment for them, especially as there is a great want of *matériel* in so comparatively small a city for clinical teaching. The Dean, Professor Stoltz, read a long letter addressed to the Faculty by M. Jules Simon, the Minister of Public Instruction, in which, while declaring that the professors of this Faculty would enjoy a liberty of consultation and initiative unknown to other French Faculties, he entered into the minutiæ of the procedures by which they were to be regulated quite incompatible with such liberty of action. In fact, the whole document much more resembles an address of a head-master to his monitors, informing them of how he is determined to have matters managed, than an appeal to the co-operation of men as well able, and perhaps better, to judge of the necessities of the case and the best way of fulfilling them. The "*je veux*" prevails very offensively when we consider to whom the letter is addressed.

The Minister sets forth at great length what he considers the chief, if not the sole, function of the Faculty should be, and which may almost be characterised as an establishment for the translation of German. He, like many other enlightened Frenchmen, is well aware of the great ignorance which his countrymen betray in regard to foreign countries and their proceedings; as also that, as far as Germany is concerned, Strasburg, by reason of its historical and geographical position, constituted one of the few channels through which information was diffused. This, which was incidental to that Faculty, he seems determined to make the great *raison d'être* for the new Faculty at Nancy. To this end he says—

"The Faculty of Nancy may become a vast study (*atélier*), into which all the science elaborated in Germany will be poured, to be thence diffused in the French schools, after having been subjected to severe and judicious criticism. I believe that in this direction there is much glory to be acquired and many services to be rendered, and it is in order to aid you in this that I have come to the determination of giving a special organisation to your library and of creating a *Bulletin Médical de Nancy*. I desire (*je veux*) that you should subscribe to all the medical publications of Germany, and that you purchase, not only books, but all the theses and memoirs of any value that may appear among our neighbours. You will as soon as possible furnish me with a report of what the expense of such acquisitions is likely to be, and I will provide for it. . . . The *Bulletin* will be the exclusive work of the Faculty, and I will find funds for its expenses. It is to be purely bibliographical, and is to be devoted to German books, *brochures*, and periodicals, without any admixture of French bibliography or news, even scientific. The notices ought to be proportionate to the importance and value of the work reviewed. Sometimes a few lines will suffice, and at others it may be desirable to devote an entire number to the analysis and criticism of a work of consideration. When there is produced in Germany a work the translation of which you think desirable, you will make a proposal to me in order that it may be undertaken under the auspices of the Faculty. Rarely have we had in France a truly instructive bibliographical journal. Authors of articles or notices not attaching their names, and not hoping to acquire celebrity from this description of work, write rapidly, seeking rather to render service to authors than to enlighten readers. In confiding to the Faculty of Nancy the execution of the *Bulletin*, I hope to arrive at an entirely different result; and, Monsieur le Doyen, it will be one of your principal attributes to choose for the examination of a work the professor or *agrégé* whom you deem most competent. The Faculty will meet every month in order to assist you in this labour, and to hear the articles read, which are never to be inserted until they have been read and approved in common. The responsibility will be divided between the Faculty and the author, the latter signing his contributions, and the Dean affixing also his approbation and signature. I am persuaded that when it appears this publication will acquire authority with the medical profession; and its contributors, feeling this, will know that their judgments will be accepted, and their advice followed—bringing, in fact, to this work the same gravity and the same scruples which prevail in their consultations."

This is the pith of the Minister's letter; but, excellent as may be the idea of facilitating the knowledge of German work by the French, it is evidently here made too engrossing a topic. Not a word is said of original research, and the cultivation of the true scientific spirit; but all culminates in an elaborate apparatus for the acquisition and diffusion of medical science at second hand. Nothing that could be done, were this project carried out to the letter, would more completely justify the statement so commonly made in Germany, that science is dying, dead, or effete in France, as to find the whole energies of a new Faculty directed into organising a *bureau* for the acquisition and propagation of German science. It is to be hoped, for the students' sake, that the proper business of the Faculty will not be neglected for any such purpose, which, if executed at all, is much more likely to be brought about by independent efforts made at Paris than by any such scheme forced into existence at Nancy.

DISEASE AND MORTALITY AT HOME AND ABROAD.

From a summary of the cholera cases reported at Fyzabad during the recent outbreak of the epidemic in the cantonment there, 50 cases occurred amongst the 26th Cameronians, of which 31 were fatal. The Artillery had 13 cases, and 6 died; and, strange to say, the medical report draws attention to the fact of a number of elephants having succumbed to the same disease. No case of cholera occurred at Peshawur from October 21 to 26. The disease is said to have disappeared from Cabul.

Small-pox has appeared at Dersingham, near Sandringham.

Twenty-two cases of small-pox had been admitted during the past fortnight into the Homerton Small-pox Hospital, and 6 deaths had occurred; 3 of the cases were of a malignant type. In the same period 16 fresh cases had been admitted into the Stockwell Small-pox Hospital; 5 patients had died, 19 had been discharged, and 37 remain at present under treatment.

Small-pox has extended its ravages to Viborg (usually considered one of the healthiest towns in Northern Russia), where the mortality has been so great that the proportion of sick who have recovered is rated as low as 20 per cent.

Dr. Zuelzer reports from Berlin that cholera has broken out in East Prussia, and that 50 fatal cases have occurred in Thorn and Insterburg.

In Paris 705 deaths occurred in the week ending the 23rd ult., and the annual death-rate was equal to 20 per 1000.

In the metropolis last week 1221 deaths were registered, being 527 less than the average number.

In Rome 213 deaths occurred in the week ending the 17th ult.

DRUITT TESTIMONIAL FUND.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions since Wednesday, November 27:—

	£	s.	d.
Dr. Du Lac (Hérault)	21	0	0
Dr. Bissett Hawkins	10	10	0
Mrs. Prescott Hewett	10	10	0
Mr. R. B. Oakeley	10	0	0
Mr. George Lawson	5	5	0
Mr. W. E. Brodhurst	5	5	0
Dr. W. T. Gairdner (Glasgow)	5	5	0
Messrs. Auld, Barton, & Co.	5	5	0
Mr. Wm. Acton	5	5	0
Mr. John Wood	3	3	0
Mr. Liebreich	3	3	0
The Earl of Caudor	2	2	0
Dr. J. B. Sanderson	2	2	0
Mr. A. Norton	2	2	0
Mr. Fleming (Brighton)	2	2	0
Dr. W. S. Playfair	2	2	0
Dr. Wm. Farr	2	2	0
Mr. W. Johnson Smith (Greenwich)	2	2	0
Messrs. Hedges and Butler	2	2	0
Dr. Peter Allen	2	2	0
Mr. E. Lund (Manchester)	2	2	0
Dr. Cahill	2	2	0
Dr. E. A. Parkes (Southampton)	2	2	0
Dr. John Macpherson	2	2	9
Mr. T. B. Curling	2	2	0
General Gascoigne	2	0	0
Mrs. Gascoigne	1	0	0
Mr. C. Vasey	1	1	0
Dr. Cooper Rose	1	1	0
Dr. Robert Barnes	1	1	0
Mr. Hy. Harris (Redruth)	1	1	0
Mr. A. Browning (Lewes)	1	1	0
Dr. W. Pretty	0	10	6

Dr. P. Allen of last week should have been Dr. *John Allan.*

Subscriptions will be acknowledged weekly in the medical journals.

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. Norton, 6, Wimpole-street; or placed to the account of the Druitt Testimonial Fund, Union Bank, Argyle-place, Regent-street.

SURGICAL INSTRUMENTS AND APPLIANCES IN THE LONDON INTERNATIONAL EXHIBITION OF 1873.

The first meeting of the Committee on Class 10, "Surgical Instruments and Appliances," for the London International Exhibition of 1873, was held at 3 p.m. on Tuesday, November 26, at the offices in Stanhope Lodge, Kensington Gore. Mr. Cæsar H. Hawkins, F.R.S., was voted into the chair, and among those present were Mr. J. Hilton, F.R.S., Mr. Prescott G. Hewett, Mr. R. Quain, F.R.S., Mr. W. White Cooper, Mr. J. Luke, F.R.S., Mr. T. W. Nunn, Mr. E. Saunders, Dr. G. T. Gream, Dr. W. S. Playfair, and Dr. H. J. Domville, C.B.

Captain G. S. Grover, R.E., acted as Secretary to the Committee, and Mr. H. Cole, C.B., was present as the representative of her Majesty's Commissioners for the Exhibition of 1851, under whose auspices the current series of annual International Exhibitions is being carried on at South Kensington.

The Committee was informed of the steps which had already been taken towards notifying the particulars of next year's International Exhibition to the manufacturers of surgical instruments and appliances at home and abroad.

The following resolutions were then passed:—

"1. That the individual members of this Committee undertake to interest instrument-makers on the subject of exhibiting improved surgical instruments and appliances, and will request them to give an early intimation to the Committee of their intention to contribute to the Exhibition of 1873."

"2. That the Royal College of Surgeons and other public bodies or private collectors should be requested to lend the ancient surgical instruments in their museums; that steps should also be taken to obtain a loan from the Italian Government of the ancient surgical instruments recovered from the ruins of Pompeii, and that similar applications should be made to other foreign governments who possess similar collections."

"3. That a communication should be forwarded to the medical journals, and to the *Journal of the Society of Arts*, explaining the objects of the proposed exhibition of "surgical instruments and appliances," and requesting instrument-makers and others to contribute specimens. Applications to exhibit should be forwarded before January 31, 1873, and the goods delivered on March 11, 1873."

With reference to the last paragraph of resolution 2, it was suggested that the Spanish Government should in particular be communicated with; and that among public bodies in England, the Royal Medico-Chirurgical Society, the Obstetrical Society, and the University of Edinburgh should be applied to.

A letter was read from Dr. Henry D. Noyes, of New York, offering a case of optical appliances for treating ocular diseases; and it was proposed that the Commissioners should, when acknowledging it, suggest that he should try to interest the American instrument-makers in next year's London International Exhibition.

After the transaction of their business, the Committee adjourned until Monday, December 23.

REVIEWS.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New edition, brought down to the present time by Samuel A. Lane, Consulting-Surgeon to St. Mary's and the Lock Hospitals, etc. Vol. II.

[THIRD NOTICE.]

Chief among the remedies for inflammation was, of course, blood-letting, "which the saintly Willis conceived to be taught by Nature and sanctioned by the Divine law," and which was sometimes carried to such an extent as to cause the death of the patient. We cannot here follow all the phases of the practice in its rise and in its fall. It reached its acme in the decade 1830-40. One of the first opponents of the system was Marshall Hall,—but in this way: he showed how it did harm. His ideas of the benefits derived from it were extravagant. "Parodying the proverb about the wind that is tempered to the shorn lamb, he believed that when well borne it was necessary." At this time "patients were furiously bled immediately after injuries, ere they could have recovered from 'shock,' and before inflammation could have been established. Marshall Hall quotes the case of a man brought to St. Bartholomew's Hospital with three ribs broken by a fall from a scaffold. He was bled to 18 oz.; soon afterwards 20 more were taken; second day, twice bled to 18 oz.; third day, because the pulse was jerky, he was bled again, but the dresser would only take a few ounces. Mr. Lloyd, a fearful bleeder, and Mr. Lawrence, ordered 20 oz. to be taken, after which 'the pulse became a mere flutter," and the man died. Equally shocking was the case of a surgeon who was bled to death at Dr. Marshall Hall's own house at Nottingham in 1821, after a fall from his horse and broken ribs. This poor man twice bled himself in the night into a wash-hand basin! and his advisers, after bleeding, leeches, and ptyalism, were proposing to cup him, when he became insensible and soon died. The effects of loss of blood, the jerking pulse, and undue excitement were often mistaken for 'action' requiring further depletion; and, strange as it may seem, there is no doubt that fresh bloodletting was often employed to relieve these ill effects, and often with temporary benefit. The idea, too, of using bloodletting as a means of diagnosis—that is to say, to bleed patients who ought not to be bled in order to prove that bleeding was wrong—seems terrible. Perhaps the most humiliating part of Marshall Hall's book is his statement of the absoluteness of bleeding as 'the remedy and the only remedy for inflammation.' Well does he describe himself, as well as his medical brethren, when he says they 'think only of the disease, and forget the patient.'

"Let us look at some of the causes (or concomitants) of this love of bleeding which inspired our forefathers. In the first place there is no doubt that it is a positive remedy; it relieves (though, peradventure, for a time only) the dreadful pain of an acute inflammation; it makes the breathing freer, and is followed by a delicious sense of languor and inclination to sleep. As we have just said, there is no doubt that a few leeches will quiet for a time the throbbing caused even by previous loss of blood. Secondly, it was sanctioned by the preponderance of medical authority, and adopted by popular prejudice, so that most surgeons would not have dared not to bleed even if they thought it improper. A man, about 1825, fell from a balloon at a great height, and was smashed to pieces; yet the surgeon who first saw him tried to bleed his mangled remains, and it was observed at the time that no surgeon dared face a coroner's jury who had not bled in any case of accident, injury, or sudden death.

"It was an ancient and inveterate custom with many people to be bled spring and fall, and to be bled on any change. For instance, a man jilted in love was bled to mitigate grief; a man who came in for a fortune was bled to check exuberant joy. I recollect that schoolboys were physicked before bathing and before going home for the holidays. Many people were bled before a journey. The Prince Regent was bled to make him look interesting in the eyes of a woman. Singularly enough, the illustrious Stahl, who denounced bleeding *in fever or other disease*, yet recommended it in health to 'ventilate

the blood' and prevent disease. He prescribes it for both men and women of full habit and middle life, and especially for women at the cessation of the menses; and as for himself, he thanks God that he has been able to preserve his health by this means during forty-three years of practice. He began to be bled at seventeen, and says that in November, 1727, he entered his sixty-ninth year, and was bled for the 102nd time, to the increase of his alacrity and vigour. I have already quoted Hoffmann.

"Thirdly, all the medical theories which succeeded each other in the way we have described, opposite as they might be in their premises, came to bleeding as their conclusion. Whether the capillaries were in too great force and action, or whether they were debilitated—whether there were too much or too little oxidation—the good effects of bleeding were equally demonstrable. The dominant theory of Hunter, that inflammation consisted in excess of life and action, was taken by his pupils without the checks and corrections which his own sagacious mind dictated. Broussais, Clutterbuck, and others held the doctrine that most diseases depend on some latent inflammation. The prevalent medical notion was threefold—viz., 'excited and increased action,' as Abernethy called it; next the doctrine of Haller, that the action of the heart depends on the stimulus of the blood; and the doctrine of Cullen, in the words of Elliotson, that it was necessary 'to exclude external and remove internal stimuli.' This threefold chain of error was the strength of the bleeding system.

"Fourthly, the medical theorists had discarded 'humoral pathology' as something absurd or unattainable. All was 'action' and 'sympathy' in the Hunterian language where we now think of blood-poisoning. The term 'constitutional irritation' was also used for symptoms of blood-poisoning and others which would not bear bleeding. But diseases of 'irritation' and 'action' are cold abstractions; the surgeon can conceive of those apart from the patient in a way he never could if he thought of such a tangible concrete thing as blood mixed with putrid sanies.

"Fifthly, the doctrine of conservation of force was unknown, and the idea of *quantity* never seemed to be considered. The loss of pounds of blood was looked upon as the withdrawal of a stimulus (an abstract term) from a system to which inflammation (another abstract idea) had given apparently unlimited powers of tolerance, without the notion that the blood was a fluid of limited amount. What idea of quantity could have been entertained by the respectable practitioner who took twenty ounces of blood at once for peritonitis from a child 9 years of age just recovering from measles? (M. Hall, *op. cit.*, p. 191.)

"Sixthly, bleeding and the antiphlogistic regimen were supposed to counteract a 'general phlogistic diathesis'—an abstract idea which survived the doctrines of Brown, and still flourishes in full vigour in Italy.

"Seventhly, the whole ideas of the time favoured severe measures towards feverish and inflammatory patients. Women in childbed and patients after injuries and operations were denied adequate nourishment in order to 'ward off inflammation,' to avert which bugbear Ramsbotham did not allow even a 'weak solution of animal matter' till the third day after delivery. As a sign of the times, Dr. Caleb Hillier Parry (father of Sir Edward, and grandfather of the suffragan Bishop of Dover) declared that indulgence and insufficient chastisement of children, horse exercise instead of walking, good food, and fermented liquor led to want of self-control and inflammation. All things nasty and disagreeable were considered medical.

"The divine Hippocrates hath an aphorism to the effect that forasmuch as all things human are unstable, so when the height of excellence is reached there must be a fall. The converse of this aphorism is the homely English proverb that 'when things come to the worst they must mend.' Nothing could be worse than the state depicted by the last-quoted author; and a change came by degrees. First, it began by the recognition of the conditions unfit for bleeding, which had been detailed by Gooch, Travers, Kellie, Abercrombie, and Marshall Hall before 1830. Secondly, there came the influenza of 1833 and 1837, which gave instances of fever attended with smart chest inflammation, in which depletion was pernicious or fatal. Copland ('Dictionary,' article 'Influenza') blames the practitioners who talked of inflammatory action and attempted depletion, as if this action were primary and uncomplicated, whereas it was truly adynamic or asthenic. I must not let pass the opportunity of saying how much the Profession owes to Copland, a descendant of Norwegian Vikings, and every inch a man, for warning the practitioner of depressed vital power in acute disease, and for recommending a tonic treatment in many cases where the lancet was too much the routine. The burly Copland held his hand when even the prudent Watson bled. The third influence was the revival of a humoral pathology—a thing which Armstrong craved in 1815—not disquisitions on imaginary humours, but the result of observations and experiments on the blood. 'A rational humoral pathology,' says Robert Ferguson (in his 'Prefatory Essay to Gooch's Works,' New Sydenham Society's edition, 1859), 'was unknown in our schools when Gooch wrote' (1829). Gaspard, Dance, Tonellé, Magendie, and Cruveilhier showed by experiment soon afterwards the effects of the introduction of septic matters into the veins. Guided by their researches, R. Ferguson ('Essay on Puerperal Fever,' London, 1839) showed that 'the phenomena of puerperal fever originate in a vitiation of the fluids,' and thus gave to a true humoral pathology its proper place in English medicine. It is impossible for two persons to hold the same views of treatment of a disease in which one sees violent 'action,' the result of an ideal phlogistic diathesis, and the other a physical condition depending on the admixture of poisonous matters with the blood. I well remember, during my apprenticeship, seeing case after case of puerperal fever, no doubt conveyed by the hands of pupils who had been attending septic cases in the hospital. The poor women were actively treated, according to the views of the time, by bleeding and scruple doses of calomel. What struck me as odd was, that when peritonitis ceased in one instance pleurisy began, spite of the previous antiphlogistics. Now, about this time Dr. Robert Lee was endeavouring to construct a solidistic hypothesis of puerperal fever, by showing it to be 'essentially dependent on inflammation of the womb and its appendages,' its symptoms varying according as the serous, muscular, or venous tissue was implicated (*Medico-Chirurgical Transactions*, vol. xvi., 1831; also R. Lee, 'Lectures on Midwifery,' London, 1844). Anyone who compares Lee's statement—in which, following Craigie, he gives copious bleeding the chief place—with Ferguson's poultices and Dover's powder (not that Ferguson never bled), may see the influence of a humoral pathology on practice. Ferguson was much in advance of his time. His book is full of hints on the benefit of subduing the nervous disturbances in inflammation, and not looking entirely to the vascular. It is amusing to notice how timidly English pathologists of that day seemed to feel it necessary to touch on a humoral pathology. W. Addison, for instance, in 1842, said, with a tone of apology, that we were approaching a 'modified humoral pathology'; and the tone of Todd, in his 'Lectures on Gout' (1843), is the same.

"Fourthly, the natural history of disease was a thing longed for by all true physicians; Baglivi, especially, and Stahl craved to know of diseases, as Stahl said, 'quales in se ipsis sunt et quomodo observantur se gerere' ('Sileni,' etc., 1730, p. 98). But this history was unexpectedly developed in the decade 30-40 by the spread of homœopathy—a doctrine which repudiates 'nature,' busies itself in combating every symptom, and yet employs remedies so ludicrously impotent that they cannot effect the slightest alteration in the animal system (Hahnemann's 'Organon,' by Devrient, 1833, p. 25). It is one mode of curing by 'expectation,' such as was satirised by Gideon Harvey ('Art of Curing by Expectation,' 1689) as 'the applying of remedies that do little hurt and less good, from which the patient, day by day frustaneously expecting relief, is at last deferred' so long that Nature and Time effect a cure which the physician claims the credit for.

"Side by side with the results of homœopathy were promulgated the views of some physicians who were sceptical as to the use of drugs, and treated patients 'expectantly.' It was Dr. G. W. Balfour who, in 1847, brought before the Medico-Chirurgical Society of Edinburgh the practice and doctrine of Skoda in the General Hospital of Vienna. Instead of dealing with pneumonia as if large bleedings were less dangerous than the disease, he put it into the category of maladies whose tendencies were to recovery, and believed that this was best promoted by abstinence from heroic treatment, and rest and regimen alone. The same with regard to the patients treated homœopathically, who took pretentious but inert medicines. This circumstance, combined with the fact that many English physicians, as Robert Williams ('Elements of Medicine'), had long treated fever with the mildest remedies, and Seymour treated rheumatic fever with guaiacum, bred distrust as to the necessity of heroic measures. In 1843 Dr. Todd published his 'Lectures on Gout and Rheumatism,' in which he places rheumatic fever in the category of diseases with a definite duration, and therefore condemns large bleedings, which he says cannot cut short rheumatism 'as we can arrest an attack

of pneumonia or of pleurisy.' This shows that Todd's conversion from bleeding to an opposite treatment was not complete in 1843.

"Fifthly, the cell doctrine directed attention to processes outside and beyond the bloodvessels. Anyone who in 1844 studied J. Hughes Bennett's often-quoted 'Treatise on Inflammation,' would be quite prepared for such a modification of treatment as should regard development of an exudation rather than the 'action of vessels.'

"Sixthly, practitioners in India, civil and military, were dissatisfied with the bleeding and calomel, which had been the routine treatment for fever and dysentery, and found quinine and Dover's powder more congenial."

Next follows in this article an exceedingly interesting inquiry into the "change of type" theory, which we would fain quote did space permit. Our author is clear enough here; it is change of opinion rather than change of type, which has affected practice, though there may have been that too; and the same phase of opinion has been seen more than once in the world's history.

Of the other remedies here referred to we may mention cold, of which Arnott was the great apostle, though it is now coming into more general favour. In speaking of mercury as an antiphlogistic our author points out how curiously Todd turned round on this as on a good many other things. Todd in 1843 orthodoxically recommends the system to be brought as soon as possible under the influence of calomel and opium—"First," he says, "to check the effusion of lymph, and secondly to promote absorption of that which is already poured out." In 1859 Todd tells a different tale. He says the "vaunted powers of mercury in causing absorption of lymph are based on false analogy and chemical ignorance." And thus it is with most remedies; they wax and they wane, and they often disappear from practice.

One of the most curious phases of opinion here quoted by Dr. Druitt relates to homœopathy. This, which is now held utterly unorthodox, was yet apparently advanced by John Hunter, to whom Dr. Druitt traces it. On this and the absurd doctrine of "substitution" advanced by Trousseau the author makes the following vigorous onslaught:—

"The leading error in these theories is, that they take metaphysical instead of material views of the animal body, and of the substances that act upon it. In Hunter's time, as I have already said, there was a metaphysical verbiage of 'action,' 'dispositions,' 'sympathies,' etc., to express changes which we now treat of as depending on chemical change, or on cell growth, or on the action of nerves on the diameter of bloodvessels, or on the appetite of the tissues from blood plasm. Now the 'actions' of Hunter and the 'inflammations' of Trousseau are merely names for our conceptions of certain physical changes in the animal body, But the progress of science demands that these changes be treated of as physical, not as metaphysical. When Chicago was burning, they blew up houses in order to get rid of that which would have been fuel for the advancing flames. To describe this as the substitution of an explosion for a conflagration may pass as a lazy mental idea, but it is not a true account of matter of fact. So, when a practitioner swabs a relaxed throat, it is mere laziness to be content with the notion that he substitutes a caustic inflammation for a catarrhal one. The man who is content with this may be content to prescribe hypothetical globules for conditions that exist in his own imagination; but the man of sense will seek to know first the fact—does the new application of a cause of inflammation relieve an inflammation already existing? and he will find it not to be generally true. Then, does a caustic swab relieve a relaxed sore throat, and, if so, how?—and he will find plenty of answers derived from the realm of sense and fact. It curdles, kills, and sweeps off a host of epithelial cells, living lazily on the relaxed membrane, and multiplying themselves like paupers to the public detriment. It thus makes way for a healthier brood. It produces an impression on the nerves, deadens extreme irritability, flushes out the bloodvessels, drains them of serum, and braces up muscular fibres. Here, surely, are the elements of rational therapeutics; we need not stoop to metaphysical explanations, which only smell of the lamp or the tobacco-pipe."

Finally, Dr. Druitt refers to the doctrine of counter-irritation, and alludes to the great service done by Professor Laycock in reducing it to a scientific mode of treatment. But we must take leave of the article, though we would fain spend more time on it, and give our readers still more copious extracts from it. We have, however, done enough to show them it is of a kind too hard to meet at the present day, and such as to more than justify the author's reputation. We again take leave to recommend it to our readers, not only for what it contains, but for the stores of learning to which it gives the key.

We have spent so much time on this one article that we can ill afford to devote more space to a review of the other contents of the second volume of "Cooper's Dictionary." In many respects the volume is different from those which now come from the press, especially in an exhibition of learning, which many nowadays think a useless acquisition. Yet that it is a volume which deserves, and doubtless will receive, notice, we shall show, if we only mention a few of the articles, with their authors, contained in it. Thus, we have "Orthopædic Surgery," by Mr. W. Adams; "Ophthalmic Surgery and the Ophthalmoscope," by Mr. Bader; "Phlegmasia Dolens, Pregnancy, and Uterine Disease," by Dr. Barnes; "Tumours," by Mr. Birkett; "Lithotomy and Lithotrity," by Mr. S. Coulson; "Diseases of Bone and Testicle," by Mr. Gascoyen; "Subcutaneous Injection," by Mr. Charles Hunter; "Diseases of the Rectum," by Mr. J. R. Lane; "Scurvy," by Mr. Harry Leach; "Tetanus," by Mr. Alfred Poland; "Prostatic Diseases," by Sir Henry Thompson; "Ovariotomy," by Mr. Spencer Wells; and "Diseases of the Skin," by Mr. Erasmus Wilson.

This is but a small proportion of the writers and articles, but they are all men known to fame, and each, too, on the subject contributed to this "Dictionary." We have only one regret with regard to it—we regret it did not appear long ago.

GENERAL CORRESPONDENCE.

ON THE DEATH OF THE PRINCESS CHARLOTTE OF WALES.

LETTER FROM DR. W. S. PLAYFAIR.

[To the Editor of the Medical Times and Gazette.]

SIR,—The letter of your correspondent, "An Old Accoucheur," regarding the death of the Princess Charlotte raises a question of great interest—viz., whether the fatal result might have been averted under other treatment? The history of the case is most instructive, and I think a careful consideration of it leaves little room to doubt that, though the management of the labour was quite in accordance with the teaching of the day, it was entirely opposed to that of modern obstetric science. The following account of the labour may interest your readers, and will probably be new to most of them. It is contained in a letter from Dr. John Sims to the late Dr. Joseph Clarke, of Dublin:—

"London, November 15, 1817.

"My dear Sir,—I do not wonder at your wishing to have a correct statement of the labour of her Royal Highness the Princess Charlotte, the fatal issue of which has involved the whole nation in distress. You must excuse my being very concise, as I have been and am very much hurried. I take the opportunity of writing this in a lying-in chamber. Her Royal Highness's labour commenced by the discharge of the liquor amnii about seven o'clock on Monday evening, and the pains followed soon after. They continued through the night and a great part of the next day—sharp, soft, but very ineffectual. Towards the evening Sir Richard Croft began to suspect that labour might not terminate without artificial assistance, and a message was despatched for me. I arrived at two on Wednesday morning. The labour was now advancing more favourably, and both Dr. Baillie and myself concurred in the opinion that it would not be advisable to inform her Royal Highness of my arrival. From this time to the end of her labour the progress was uniform, though very slow, the patient in good spirits, the pulse calm, and there never was room to entertain a question about the use of instruments. About six in the afternoon the discharge became of a green colour, which led to a suspicion that the child might be dead; still the giving assistance was quite out of the question, as the pains now became more effectual, and the labour proceeded regularly though slowly. The child was born without artificial assistance at nine o'clock in the evening. Attempts were made for a good while to reanimate it by inflating the lungs, friction, hot baths, etc., but without effect; the heart could not be made to beat even once. Soon after delivery Sir Richard Croft discovered that the uterus was contracted in the middle in the hour-glass form, and as some hæmorrhage commenced it was agreed that the placenta should be brought away by introducing the hand. This was done about half an hour after the delivery of the child with more ease and less loss of blood than usual. Her

Royal Highness continued well for about two hours; she then complained of being sick at stomach, and of noise in the ears, began to be talkative, and her pulse became frequent; but I understand she was very quiet after this, and her pulse calm. About half-past twelve o'clock she complained of severe pain in her chest, became extremely restless, with rapid, weak, and irregular pulse. At this time I saw her for the first time. It has been said that we had all gone to bed, but that is not a fact; Croft did not leave her room, Baillie retired about eleven, and I went to my bed-chamber and laid down in my clothes at twelve. By dissection, some bloody fluid (two ounces) was found in the pericardium, supposed to be thrown out *in articulo mortis*. The brain and other organs all sound, except the right ovarium, which was distended into a cyst the size of a hen's egg. The hour-glass contraction of the uterus still visible, and a considerable quantity of blood in the cavity of the uterus—but those present dispute about the quantity, so much as from twelve ounces to a pound and a half—her uterus extending as high as her navel. The cause of her Royal Highness's death is certainly somewhat obscure: the symptoms were such as attend death from hæmorrhage, but the loss of blood did not seem to be sufficient to account for a fatal issue. It is possible that the effusion into the pericardium took place earlier than was supposed, and it does not seem to be quite certain that this might not be the cause. That I did not see her Royal Highness more early was awkward, and it would have been better that I had been introduced before the labour was expected; and it should have been understood that when labour came on I should be sent to without waiting to know whether a consultation was necessary or not. I thought so at the time, but I could not propose such an arrangement to Croft. But this is entirely *entre nous*. I am glad to hear that your son is well, and, with all my family, wish to be remembered to him. We were happy to hear that he was agreeably married.

"I remain, my dear Doctor,

"Ever yours most truly,

"JOHN SIMS, M.D.

"This letter is confidential, as perhaps I might be blamed for writing any particulars without the permission of Prince Leopold."

What are the facts here shown? Here was a delicate young woman prepared for the trial before her, as Baron Stockmar tells us, by "lowering the organic strength of the mother by bleeding, aperients, and low diet," who was allowed to go on in lingering feeble labour for no less than fifty-two hours after the escape of the liquor amnii! Such was the groundless dread of instrumental interference then prevalent that, although the case dragged on its weary length with feeble ineffectual pains, every now and then increasing a little in intensity and then falling off again, it is stated "there never was room to entertain a question about the use of instruments"; and even "when the discharge became of a green colour . . still the giving assistance was quite out of the question"! Can any reasonable man doubt that if the forceps had been employed hours and hours before—say on the Tuesday, when the pains fell off—the result would probably have been very different, and that the life of the child, destroyed by the enormously prolonged second stage, would have been saved? It must be remembered that early on Tuesday morning delivery was expected, so that the head must then have been low in the pelvis (*vide* Stockmar's "Memoirs," vol. i., p. 63). It would be difficult to find a case which more forcibly illustrates the danger of delay in the second stage of labour. Then what follows? The uterus, exhausted by the lengthy efforts it should have been spared, fails to contract effectually; nor do we hear of any attempts to produce contraction by pressure. The relaxed organ becomes full of clots, extending up to the umbilicus, and all the most characteristic symptoms of concealed post-partum hæmorrhage develope themselves. She complained "of being sick at stomach, and of noise in her ears—began to be talkative, and her pulse became frequent." Before long other symptoms came on, graphically described by Baron Stockmar, and which seem to point to the formation of a clot in the heart and pulmonary arteries,—a most likely occurrence after such a history. "Baillie sent me word that he wished me to see the Princess. I hesitated, but at last went with him. She was suffering from spasms of the chest and difficulty of breathing, in great pain, and very restless, and threw herself continually from one side of the bed to the other, speaking now to Baillie, now to Croft. Baillie said to her—'Here comes an old friend of yours.' She held out her left hand to me hastily, and pressed mine warmly twice. I felt her pulse; it was going very fast—the beats now strong, now feeble, now intermittent."

Here was evidently something different from the exhaustion of hæmorrhage; and no one who has witnessed a case of pulmonary obstruction can fail to recognise in this account an accurate delineation of its dreadful symptoms.

Surely this lamentable story can only lead to the conclusion that the unhappy and gifted Princess fell a victim to the dread of that bugbear, "meddlesome midwifery," which has so long retarded the progress of obstetrics.

I am, &c., W. S. PLAYFAIR.

Curzon-street, Mayfair, W., November 29.

CLINICAL TEACHING IN EDINBURGH.

LETTER FROM Mr. JAMES RITCHIE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your issue of the 23rd ult., appears an article entitled "Clinical Teaching in Edinburgh," written by one who exhibits an intimate knowledge of the Edinburgh School. I heartily sympathise with the object of that article—viz., the introduction of a more perfect method of teaching clinical surgery. That the Edinburgh School has been specially referred to may be explained by the supposition that the writer of the above-named article has a better knowledge of the method of teaching there than of that in other schools; or it may be that the admirable style of teaching in the medical wards makes that in the surgical appear the more imperfect by contrast. Unfortunately for the student of surgery, other schools, as you remark, find themselves in a similar predicament. One difficulty is common to all—viz., that operations interfere with regular clinical teaching (although clinical teaching would not be complete without them). And in Edinburgh there is this greater difficulty to deal with—viz., that one hour only is at the disposal of many, if not of most, of the students of surgery; whereas, when the time arrives for them to take up clinical medicine, two hours are at their command. With two clinical lectures each week, and the occasional interference of operations, it is evident that one hour in hospital daily is not sufficient for the teaching nor for the study of surgery. The writer of the article referred to cannot have known that for two years Mr. Annandale, now second Surgeon to the Edinburgh Royal Infirmary, has been teaching surgery in a way resembling that by which the teaching is carried on in the medical house of this Hospital. Two years ago, while I had charge of his surgical wards, he commenced this method, and has since pursued it. The estimation in which it has been held by the students has been testified to by the large number which last summer attended his clinique.

I am &c., JAMES RITCHIE, M.R.C.S., M.B., C.M.

Royal Infirmary, Edinburgh, November 27.

SEA-VOYAGES IN PHTHISIS.

LETTER FROM DR. HERMANN J. JONES.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am pleased to find that my letter on the effects of sea-voyages in phthisis has been taken notice of by two correspondents, as the subject is well worthy of investigation. It is satisfactory to me to find that Dr. Thorowgood's opinion coincides to a great extent with mine.

When a student, I was taught that tubercular deposit, like cancer, was a morbid product of a specific nature not found in healthy tissues, and never the result of inflammation; and my own experience in practice confirms this view. I quite admit that patients suffering from the effects of inflammation, such as pneumonia, bronchitis, etc., or weakened by the poison of syphilis, may be benefited by a sea-voyage or by a change of climate. But the confounding of these diseases with phthisis gives rise to an erroneous notion that the latter disease is curable.

It is, however, unnecessary to enter into this disputed question, for a great number of patients in the last stage of consumption are told by their physicians, not only that they will be benefited by a voyage to Australia, but that they will be restored to perfect health.

My experience of the sea shows me a very different result. The following are a few cases which came under my notice besides the one mentioned in my previous letter:—

1. A young railway clerk suffering from phthisis was to have sailed last year in the same ship that I did, at the recommendation of his medical advisers, but died about a month before the ship started.

2. A second-class passenger of ours, returning to Australia, died of phthisis very shortly after landing. He got rapidly

worse during the voyage, and for the latter half of it was confined to his bed.

3. On our return from Melbourne, a young Scotchman suffering from phthisis, who had come out second-class in another ship, was put on board in an almost dying state; and after a consultation with the ship's surgeon and myself, the captain landed him at Queenscliffe, for the purpose of his being sent to the Melbourne Hospital, as we felt sure the poor fellow would never reach England.

4. Another second-class passenger, with the same disease—a young man from the neighbourhood of London—went out and returned by our ship. Strong hopes had been held out to him that a perfect cure would be effected. On the homeward passage the disease rapidly advanced.

5. A short time ago I heard of the death of a Mr. S., who had come to England from Melbourne for a second time, on account of tubercular disease of the lungs. Last year he returned to Australia, and died a few months after getting home. The steamship he returned by had two deaths from phthisis at sea.

6. Mr. W., a first-class passenger, a young man in the second stage of tubercular consumption, returned by our ship, after a stay of about three months in Victoria, during which time he told me he had continued to grow worse. He became much weaker during the voyage home, particularly in the hot weather of the tropics.

7. Mr. C., who left London for Sydney in November of last year, also returned with us. He suffered from very severe hæmorrhage from the lungs, and was told by several physicians that he would be perfectly cured by a voyage to the Antipodes. He therefore left his business and family at great inconvenience, but unfortunately without the slightest benefit; for during the voyage home he had a more violent attack than he had ever had before. I think it right to state here that during my voyage round the world I met with no one who had been cured or even substantially benefited.

Mr. Scobell, in his letter, although he agrees with me in thinking that sea-voyages are useless in advanced cases of phthisis, states that he was cured, by a voyage, of a "tendency" to tubercular consumption. The word "tendency," I submit, is too vague a term. What pathological condition does it denote? Are we to understand that a person suffering from this "*tendency*" has a few tubercles in one or both lungs; or does it mean that the patient is in a weak, debilitated state from some unknown cause? I do not for a moment doubt that persons of this latter class may derive benefit from rest and change of air. Mr. Scobell speaks of "a well-victualled, ventilated, and roomy ship." How can any ship, however well built, be properly ventilated in even moderately rough weather? We often had all the dead-lights, ports, and sky-lights closed for more than a week together; and the air in the saloon and cabins was far from pleasant or healthy. Good ventilation in rough weather would convert the cabin into a salt-water bath. The food on board even the best-found ships is not sufficiently tempting for an invalid. Poultry, confined in the small pens on deck, gets, as might be expected, into a wonderfully emaciated condition. The second-class passengers are almost entirely fed on preserved meats.

It is right to keep up the spirits and hopes of a patient suffering from phthisis as much as possible; but, in my opinion, this may be attained in many better ways than by transportation to Australia.

If my observations lessen the number of phthisical patients that suffer the useless hardships of a voyage to the Antipodes, I shall feel that good has been accomplished.

I am, &c., HERMANN J. JONES, L.R.C.P. Lond.

53, Blenheim-crescent, W., December 3.

REPORTS OF SOCIETIES.

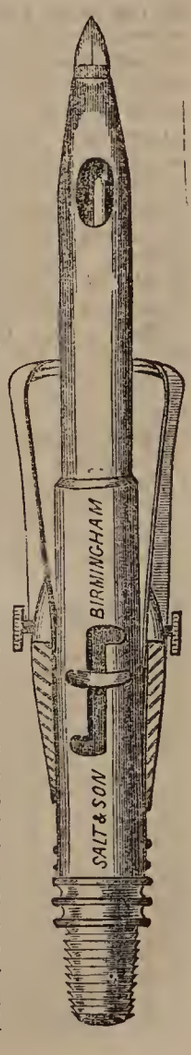
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 26.

Mr. T. B. CURLING, F.R.S., President, in the Chair.

MR. T. SPENCER WELLS communicated "A Fifth Series of 100 Cases of Ovariotomy, with Remarks on the Results of 500 Cases."—Cases of completed ovariotomy, from 400 to 500, are arranged in a table of similar form to the previous series of one to 400 cases, published in successive volumes of the *Transactions* of this Society, and the author then reviews the whole of the cases, examining the influence which the social condition of the patient, her treatment in large or small hospitals or in private practice, the season when the operation was performed, the age and conjugal condition of the patient, the size, solidity, and connexions of the tumour, and the length of incision required for its removal, and the various modes of carrying out the extra-peritoneal and the intra-peritoneal treatment of the pedicle, have upon the result of the operation. Twenty-five cases where both ovaries were removed at one operation, and four cases where ovariotomy was performed twice on the same patient, are then reported, and some remarks follow upon fifty-two cases of exploratory incisions and incomplete operations, and exceptional cases of recovery after suppuration and drainage of cysts which could not be removed. The subsequent history of patients who have recovered after removal of one ovary proves that they may menstruate regularly, and may bear children of both sexes, or twins, and that after removal of both ovaries they do not become excessively fat, nor lose their feminine appearance or sexual instinct. Of 373 women who recovered, 36 who were unmarried at the time of operation have married since; of these 15 have had one child, 6 two children, 3 three, and 3 four children; 2 have had twins. Of 259 who were married when the operation was performed, many being beyond the age of child-bearing, 23 have had one or more children since. No particulars could be obtained of 23 patients who recovered, but 312 reported themselves as in good health this summer. A few complained of some trifling ailment, and 17 have died of causes more or less directly connected, and 19 of causes not at all connected, with ovarian disease or the operation, at various periods from a few weeks to eight years after ovariotomy. These are rare exceptions to the general rule that a woman who recovers after ovariotomy is restored to perfect health, and is enabled to fulfil all the duties of wife and mother. Supposing that the 373 women who recovered might have lived four years if ovariotomy had not been performed, they might have realised 1492 years of miserable invalid life. Taking their average age at 38 years at the time of operation, and the average expectation of life for a healthy woman of that age in this country as 29 years, we find the 373 women have secured by the operation the probability of the gross amount of 10,817 years of average healthy life.

MR. ROBERT LAWSON TAIT introduced to the notice of the Society a New Form of Trocar for use in Ovariotomy. For this instrument it is claimed that it has the following advantages over those at present in use:—That the penetrating edge cuts, and does not tear, making a wound which the tube completely fills, and is easily retracted. One size of trocar will answer all purposes. The cutting point may be used as a knife to slit open smaller cysts contained in the major, and of which the contents may be so viscid as to be unable to pass along any trocar. The catches adapted to this trocar are such as to obviate any possibility of it slipping, and the instrument is much handier than any other at present in use for ovariotomy. It is made by Salt and Son, of Birmingham.



MR. SPENCER WELLS said he had not yet used Mr. Tait's trocar, but intended to do so. The objection raised as to his own instrument was not true; if it had been improperly sharpened, it might split the cyst, but he had never found it to occur. He thought the internal arrangement in Mr. Tait's trocar was objectionable, as it would so block up the calibre as to prevent the escape of thick fluid. The calculation in his paper as to the saving of life by ovariotomy might appear at first startling—it did so to him,—and he asked Dr. Farr to look through his statistics, and he had said they were correct.

DR. PRIESTLEY, after congratulating the author on his successful experience, said he wished to draw attention to two points not touched upon in his paper. Had Mr. Wells any established rule for dealing with a unilocular cyst? Was it best to tap it, to inject it with iodine, or at once proceed to its removal? As the mortality appeared to depend upon the length of the incision, was it desirable to tap once or more before operating? Was it better to operate when the tumour was small and just out of the pelvis, or to allow it to grow till

the patient had some discomfort from it, and at the same time was weakened by its growth, and so would be less likely to bear the operation well?

Dr. Squarey asked if Mr. Wells had traced the ovary in the early stage of the disease, and if so, what was the condition? From a case he had seen at the Soho-square Hospital, he was led to think that the cyst occurred as a consequence of ovaritis. The patient had all the symptoms and physical signs of ovaritis. After six or eight months a cyst was found the size of a cocoa-nut, which was removed by Dr. Meadows. Would it be well to operate thus early, or to wait? If so adhesions might form.

Dr. Heywood Smith said that in the intra-peritoneal way of healing the pedicle, the cautery gave the best result—sixteen recoveries to two deaths,—whilst if the cautery and ligature were combined, the mortality was much greater.

Mr. Heath said that the result of two years' experience at Soho Hospital, during which time no clamp had been used, was very favourable, and bore out what Mr. Wells said of this proceeding. As to the precautions to be taken before operating, he thought that this was somewhat theoretical, for often practitioners had to attend a woman, or do some operation, after having been recently in the post-mortem room. He mentioned a case where such had happened to him; the patient did well for a week, and then was moved from a private into a general ward in which was a patient suffering from carcinoma uteri. Twelve hours after she had a rigor, the temperature and pulse rose, and a second rigor within the twenty-four hours. She was removed from the ward, and soon was well. He thought from this much care was required after the operation, as there was a peculiar susceptibilty to infection. Mr. Wells did not say that he took any special precaution to prevent the entrance of germs by the use of carbolic-acid spray, and yet the results were good, and the healing by the first intention.

Mr. Spencer Wells replied that, in unilocular cysts, he thought it was well to try what tapping would do. If small, they were often cysts of the parovarium, or extra-ovarian, and contained a clear whitish fluid, with little albumen and chloride of sodium; they collapsed on tapping, and the patient was cured. As to early or late tapping, if the cyst were small and the patient young, it was better to wait, as the prognosis was not so good as in older women with a large cyst, and where the peritoneum had undergone some change. His experience did not permit him to answer the question as to the relation between ovaritis and the early stage of ovarian cyst. Cases did not come to him at that stage; he had hardly seen one so small as a cocoa-nut, and had never removed one less than seven pounds. He should not think one was justified in removing so small a tumour, unless the patient was greatly inconvenienced by it. He had only used the ligature as a supplement to the cautery, when, after removing the cautery forceps, bleeding points were seen. He thought the use of the clamp was preferable to ligaturing and returning the pedicle. He had never used the carbolic-acid spray. Dr. Keith, of Edinburgh, found he was more successful where it was not used than where it was.

Mr. Lawson Tait said his trocar did not split the cyst wall, but only stretched it, and filled the hole, grasping it tightly, so that no fluid escaped. This was especially serviceable when the cyst wall was thin. He thought if the fluid was too thick to pass through his trocar, it would be too thick to pass through any. He agreed with Mr. Heath that it was best to return the pedicle, and close the abdomen. Mr. Wells's results by the extra-peritoneal mode were exceedingly good. This would do if the pedicle was long, but if very short he should prefer using the écraseur, and closing the opening.

Mr. E. R. Bickersteth related a case of Subclavian Aneurism treated by Temporary Compression of the Innominate Artery, followed by Ligature. The patient, a strong, healthy-looking dock porter, aged 40, was admitted into hospital on April 15, 1868. He was suffering from an aneurism of the third part of the right subclavian artery, traceable to a strain incurred while moving a heavy weight about three weeks previously. It was about the size of a hen's egg, and presented no features of difficulty in diagnosis. A review of the various plans attempted for the cure of this complaint seemed so unpromising that it was resolved to try temporary compression of the innominate artery. Mr. Porter, of Dublin, had attempted this in 1867 by means of an instrument not unlike a miniature lithotrite, between the blades of which the artery, after having been laid bare, was compressed. The pressure here, however, being rigid and unyielding, produced a slough in the coats of the vessel, and fatal hæmorrhage resulted. In this instance an attempt was made to secure elastic compression, sufficient to stop the flow of blood through the vessel, but not strong enough to injure its coats. The instrument was devised, consisting of a hollow stem with a transverse bar, having eyes at its extremities. In the hollow stem worked a screw, having also a transverse bar, to the extremities of which two india-rubber bands or accumulators were attached. A wire passed through the eyes of the lower bar, and was attached to hooks at the ends of the accumulators, and by means of this wire the artery was compressed against the lower transverse bar. By moving the screw the accumulators were put on the stretch and the wire tightened upon the vessel. The great difficulty was to find a suitable wire; one which should be quite pliable and supple, and yet sufficiently strong. Gold, copper, silver, aluminium, and lead were tried upon an innominate artery removed from the dead subject, upon which the instrument was placed, while a very powerful stream of water was forced along the vessel. The last-mentioned was adopted—viz., lead. On May 5 the operation was performed. An incision was made parallel with the anterior edge of the sterno-mastoid as low as the sterno-clavicular articulation, and another from this point outwards along the clavicle. The flap thus formed was raised, the sterno-mastoid, sterno-hyoid, and sterno-thyroid cut through, and the sheath of the common carotid laid bare; this was followed down to where it meets the subclavian, and the innominate then came into view. A portion of the sheath of the latter was separated, an aneurism-needle armed with thread passed beneath the vessel, and by means of this the lead wire was pulled through. The clamp was passed down on the wire and screwed up, when pulsation in the aneurism and in the radial at once ceased. The end of the instrument was out of the wound a long way, and moved like the pendulum of a clock with every beat of the innominate. For the first forty-eight hours everything progressed most satisfactorily, but at the end of that time pulsation was found in the tumour, and the house-surgeon on proceeding to tighten up the clamp, found that it did not act. A few hours afterwards Mr. Bickersteth, having had the patient put under choloform, opened up the wound, and found that the constant sawing action produced by the impulse of the artery had cut through the lead wire at the point where it passed through one of the eyes of the transverse bar. As the instrument seemed now useless, two strong silk ligatures were put beneath the vessel, one above and one below the point where the lead wire had been. The second operation was accomplished with the greatest ease. The patient went on tolerably well till the evening of the fifth day after this last operation, when some hæmorrhage occurred. On the sixth day three attacks ensued, and on the last occasion the loss of blood was so great and so uncontrollable that the patient died rapidly in a convulsed condition. Loose shot were poured into the wound on the last two occasions. The post-mortem examination showed the wound healthy, the innominate from the aorta to the point of ligature filled with a firm, tightly fitting clot, the common carotid empty, the subclavian empty as far as the aneurism, the aneurism itself filled with firm, laminated coagulum, and the subclavian beyond it also occluded. The aneurism was practically cured. The hæmorrhage had occurred on the distal side of the ligature.

Mr. Smith asked Mr. Bickersteth if he would let the Society know on what grounds he had confidence in ligaturing an artery with carbolised catgut.

Mr. Holmes, in reply to a question, said that the catgut ligature had been used several times. It had the superiority of being absorbed. He was accustomed to use it for sewing up wounds, as it melted away in the wound, and the patient was freed from the pain of its removal. There was one objection—that it might be absorbed too soon; but it would not if properly prepared. Since using it at St. George's there had been only one case of secondary hæmorrhage, and that resulted from the patient putting his foot to the ground too early; so that the danger was not from this. In using the catgut we had also the advantage of compression with ligature: it occluded but did not divide the vessel. The successful cases of ligature in continuity proved that primary union might occur when the artery was thus tied. Usually, in subclavian aneurism, the artery on the heart side was diseased; if so, no ligature would be of use. He did not think the antiseptic treatment should be lightly spoken of. There was no physical proof of the germ theory; but, whether this was believed in or not, we had only to treat a number of cases by carbolic acid to find the good results. It was the most successful mode of treatment, and this was apart from all reasoning about the germ theory.

Mr. Couper spoke of the good results of the antiseptic treatment at the London Hospital. Catgut had been used for ligaturing arteries for three years, and was equally trustworthy

whether the wound was dressed antiseptically or not. In dissecting the stump of a thigh five weeks after amputation, he found the ligature distinct and enveloped in fibrous tissue.

Mr. Spencer Wells asked Mr. Bickersteth if he had applied silk ligatures in the way he had used catgut. Silk would not dissolve too soon; it would remain for six or seven weeks, or even three months.

Mr. Barwell thought the absence of clot on the distal side of the artery remarkable. He remembered no case like this. Was it washed away when the wire broke?—if so, would not a ligature primarily applied have done better?

Mr. Bickersteth replied that the result from catgut ligatures with him was so remarkable and successful that he did not resort to any other procceding. Where silk was used the vessels must be cut through; not so with catgut, and so there was no fear of secondary hæmorrhage. He had not used silk in this way, but he had knowledge of one such case. Silk ligatures, as in ovariotomy, might be returned into the abdominal cavity without any bad result. He thought that the secondary hæmorrhage had occurred in the ordinary way from the distal end; no clot being there did not surprise him. He did not think the ligature of the vessel was prejudiced by the previous application of the wire clamp; he ligatured in two places because he feared that the vessel might have been injured.

THE PATHOLOGICAL SOCIETY.

Tuesday, November 19.

Mr. Hilton, F.R.C.S., in the Chair.

Mr. Bellamy showed a specimen illustrating the process of Repair after Removal of the Astragalus. Some years ago the patient suffered from compound dislocation of the astragalus, which was removed by Mr. Canton. The patient died a little time back, and the specimen showed well how the tibia and fibula became adapted to their new position. The patient could walk well. The tibia was grown to the os calcis.

Dr. Goodhart said that at Guy's lately was a somewhat similar case. The cartilages were present, and the tibia was bound to the calcaneum by fibrous bands.

Dr. Crisp exhibited Gordian Worms from the Lungs of Sheep, for the purpose of showing that the *Strongylus filaria* in the white elevated masses on the surface of the lungs had been mistaken by Drs. Sandy, Pedly, and himself for a gordius; that he had traced these gordians through their different stages of growth, and he had every reason to believe that they were immature forms of the *Strongylus filaria*. He had consulted the works of a great many helminthologists, and none of these authors had spoken of a gordian worm in the body of a mammal (with the exception of the guinea worm, *Dracunculus*). If this conclusion proved to be correct it would throw great light upon the origin of many of the nematoid worms, such as the *Filaridæ* and *Strongylidæ*, the early history of which remained obscure and doubtful.

Dr. W. Moxon showed a specimen of Abscess of the Liver, which was large and single, although the patient had never been in a tropical country. The question raised was, whether it is right to recognise a tropical form of abscess of the liver distinct from the pyæmic abscess due to dysentery, etc., and especially whether large size and singleness of abscess is a distinctive mark of the tropical form. Dr. Moxon enumerated ten cases of pyæmic abscess which had come in succession under his notice. In four of these the abscess was single and large; in one other there were three abscesses so close together that they would soon have broken into each other; in another case the abscesses were gathered in one circumscribed part of the liver. The rest of the cases showed scattered abscesses, but they were all cases of general pyæmia from amputations of limbs and injuries to the head, and in them the disease had proved rapidly fatal, whereas the cases of single abscess were of long duration. He thought the large size and singleness of the abscess, which so often marks the tropical cases, is due to the longer time they last as compared with the swift course of general pyæmia, such as produces multiple abscesses. The tropical cases are insidious and slow, and the abscesses, at first multiple, have time afforded them to break through into each other, and form those enormous collections of pus which Annesley figures, in which indeed there is comparatively little of the liver tissue left. While speaking with very great respect for Dr. Murchison's opinion to the contrary, he could not but believe that almost all tropical abscesses are secondary to dysenteric or other ulceration, and that primary suppuration of the liver is at least as doubtful as primary suppuration of the brain. Dr. Murchison cites Mr. Waring as showing that fifty-one cases out of 204 did not show cicatrices or ulcerations in the bowel. Now, considering first that only one-fourth of all the cases remain as due to primary suppuration in other parts of the body, and that of so large a number as 204 many inspections must have been made indifferently, it surely is remarkable that so many times as three out of every four the ulcer or cicatrix was found. A free supply of water for a careful washing and searching of the whole bowel would surely not be at hand in all the 204 cases, and even then the task of searching is so dirty that in so large a number it surely would be often incomplete. In this point attention was drawn to the cicatrix in the cæcum. It was so easily overlooked that many at the post-mortem did not see it, though Dr. Habershon, who was present, agreed to it as certain. And on section of the wall of the bowel the coat was found two and a-half times as thick at the site of the cicatrix, while the natural surface had entirely disappeared. The specimens were from a man aged 23, who had been taken ill in April while in a vessel trading on the coast of France and Spain. His symptoms were sweating, wasting, and hæmoptysis. He lived until October, and died of exhaustion in Guy's Hospital. A large abscess was found in the upper part of the right lobe of the liver, adherent to the diaphragm, and pointing to the pleura; it had burst into the hepatic vein half an inch from the vena cava, into which it extended, and so through into the right auricle, in which was a great mass of ante-mortem clot, from which pieces had gone on into the small pulmonary arteries, plugging them and setting up numerous pyæmic abscesses.

Dr. Murchison said the connexion between abscess of the liver and dysentery which had been supposed to exist was unreal. The cases of abscess without dysentery were not to be explained by missing the scars in the bowel. In one set of cases—viz., abscess from impaction of biliary calculi—the abscesses were certainly multiple.

In reply to the President, Dr. Moxon said the calcareous glands in the bowel would weaken the part, and render it more liable to inflammatiou.

Dr. W. Moxon exhibited specimens of Acute Interstitial Pneumonia, or Purulent Inflammation of the Lymphatics of the Lung. The specimens shown consisted of the thoracic viscera from the body of a woman. She was admitted into hospital in an almost dying state. Great difficulty of breathing, with much wheezing in respiration, slight dulness at right base, together with moderate elevation of temperature, were the chief symptoms. The left pleura contained a few ounces of turbid liquid, and the surface (especially of the upper lobe) was coated with recent lymph. Under this lymph, and beneath the pleura in the sub-pleural tissue, were numerous wandering yellow lines, forming a network. On comparison of this network with the injected specimens of the lymphatics of the pleura, they were found to correspond, and on examining the lines themselves they were found to be minute vessels full of pus. The substance, especially of the upper lobe, was denser than natural; and on section of it a peculiar appearance was exposed. The outlines of the lobules were revealed in a peculiarly striking manner by dots and streaks of the same yellow colour and general appearance as those in the sub-pleural tissue, the effect thus produced amounting to a nearly complete mapping out and insulation of a large proportion of the lobules on any section. The right pleura was adherent at the base and the hinder and outer surfaces; but between the lung and mediastinum three ounces of sub-puriform liquid lay lodged, the disease here being evidently older. The upper lobe of this lung showed the same interlobular suppuration as that on the other side. In both lungs a moderate extent of early pneumonia accompanied these changes; but the pneumonia was in the outside of the lobules, evidently extending from the interlobular suppuration. The lower lobe of the right lung was in a state of chronic atrophic induration.

Dr. Powell asked if there was any history of previous disease to which acute disease had been superadded. He had seen the lymphatics enlarged, but in chronic disease, not in acute. He thought the name was faulty.

Dr. Moxon said that last week he had seen a similar acute case with the same suppurating lines of lymphatics.

Dr. Green said there was old disease of the base of the lung. Last year he had brought a similar case, but chronic. Was there any exudation into the vesicles in this case?

Dr. Moxon said there was a change in the neighbourhood of the walls of the air-vesicles.

Dr. Dowse showed an Aneurism of the Innominate Artery,

involving the Aorta, from a woman aged 60. She was admitted to the Highgate Infirmary for cystitis, and died soon after admission. She could not swallow or breathe well. The left pupil was dilated, the right contracted. The aorta was dilated and atheromatous; the circulation was not greatly impeded. The nerves of the neck were pressed on.

Dr. Dowse also showed the degenerated Spinal Column of a child, aged 9, which looked as if suffering from Mesenteric Disease. There was no curvature of the spine and no pain on pressure, yet after death the spine was found extensively diseased. The disease appeared to begin in the intervertebral cartilages, and was worst about the seventh rib, where an abscess seemed to have pointed, though at the time there was no discharge. The rib was carious.

Mr. Nunn showed a specimen of Large-celled Sarcoma of the Liver. The patient had had her breast extirpated for a large myxomatous tumour. The wound was large, and before it quite healed the disease returned as a fungous growth growing from the scar. This was removed by the cautery and zinc paste. The bone necrosed at the spot and came away. He tried transplantation at the part, and the wound healed. She was again admitted with pain on the right side and much difficulty of breathing. By-and-by she died, when they found a large tumour of the right lung not connected with the scars. It was a large-celled sarcoma. (Referred.)

Mr. Hulke said in 1862 he removed a spindle-celled sarcoma of the choroid. Two years ago the patient showed signs of disease of the liver. Death recently followed, when the liver was found large and full of spindle-celled growth. The spindle-celled growth of the choroid was white; that of the liver was partly melanotic, the reverse of what usually happens.

Dr. Tilbury Fox showed under the microscope a specimen of Scleroderma from India. The patient was a soldier. After exposure during the night he got diarrhœa, and his skin began to harden. His favourite posture was sitting on the edge of his bed, and he died there. He was so stiff that his skin had to be cut to lay him straight after death. The appearances were those of ordinary scleroderma—increase of connective tissue, diminution of fat, and widening of the ducts in the skin.

Mr. George Lawson exhibited a Large Blood-cyst which he had removed from the thigh of a gentleman that afternoon. The patient first noticed a swelling on the anterior part of the thigh about four years ago. It was without pain, and occasioned no inconvenience. From that time the swelling gradually increased until it attained its present dimensions. The tumour occupied the anterior part of the thigh; it was very elastic to the touch, evidently containing fluid, and was beneath the rectus and covered laterally by the vasti muscles. It measured vertically nine inches and a half, and transversely seven inches and a half. Mr. Arnott gave the following account of its microscopical appearances:—"The tissue forming the fleshy fasciculi projecting from the inner side of the cyst wall is made up of cells and intercellular substance, without any appearance of fibroid stroma. The cells are mostly of a spindle shape, with plump oval nuclei, and are banded together in wavy tracts. Some of these cells, are very large and of irregular form, containing many nuclei; others are smaller and oat-shaped; the majority are spoilt by fatty degeneration. Mingled with these cells, and lying free in the fluid contents of the cyst, and in the solid remains of old clot filling some secondary cysts in the wall, are large numbers of crystals of cholesterine." Mr. Lawson remarked, with reference to the future of blood-cysts, that in one patient whose thigh he amputated on account of a large blood-cyst, there was a recurrence of the cysts in the stump, and the patient died four years afterwards from medullary cancer in the thorax. In another patient now under his care he punctured a blood-cyst in the back three years ago, and in the site of the cyst there is now a large medullary tumour.

Mr. Hulke had a similar case some years ago in a girl. The blood-cyst was easily removed, but the patient died of malignant disease.

Mr. Nunn said in a case of his, also, of blood-cyst, the patient died in the same way.

Mr. Arnott said Mr. Shillitoe removed such a cyst in the Great Northern Hospital by amputating the limb. The patient died of bleeding. They found much spindle-celled matter in the limb, spreading up the thigh from the seat of the cyst.

Mr. De Morgan showed a specimen of Perforation of the Diaphragm from a fractured rib. The patient, a powerful man, when seen was emphysematous, and had fractured ribs, but seemed exceedingly comfortable for a man in such a condition. He was sick in the evening; next day his breathing was pretty well, and the emphysema going down. That evening he suddenly became delirious, but got better, when suddenly he collapsed and died. Seven ribs were broken; the sixth, perforating the lung, diaphragm, and ileum, was found sticking in the spleen. From the wound of the spleen free bleeding had taken place, and the abdomen was filled with blood. The rib had partly returned to its natural position, but not altogether. He supposed the spleen had been wounded in the delirium.

Mr. Cooper Forster exhibited a specimen of Fracture of the Bones of the Skull. The man was thrown out of a window, and had his occipital bone fractured. His lower limbs were paralysed; he was delirious, and he had lost the sense of taste. There was no vomiting after the first day, but he ultimately died, some weeks after, of cystitis and bed-sores. His liver was lardaceous, and he had empyema. The fracture of the skull divided into two parts—one part was covered by a thin plate of bone; in the other, which gaped widely, there was no attempt at repair. The brain was inflamed. The tenth and eleventh dorsal vertebræ were injured; here repair was advanced, though ninety days after the receipt of the injury there was no repair in the skull.

MEDICAL NEWS.

University of London:—The following is a list of the Candidates who have passed the recent M.D. Examination:—

Alford, Henry James, student of University College.
Ball, James Barry, of University College.
Bruce, John Mitchell, M.A. Aberd., of Aberdeen and Charing-cross Hospital.
Burgess, William Frederick Richardson, of Guy's Hospital.
Carter, Alfred Henry, of University College.
Griffiths, Thomas, of University College.
Hall, Francis de Havilland, of St. Bartholomew's Hospital.
Lyell, Robert Wishart, of King's College.
Smith, Arthur William, of Guy's Hospital.

The following passed in Logic and Moral Philosophy only:—

Archer, Herbert Ray, student of St. George's Hospital.
Gibbings, Alfred Thomas, of King's College.
Harris, James Alfred, of Edinburgh University.
Humphreys, John Henry, of University College.
Langmore, John Wreford, B.S., of University College and Middlesex Hospital.
Morton, John, of St. Thomas's Hospital.
Read, Charles, of University College.
Vachell, Charles Tanfield, of King's College.
Wyman, John Sanderson, of St. Bartholomew's Hospital.

The following is a list of the Candidates who have passed the recent Second M.B. Examination (Examination for Honours):—

Medicine.

FIRST CLASS.

Dalton, Benjamin Neale (Scholarship and Gold Medal), student of Guy's Hospital.
Ottley, Walter (Gold Medal), of University College.(a)
Philpot, Joseph Henry, of King's College.
Greenfield, William Smith, of University College.
Barfoot, George Harry, of University College.

SECOND CLASS.

Jones, Thomas, of Guy's Hospital.
Perkins, Charles Edward Steele, of Guy's Hospital.
Godlee, Rickman John, B.A., of University College.

Obstetric Medicine.

FIRST CLASS.

Eardley-Wilmot, Robert (Scholarship and Gold Medal), of King's College.
Greenfield, William Smith (Gold Medal), of University College.
Philpot, Joseph Henry, of King's College.(b)
Branfoot, Arthur Mudge, of Guy's Hospital.(b)
Warner, Francis, of King's College.(b)
Jones, Thomas, of Guy's Hospital.(b)

SECOND CLASS.

Dalton, Benjamin Neale, } Equal. { of Guy's Hospital.
Harris, Michael, } { of Guy's Hospital.
Cane, Leonard, of University College.
Godlee, Rickman John, of University College.

THIRD CLASS.

Ashby, Alfred, of Guy's Hospital.

Forensic Medicine.

FIRST CLASS.

Harris, Michael (Gold Medal), of Guy's Hospital.
Ottley, Walter (Gold Medal), of University College.

SECOND CLASS.

Greenfield, William Smith, of University College.
Godlee, Rickman John, of University College.
Dalton, Benjamin Neale, of Guy's Hospital.

(a) Obtained the number of marks qualifying for a Scholarship.
(b) Obtained the number of marks qualifying for a Gold Medal.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 28, 1872:—

Bevers, Edmund Augustine, Oxford.
Buck, William Elgar, Leicester.
Charlesworth, Henry, Longnor, Buxton.
Cleghorn, George, York-road, London.
Jackson, Richard Atkinson, Lancaster.
Moss, Herbert Campbell, Stratford, Essex.
Northey, Gilbert William, Tavistock, Devon.
Vines, Edward Prince, Reading.
Whateley, George Frederick, Great Berkhamsted.

As an Assistant in Compounding and Dispensing Medicines:—

Butterfield, Edward, Northampton.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Boulger, Isaac, St. Thomas's Hospital.
Couldrey, James, Charing-cross Hospital.
Finemore, James Harman, London Hospital.
Todd, William Hurford, London Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ASHBY, ALFRED, M.B., F.R.C.S.—Surgeon to the Westminster General Dispensary, Gerard-street, Soho.

ATKINSON, ROBERT, M.R.C.S., L.S.A.—Medical Officer for the Ripponden District of Halifax Union.

BELL, JOHN WILLIAM, L.R.C.P., L.R.C.S.—Resident Medical Officer at the Royal Hospital for Sick Children, Edinburgh.

HARDING, Miss S. M.—Dispenser to the Birmingham and Midland Hospital for Women.

HARRIS, JOHN D., L.R.C.P. Lond., M.R.C.S.E.—Surgeon to the Exeter Dispensary.

MACLAREN, JAMES, L.R.C.S.—Assistant to the Extra Physicians at the Royal Hospital for Sick Children, Edinburgh.

SMITH, CLEVELAND, M.R.C.S. Eng., L.S.A.—Public Vaccinator for No. 2B Worthing District of Preston Union, Sussex.

THOMAS, RICHARD ROBERTS GREGORY, M.D., M.R.C.S., L.R.C.P., L.M.—Medical Officer of the Workhouse, and for the East Tiverton District; and Medical Officer and Public Vaccinator for the Cadbury and Cadeleigh and Washfield Districts of the Tiverton Union, *vice* William Frederick Terry, M.R.C.S. Eng., L.S.A. Lond., resigned.

THORNTON, W. PUGIN, M.R.C.S. Eng., L.S.A.—Assistant-Surgeon to the Hospital for Diseases of the Throat, Golden-square, London, W.

TURNER, GEORGE, M.R.C.S., L.R.C.P.—Resident Medical Officer to the London Fever Hospital, Liverpool-road, N.

WHARRY, C. J., M.B., M.R.C.S.E., &c.—Superintendent of the Civil Hospital at Hong-Kong.

WOODMAN, JOHN, F.R.C.S.E.—Honorary Consulting-Surgeon to Exeter Dispensary.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—Thomas A. Warren, Surgeon to the *Topaze;* Dr. William Lloyd, Surgeon to the *Duke of Wellington*, for Lisbon Hospital; Dr. James W. Fisher, Assistant-Surgeon to the *Vanguard.*

WAR OFFICE—MEDICAL DEPARTMENT.—Surgeon-Major J. Sinclair, M.D., from the 33rd Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon R. W. Clifton, appointed to the 33rd Foot; Staff Assistant-Surgeon J. D. Edge, M.D., to be promoted Staff Surgeon, in recognition of his gallant services when engaged against the Indians at Orange Walk, British Honduras, as soon as he has qualified for the superior grade, in accordance with Article 337 of the Royal Warrant of December 27, 1870.

MILITIA.—Royal Tyrone Fusiliers—Assistant-Surgeon E. C. Thompson resigns his commission.

BIRTHS.

BROWN.—On November 29, at Newlands, Ryde, Isle of Wight, the wife of Richard Brown, M.D., of 1, Brunswick-place, Brunswick-square, Brighton, of a son.

GREENHOW.—On October 19, at Sirdarpore, near Indore, India, the wife of H. M. Greenhow, F.R.C.S., Surgeon Bengal Army, of a son.

TONGE.—On December 2, at Harrow-on-the-Hill, the wife of Morris Tonge, M.D., of a son.

MARRIAGES.

BATCHELOR—JORDISON.—On November 20, at the parish church, South Ockendon, Essex, Ferdinand Campion Batchelor, L.R.C.P., M.R.C.S., of Stratford St. Mary, Suffolk, to Eliza Annie, elder daughter of R. B. Jordison, M.R.C.S., of South Ockendon.

BOSTOCK—BAKER.—On November 28, at St. Mary's, Horsham, Alfred Stillman Bostock, to Ellen Southey, daughter of Thomas Baker, M.D., of Cutton's-hill, East Grinstead.

LANGHARNE—CROSS.—On November 7, at Trinity Church, Allahabad, Montague Langharne, Royal Engineers, only son of the Rev. Thomas Langharne, of Avonhurst, near Bath, to Florence Trant, second daughter of A. Cross, Deputy Inspector-General of Hospitals, Royal Navy.

SANDERS—FLOWER.—On October 31, at Bombay, Edwin Sanders, Assist.-Surgeon 2nd Sikh Infantry, to Edith Waters, daughter of Edward Flower, Esq., St. Helier's, Jersey.

DEATHS.

BENNETT, MARY JANE, wife of the Rev. J. H. Bennett, M.A., and only surviving daughter of the late Thomas Casey, M.D. St. Albans, at Solihull, on December 1, aged 33.

BUBB, HORATIO WARNER, M.D., at Gulgong, New South Wales, on September 13, aged 39.

CLEMENTS, GEORGE, Senior Medical Officer to the Chorlton Union Hospitals, Manchester, on board the steamship *Antenor*, homeward bound, on November 28, aged 28.

GARLIKE, SIBYL ETHEL LAURA, second daughter of E. W. B. Garlike, L.R.C.P. Edin., M.R.C.S. Eng., of Cheshunt, Herts, on November 29, aged 5 weeks and 2 days.

HARWOOD, ALFRED, M.R.C.S. Eng., at 15, Emmanuel-road, Cambridge, on November 18, aged 29.

MILLER, MARY ELIZABETH, wife of John Robert Miller, M.D., Deputy Inspector-General of Hospitals, Bombay, and daughter of the late Robert Nasmyth, Esq., Charlotte-square, Edinburgh, at 20, Leopold-place, Edinburgh, on December 1, aged 49.

WHITAKER, JAMES SAMMS, M.R.C.S., L.S.A., at Betah Cottage, Kingsland-road, on December 3, aged 67.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

COUNTY OF DERBY.—Public Analyst. Candidates must be duly qualified. Applications, with testimonials, to John Barber, Esq., Clerk of the Peace, Derby, on or before December 13.

COVENTRY AND WARWICKSHIRE HOSPITAL, COVENTRY.—House-Surgeon. Candidates must possess both medical and surgical qualifications. Applications, with testimonials, to the Secretary, on or before Dec. 21.

DORSET LUNATIC ASYLUMS, NEAR DORCHESTER.—Assistant Medical Officer for Forston Asylum. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee of Visitors (under cover to Mr. J. Brown, Dorchester, Clerk to the Visitors), on or before January 6, 1873.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE, W.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Applications, with testimonials, to Francis Baily, on or before December 12.

MANCHESTER ROYAL INFIRMARY.—Senior House-Surgeon, or, in the event of the Junior being appointed, the post of Junior House-Surgeon. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Weekly Board, on or before December 14.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN'S-SQUARE, BLOOMSBURY.—Surgeon and Assistant-Physician. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before December 9.

NEW ABBEY, DUMFRIES.—Resident Medical Officer for the Parochial Board, parish of New Abbey by Dumfries. Applications, with testimonials, to W. Caird, Inspector of Poor, on or before December 10.

PLUMSTEAD BOARD OF WORKS.—Public Analyst. Candidates must be duly qualified. Applications, with testimonials, to the Board of Works, Old Charlton, on or before December 10.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Candidates must be legally qualified and duly registered. Applications, with testimonials, to the Assistant-Secretary, on or before January 6, 1873.

ST. GEORGE'S DISPENSARY, 59, MOUNT-STREET.—Resident Medical Officer. Applications, with testimonials, to Dr. Wegg or Dr. Sutherland, at the Dispensary.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, LOWER SEYMOUR-STREET, PORTMAN-SQUARE.—Physician and a Surgeon for the Out-patient Department. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before December 23.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.—House-Surgeon. Applications, with testimonials, to the Secretary, on or before December 7.

WESTERN GENERAL DISPENSARY, 10, LISSON-GROVE, N.W.—Resident Surgeon and Apothecary. Candidates must be Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, and Licentiates of the Society of Apothecaries, and duly registered. Applications, with testimonials, to the Secretary, on or before December 9.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Bromsgrove Union.—Dr. Fletcher has resigned the Bromsgrove District; area 13,497; population 11,272; salary £60 per annum; and the Workhouse, salary £30 per annum.

Meriden Union.—The Fillougley District is vacant; area 6809; population 1657; salary £30 per annum.

APPOINTMENTS.

Bath Union.—Charles Harper, M.R.C.S. Eng., L.R.C.P. Edin., to the Fifth District.

Eastry Union.—Thos. Brockwell, L.R.C.P. Edin., M.R.C.S. Eng., to the Ash District.

Evesham Union.—Anthony H. Martin, M.R.C.S. Eng., L.S.A., to the First District.

Great Ouseburn Union.—Alfred Hill, L.S.A., to the Green Hammerton District.

Henley Union.—Wm. S. J. H. Munro, M.D. Univ. and King's Coll. Aberd., M.R.C.S. Eng., to the Nettlebed District.

Uckfield Union.—Samuel Brown, L.R.C.P. Edin., L.R.C.S. Edin., to the Maresfield District.

Mr. Keene has been appointed Medical Officer of the South-East District of Chelsea, *vice* Dr. Blundell, resigned.

On Saturday last Mr. Lawson Tait removed both ovaries from a patient at the Birmingham Hospital for Women, under the influence of Dr. Richardson's mixture—methylene ether. The action of the anæsthetic was in every way satisfactory, and the recovery was quite free from sickness.

Professor Frankland reports that the water supplied by the metropolitan companies during the past month from the Thames and the Lea showed a considerable deterioration as compared with that analysed during October. The Kent Company's water was of its usual good quality.

The Egyptian Government announce that direct communication between Soudan and Nubia is prohibited on account of cholera. Travellers are requested not to ascend the Nile beyond Thebes.

Collegiate Hospitalities.—Mr. Hancock, the President of the Royal College of Surgeons, has issued invitations to a series of entertainments at his private residence. The first, on Tuesday last, was attended by the heads of the Army and Navy Medical Departments, of the sister College of Physicians, General Medical Council, etc.

Royal Medical Society of Edinburgh.—At a meeting of the Society on the 29th ult. the following gentlemen were elected Annual Presidents:—J. Crawford Renton, L.R.C.S.E., V.P., H. Macdonald Church, B.Sc., M.B., C.M., John G. Shaw, M.B., C.M., Alfred C. E. Harris, M.B., L.R.C.S.E.

Royal College of Surgeons of England.—The following Members of the College having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on December 4:—Messrs. John Adams, Kingsbridge, Devon, diploma of Membership dated July 25, 1872, and Henry Mason Jay, F.R.C.S. and L.R.C.P. Edin., L.S.A., Chippenham, Wilts, April 22, 1868, students of St. Bartholomew's Hospital; Joseph Oakman, L.S.A., Battersea-square, April 27, 1866, of the Westminster Hospital; Francis Lett, L.R.C.P. Edin. and L.S.A., Woolwich, July 23, 1868, of Guy's Hospital; and Richard John Anderson, M.D. Queen's Univ. Ire., Newry, County Down, November 13, 1872, of the Dublin and Belfast Hospitals. Five candidates having failed to acquit themselves to the satisfaction of the Board were referred to their obstetric studies for three months.

Small-pox Relief Fund Committee, Dublin.—The final meeting of the members of this Committee and of the subscribers to the Fund was held in the Oak Room of the Mansion-house, Dublin, on Tuesday, the 3rd inst., the Lord Mayor presiding. From the report it appeared that 3650 applications for relief had come before the Committee, of which 3245 met with a favourable response. These applications represented 7000 cases of small-pox. The subscriptions, including interest, amounted to £3753 2s. 6d. A balance of £482 11s. 4d. remains, and is to be divided in equal shares between Sir Patrick Dun's, City of Dublin, Mater Misericordiæ, Meath, and Cork-street Hospitals. Among the speakers to resolutions were the Archbishop of Dublin, Sir D. Corrigan, Bart., M.P., Dr. Stokes, Dr. Burke, Dr. Churchill, Dr. Grimshaw, Dr. Speedy, and Dr. C. F. Moore.

Ulster Medical Society.—The annual dinner of this Society took place on the 27th ult. at Belfast, Dr. Johnstone, President, in the chair. In reply to the toast of his health, the Chairman said that it was the fiftieth anniversary of the Society, it having been formed in 1822. He was glad to say that the Society was in a prosperous condition, and that there had been a steady advance during the past two years. In proposing "The Medical School of Belfast, in connexion with the Queen's College and the General Hospital," he stated that there were at present nearly 200 medical students attending the classes in the Queen's College, and of those 125 were in attendance at the General Hospital. He considered that the opportunities which the Belfast School of Medicine afforded to students for acquiring a knowledge of their profession was second to none in Ireland. In proposing "Success to the Benevolent Fund, and especially its Belfast Branch," he said he regretted the apathy which was shown towards the Fund by the Profession and the public. He thought it one which ought to have the very strongest claims upon their sympathy; and when he read the miserable pittances which were dealt out to the widows and orphans of medical men who had fallen at their post of duty without being able to leave provision for their families, he felt ashamed at the little that had been done. He had much pleasure in handing a cheque for £100 to the treasurer as a donation to the Fund.

Out of a total population, at the end of last year, of 506,475 in the Canton Berne, there were 1512 idiots and cretins and 1292 persons suffering from mental aberration. The ratio of idiots and insane to the population is as 1 to 180, whilst in England the proportion is 1 to 300.

NOTES, QUERIES, AND REPLIES.

He that questionetly much shall learn much.—Bacon.

P. N.—Dr. Beatson is the Principal Medical Officer in India.

G. C. F.—At any medical bookseller's.

W. D.—Next week.

S. G. O.—"Herbs, woods, and springs, the power that in you lies,
If mortal man could know your properties."—*Fletcher.*

An Indignant Member.—Be cool, as the subject will no doubt be fully discussed at the next meeting of the Council of the College of Surgeons on Thursday next.

Obstetrician.—You are too late; the Board met on Wednesday last, when five members passed, two were referred to a written examination, and three altogether rejected. The list of successful candidates appears in another column of the *Medical Times and Gazette.*

Accoucheur.—Dr. Samuel Merriman, the son of a writer on political economy, was born at Marlborough, in Wiltshire, on October 25, 1771. He was one of the first accoucheurs of the day. His "Synopsis of the various kinds of Difficult Parturition, with Practical Remarks on the Management of Labours," published in 1814, a most excellent work, has gone through several editions, and been translated into the French, German, and Italian languages.

We have received from Dr. Joseph Rogers an unsigned letter which he tells us comes from a member of the Provincial Council of Poor-law Medical Officers, thanking him for entering a protest against the resolution carried at the recent meeting of the Council of the Poor-law Officers' Association. Our readers do not require to be told that there are certain Poor-law Medical Officers in country districts who shrink from the duties of Medical Officer of Health through a fear that the performance of those duties would seriously affect their position as private medical practitioners. We believe that this feeling is mistaken, and that its extent has been over-estimated. We also believe that the Poor-law Medical Officers will lose far more than they gain in public estimation if they do not accept these offices. The anonymous writer we are sure could not have intended his letter for publication, or he would have couched it in other terms.

Dr. R. Lee's Inhaler.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The artist must have surely made a mistake in writing the word "patent" on Dr. Robert Lee's inhaler, of which a description and drawing appeared in your journal of last week, as I see by the "Directory" that Dr. Lee is a graduate of Cambridge and a Member of the College of Physicians.

I should have felt certain that it was a printer's error, but that on inquiry I find the cost of the apparatus to be 21s.—a prohibitive price, which could only be artificially kept up by a patent, as there is nothing in the manufacture of the instrument which should prevent it being sold at less than half this sum.

I believe that no physician of this country has ever before patented any inhaler, and I venture to hope that I have been mistaken in supposing that Dr. Lee has made the first exception.

December 2. I am, &c., Fiat Confirmatio.

Milk in Elephantiasis.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your correspondent Mr. Richard, Civil Service Officer of Balasore, writes a letter in the *Medical Times and Gazette* in praise of milk as a remedy for elephantiasis, etc. He remarks that "we have in this article of diet a therapeutic agent not less efficacious than any contained in the 'Pharmacopœia,'" and he invites "the attention of the profession to this invaluable remedy by laying before it certain cases." After speaking at a column's length on the virtues of milk, he adds "that a purely milk diet combined with other treatment is of the greatest possible value in elephantiasis Arabum I hope to show." The successful cases are then narrated, with the treatment, which is as follows:—"Quinine seven grains three times a day; three quarts of milk daily—no other food. The legs to be rubbed night and morning with tincture of iodine and oil, and afterwards to be well bandaged." The cases are exceedingly interesting, and as far as they go show the efficacy of the treatment, consisting of several elements and medicines and processes—quinine, rubbing into the legs tincture of iodine, milk, etc. This combination of treatment answered well, and if your correspondent would, in his further investigations, endeavour still more to simplify the treatment by eliminating from it all unnecessary elements, his researches would be still more instructive to the profession and useful to the public. Quinine, iodine, milk, oil, mechanical rubbing, and bandaging—*which* was the factor producing so successful a result, or was it attributable to the withdrawal of ordinary food.

I am, &c., A Bayswater M.D.

COMMUNICATIONS have been received from—

Dr. W. E. Porter; Messrs. Smith and Co.; Mr. J. Ritchie; Mr. Cole; Mr. R. Biggs; Dr. D. A. Reid; Mr. Gaskoin; Dr. A. Mitchell; Fiat Confirmatio; F. W.; Mr. F. Morrison; A. B. C.; Mr. J. Woodman; Dr. H. T. Jones; Mr. Cullingworth; Dr. Iliff; Mr. Lawson Tait; Dr. Tizard; Dr. Morris Tonge; Dr. Neild; Mr. Haynes Walton; Dr. Rogers; Mr. H. M. Church; Mr. Hardie; Mr. J. Hutchinson; Mr. J. Chatto; Dr. A. E. Sansom; Dr. G. Scott; Dr. F. R. Hogg; Dr. W. S. Playfair.

BOOKS RECEIVED—

Transactions of the Odontological Society, Vol. 5, No. 1—On Some Practical Points in the Treatment of the Phimosis produced by Chancroidal Ulcers, by R. W. Taylor, M.D., Surgeon to the New York Dispensary—Smith's Physicians' and Surgeons' Visiting List, etc., for 1873—Small-pox, the Predisposing Conditions and their Preventives, by Dr. Carl, Bath—Descriptive Catalogue of the Teratological Series in the Museum of the Royal College of Surgeons of England, by B. Thompson Lowne, M.R.C.S.—A Text-book of Physiology, by John Hughes Bennett, M.D., F.R.C.S.E., F.R.S. Edin.—Report on Cheap Wines, second edition, by Robert Druitt, M.R.C.P., F.R.C.S. Eng., L.S.A.—The W— Hints for Obstetric Clerks, with Aids for Diagnosis, by Albert F. Field, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A.—A Table giving the Relative Values of Different Articles of Food in Common Use, compiled by Charles Ekin, F.C.S.—St. Bartholomew's Hospital Reports, vol. viii.—Handbook of Therapeutics, 3rd edition, by Sidney Ringer, M.D.—Report on the Provisions of the Adulteration Act of 1872, by W. T. Iliff, M.D., Medical Officer of Health for St. Mary, Newington—Principes de Psychologie, avec une Etude sur l'Instinct et sur la Nature du Génie, par le Dr. F. A. Hartsen—A Manual of Palæontology, for the use of Students, by H. A. Nicholson, M.A., M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—Brighton Daily News—The Western Lancet—Philadelphia Medical Times, November 9 and 16—Monthly Microscopical Journal, December—Science Gossip, December—Yorkshire Post—Food, Water, and Air—Journal of Anatomy and Physiology, November—Bucks Herald—Edinburgh Medical Journal—Practitioner—Glasgow Herald—Australian Medical Journal, September—The Micrographic Dictionary, parts 8, 9, and 10—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

December 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

9. Monday.

Operations at the Metropolitan Free. 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Dr. Sansom, "Case of Infantile Paralysis treated by the Continuous Current." Mr. Thomas Bryant (President), "A Case of Disease of the Shoulder-joint." Dr. E. N. Durantz (of Marseilles), "Clinical Notes on Soft Tumours of the Larynx" (communicated).

10. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Dr. George Johnson, "On the Pathology of Chronic Bright's Disease, with Contracted Kidney, with especial reference to the Theory of 'Arterio-Capillary Fibrosis.'"

11. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

Epidemiological Society, 8 p.m. Dr. Mouat, "On Medical Statistics with especial reference to Cholera and Syphilis."

Society of Arts, 8 p.m. Rev. H. Highton, "On Galvanic Batteries."

12. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

13. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Clinical Society, 8½ p.m. Dr. C. Theodore Williams, "On Cases of the Pyrexia of Phthisis treated by Cool Baths." Dr. Tilbury Fox, "A Singular Case of Fibroma." Mr. W. B. Dalby, "Wound of the Portio Dura, causing Facial Palsy." Dr. Lockhart Clarke, "Case of Cysts in the Cerebellum." Dr. Edis, "Case of Right Hemiplegia occurring during Pregnancy, with rapid Convalescence after Parturition."

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 30, 1872.

BIRTHS.

Births of Boys, 1168; Girls, 1135; Total, 2303.
Average of 10 corresponding weeks, 1862-71, 2063·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	608	613	1221
Average of the ten years 1862-71	795·5	793·7	1589·2
Average corrected to increased population	...	...	1748
Deaths of people aged 80 and upwards	...	...	52

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	2	1	...	...	2	...	2	...	6
North ...	751668	3	3	5	2	7	...	3	2	4
Central ...	333887	...	3	...	...	2	...	1	...	1
East	638928	2	3	1	1	11	...	3	1	3
South	966132	1	5	7	1	5	1	6	...	7
Total	3251804	8	15	13	4	27	1	15	3	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·270 in.
Mean temperature	48·0°
Highest point of thermometer	55·9°
Lowest point of thermometer	39·3°
Mean dew-point temperature	44·0°
General direction of wind	S.W.
Whole amount of rain in the week	0·77 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 30, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Nov. 30.	Deaths Registered during the week ending Nov. 30.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2303	1221	55·9	39·3	48·0	8·89	0·77	1·96
Portsmouth ...	115455	12·1	66	36	55·8	34·0	46·9	8·28	1·96	4·98
Norwich	81105	10·9	51	43	54·5	36·5	45·6	7·55	0·61	1·55
Bristol	186428	39·8	143	83	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	54	34	53·8	39·0	45·3	7·39	1·18	3·00
Birmingham ...	350164	44·7	285	149	54·5	34·0	45·3	7·39	1·23	3·12
Leicester	99143	31·0	76	42	53·2	38·7	45·6	7·55	1·29	3·28
Nottingham ...	88225	44·2	37	38	57·6	38·3	45·7	7·61	0·49	1·24
Liverpool	499897	97·9	432	229	52·9	37·2	44·7	7·06	0·80	2·03
Manchester ...	352759	78·6	269	193	54·2	36·0	43·1	6·17	1·67	4·24
Salford	127923	24·7	106	67	54·3	36·7	44·7	7·06	1·49	3·78
Oldham	84004	20·2	67	52	51·0	...	...	...	2·08	5·28
Bradford	151720	23·0	139	76	53·5	38·4	45·6	7·55	2·30	5·84
Leeds	266564	12·4	258	147	56·0	35·0	45·7	7·61	1·91	4·85
Sheffield	247847	10·9	209	110	54·7	38·2	45·6	7·55	1·53	3·89
Hull	124976	35·1	93	54	54·0	33·0	43·5	6·39	0·78	1·98
Sunderland ...	100665	30·4	108	66	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	136	61	52·0	39·0	45·3	7·39	0·62	1·57
Edinburgh	205146	46·3	110	96	50·0	30·7	44·0	6·67	0·70	1·78
Glasgow	489136	94·8	370	267	51·7	28·9	41·6	5·33	1·01	2·57
Dublin	310565	31·9	+143	+123	...	...	...	...	...	...
Total of 21 Towns in United Kingd'm	7393052	34·0	5455	3187	57·6	28·9	45·1	7·28	1·25	3·17

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·27 in. The highest was 29·62 in. on Wednesday evening, and the lowest 28·70 in. at the end of the week.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

\+ The usual return from Dublin not having been received, the numbers inserted, in order to make up a total for the twenty-one towns of the United Kingdom, are the averages of those returned in the four preceding weeks.

ORIGINAL LECTURES.

LECTURES ON THE COMPARATIVE ANATOMY OF THE ORGANS OF DIGESTION OF THE MAMMALIA.

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND IN FEBRUARY AND MARCH, 1872,

By WILLIAM HENRY FLOWER, F.R.S.,
Hunterian Professor.

Lecture XII.

The Marsupialia, separated from the great bulk of the mammalia by characters so important as to raise them to the rank of a sub-class rather than an order, comprise animals of extremely different habits of life and food. Concurrently we find nothing in common in the structure of their digestive organs, both fully developed carnivorous and herbivorous types, and various intermediate conditions, being present among them. The existing members of the group are divided into six families, which might almost be considered as equivalent to the orders of the monodelphous mammals. These are—(1) *Didelphidæ*, (2) *Dasyuridæ*, (3) *Peramelidæ*, (4) *Phalangistidæ*, (5) *Macropodidæ*, (6) *Phascolomyidæ*. The first two are mainly carnivorous, the third are mixed feeders, and the last three mainly vegetable eaters.

The family *Didelphidæ* is constituted by the American opossums, the only marsupials now existing outside the Australian region. There are many species, ranging in size from that of a cat down almost to a mouse. The larger species are very omnivorous, living chiefly on small birds and mammals, eggs, and fruit; the smaller species are mostly insectivorous—one, which has aquatic habits, feeds on small fish. Their teeth in their general form and arrangement resemble those of the smaller members of the placental order *Carnivora*, the incisors being small, and the canines long and pointed; but the molars are more cuspidated, like those of some of the insectivora.

The anatomy of the best known of the group, the common opossum of the United States of North America (*Didelphis Virginiana*), was described by Tyson, and subsequently by Daubenton(a) and Hunter.(b) The mouth is long, narrow, and pointed in front. The hard palate is covered with strongly marked, irregular, wavy transverse ridges, with papillæ between them in the fore part. The tongue is long, and pointed at the tip, with the frænum situated far back. There is no under-tongue, but on the inferior surface of the free part there is a hard median ridge with a soft fold on each side. There are three circumvallate papillæ near the base of the dorsum, fungiform papillæ scattered over its surface, and numerous small conical papillæ which on the middle part of the anterior third of the dorsum change their character, becoming very large, simple, pointed, retroverted, and of horny consistence, recalling similar patches of modified papillæ on the tongues of many of the true carnivora.

Of the salivary glands the submaxillary is considerably larger than the parotid; there is no zygomatic gland, and the sublingual is very small or absent. The œsophagus has a course of two inches beyond the diaphragm before it enters the stomach. The lining membrane of this part is raised into transverse folds or ridges. The stomach is globular and thin-walled, and the cardiac and pyloric apertures much approximated. The intestinal canal is relatively short. In an animal twelve inches long the small intestine measured twenty-four and the large eight inches. The cæcum is simple and conical. The colon forms a single arch, and then passes directly down to the pelvis; but being very loosely attached by mesentery it is very movable.

As might be expected from the mode of development of the marsupials, there is no distinct round ligament of the liver, and the suspensory ligament is very delicate and usually does not extend to the free margin of the organ. It is, however, sufficient to mark the primary divisions of the liver into the two segments; and all the other characters conform precisely to the ordinary mammalian type. The lateral fissures are very deep; the left lateral lobe is larger than the right; the cystic notch is wide, allowing the globular gall-bladder to appear on the upper surface; the Spigelian lobe has very little saliency, but it is distinctly defined; the caudate is a lobe of moderate size, and ends in a pointed prolongation passing down by the side of the right kidney. The gall-duct enters the duodenum one inch from the pylorus.

All the remaining groups of the marsupials belong to the Australian region. The *Dasyuridæ* most nearly approach the opossums in their habits and in the general structure of their alimentary organs; but as to the first, they are more purely carnivorous, and as to the second, their intestine is without cæcum. Hunter thus very well describes the alimentary canal of one of the smaller members of the family, *Phascogale penicillata*:—"The stomach is pretty globular; the œsophagus enters about its middle. The duodenum passes out on to the right, being attached to the common mesentery at the very beginning; it passes down loosely on the right, and is continued into the jejunum without any interruption of attachment, and this is continued into ileum, colon, and so on to the rectum, without any distinction, being one continued gut and on one continued mesentery, however we may suppose where the jejunum begins by there being a slight doubling of this membrane. The whole gut is very short, not quite three times the length of the body and head of the animal. They appear to be more like the viscera of a lizard."(c)

The largest known member of the group is the thylacine, a Tasmanian animal resembling a dog or wolf in external appearance and habits. The form of the head and general characters of the teeth are remarkably dog-like. The tongue is not so broad and spatulate as in the dog. It has no lytta within, but a thickening of the covering membrane forms a median ridge on the under surface between the frænum and the apex. The dorsum is evenly covered with small conical papillæ, among which round-topped fungiform papillæ are scattered, and there are three large circumvallate papillæ at their base, behind which the surface is nearly smooth. The stomach is simple and rather elongated. The intestinal canal is remarkably short, being less than three times the length of the body. Apparently to compensate for this, the mucous membrane of the small intestine is provided with numerous large cylindrical papillæ, very much like those of the Indian rhinoceros, though not found, as far as is known, in any other animal. As in the rest of the family, there is no cæcum. In the liver the usual lobes are distinctly marked out by deep fissures. The right lateral lobe is by far the largest, and is partially divided into three by clefts in the free margin. As the left lateral and left central lobes are comparatively small, and as the gall-bladder lies quite on the left edge of the right central lobe, in the umbilical fissure, it is placed altogether much more to the left side of the liver than is common. The Spigelian lobe forms scarcely any prominence. The caudate lobe is of moderate size, and deeply hollowed at its right or free margin for the reception of the right kidney.

The family *Peramelidæ* embraces a small number of animals, differing from the last somewhat in the structure of the teeth, and more in that of their hinder feet. They are burrowing animals, feeding on insects, worms, and roots. As regards their digestive organs, they have a simple, rounded stomach, a short intestinal canal, and a small or moderately developed cæcum.

The remaining families are mainly phytophagous, but present some remarkable modifications in their digestive apparatus, probably in conformity with their special habits.

The *Phalangistidæ* are climbing animals, and live chiefly on the leaves and young shoots and buds of trees, though some eat fruit, and occasionally, it is said, insects or young birds. Their parotid gland is relatively larger than in the *Dasyuridæ*, and their alimentary canal considerably longer. Their stomach is of simple form, though in one species—the koala (*Phascolarctos*)—provided with a special group of glands, situated near the cardiac orifice, like that of the beaver and the wombat, to be spoken of presently.

As in other leaf-eating animals with simple stomachs, the cæcum is very greatly developed, attaining its maximum of size in the koala, where it is more than three times the length of the body; and its inner absorbing surface is augmented by numerous longitudinal parallel folds. As remarked in the last lecture, this animal, with habits and food almost exactly similar to those of the sloths, offers the opposite extreme with regard to compensating or complementary development of stomach and cæcum.

The liver of *Phalangista vulpina* is divided into the usual number of lobes. It is chiefly remarkable for the immense size of the right central lobe, which is nearly equal to that of all

(a) Buffon, vol. x., pl. 48.
(b) "Essays and Observations," vol. ii., p. 260.
(c) *Op. cit.*, vol. ii., p. 269.

the rest of the organ, and is deeply cleft nearer to its right than to its left border by the wide cystic fissure, in which the gall-bladder lies conspicuous on the upper surface. The umbilical and lateral fissures are well marked, the former quite distinct from the cystic. The left lateral lobe is broad and thin, with a semi-circular outline; the right lateral much smaller and oval; the Spigelian small and tongue-shaped; the caudate small, pointed, and bent on itself.

The *Macropodidæ*, or kangaroos, have been not unaptly compared with the ruminants of the placental series, and their place in the Australian fauna, either on the open grassy plains or on the rocky mountain-sides, corresponds with that of the antelopes and the sheep and goats of other parts of the world. Their food consists almost entirely of grass, and it has been asserted that a process of rumination occasionally takes place; but this requires further observation. The general structure of the mouth and teeth is quite like that of the ungulates, and the parotid gland presents the same preponderance over the submaxillary as in them. The hard palate presents strongly marked transverse ridges; the soft palate is considerably extended backwards, and ends in a thin and narrow arched border, without uvula, the passage from the nares into the pharynx being little more than a median longitudinal slit. The tongue is tolerably long and narrow, depressed in front, and with an intermolar elevation. Under the free part in front is a dense median ridge. The dorsum is thickly covered with fine conical papillæ, long, filiform, and forming a close-set pile all over the posterior portions, with small fungiform papillæ scattered among them. The circumvallate papillæ are three in number, but not very distinct.

The stomach of the kangaroo is a very remarkable organ, not only on account of its great size, but for its peculiar form and structure, which do not exactly resemble those of any other animal. In general conformation it is perhaps most like that of the semnopithecine monkeys, but in internal structure it more recalls that of the peccary. It is difficult to make out its real form, as it lies within the abdomen, being doubled up upon itself in a complex manner; but when the small omentum, which is attached along the lesser curvature, and keeps its various coils together, is divided, it is seen (Fig. 39) to be a greatly elongated tubular sac, with a long conical fundus projecting considerably beyond the cardiac orifice. Its walls are puckered up into a vast number of sacculi by longitudinal muscular bands, as in the human colon. The most strongly marked bands run—one on the anterior and one on the posterior surface—nearer to the lesser than the greater curvature, at

Fig. 39.

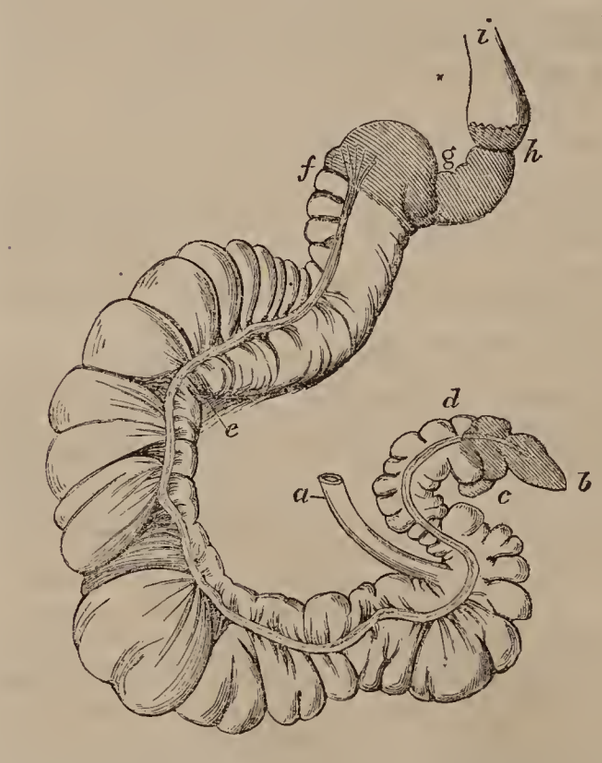


Fig. 39.—Stomach of great kangaroo (*Macropus major*), partially unfolded by division of its peritoneal attachments. The shaded portions at the two extremities indicate the regions not lined by the thick epithelium continued from the œsophagus: *a* œsophagus, *b* pouch at apex of fundus, *c* free extremity of the lateral diverticulum from posterior side of fundus, *e* a marked transverse constriction of the upper border, *fg* glandular pouch, *h* pylorus, *i* duodenum.

least, towards the cardiac end, for at the other extremity they approach the lower border of the organ, and spread out over its sides. The region on the upper or lesser curvature side of these bands is comparatively smooth, the principal sacculi being situated on the opposite border, where is a third longitudinal tract, less marked by muscular fibres, formed by the attachment of the great omentum. The pyloric extremity is almost free from sacculation.

The extremity of the left *cul-de-sac* (*b*) is formed by a single obtusely pointed conical sacculus, near the base of which projects from the upper and posterior surface of the cavity an oval diverticulum (*c*) with a somewhat constricted circular orifice, and with its fundus directed backwards or towards the œsophagus, and of a more definite character than the ordinary sacculi. The œsophagus (*a*) enters by a small oblique orifice, from which a groove is continued along the lesser curvature towards the pylorus as far as the edge of a marked constriction at *e*. Along the posterior edge of this groove is a strongly marked muscular ridge.

Dense white epithelium, continuous with that of the œsophagus, lines the greater part of the interior of this large cavity—all, in fact, except the two extremities—although it becomes thinner and smoother in the tract between *e* and *f*. On the left it passes into and completely lines the diverticulum (*c*); but the actual extremity of the fundus (*b*), and a tract extending towards the œsophagus on the anterior side, as indicated by the shading in the figure, has a thick, soft, corrugated, vascular lining membrane, composed almost entirely of parallel, vertical, tubular glands. A large patch, having a very similar structure, but smoother on the surface, occupies the great pouch (*fg*) near the pylorus; but in the pyloric antrum itself (*g*, *h*) the membrane is of lighter colour, and firm in structure, and raised in longitudinal folds. There are, moreover, in the portion of the stomach between the œsophagus and the commencement of the glandular pyloric division, a number of raised, button-like, circular or oval glandular patches, with smooth surface dotted with pores distinctly visible to the unaided eye. The greater number of these patches are collected in a linear series which corresponds in position with the posterior longitudinal muscular band. The pylorus is an irregularly contracted aperture. Immediately beyond it the duodenum (which commences by a dilatation, as in ruminants) is encircled by an annular glandular mass, of considerable thickness, and lobulated on the internal surface. The intestinal canal is long; the internal surface of the small intestine beset with conspicuous clavate villi, the large and small intestine separated by a slit-like ileo-cæcal valve. The cæcum is long and cylindrical, with rounded apex, smooth at its extremity, but in its proximal two-thirds puckered up into sacculi by a pair of lateral muscular bands, which are continued along the upper part of the colon, producing similar but smaller and closer constrictions. The greater part of the colon is, however, simple.

The liver, as in other herbivores, is small for the size of the animal. It is extended transversely, and nearly equally divided by the attachment of a delicate suspensory ligament into two segments. The umbilical and cystic fissures are in one, and very wide, the large gall-bladder lying altogether to the right of the right central lobe. The latter is more than twice the size of the left central. The lateral fissures are well marked, nearly reaching to the attached border of the organ. The left lateral lobe is broad, and thin at the margin. The large pointed lobe to the right of the right lateral fissure appears, from its relations to the vena cava and the right kidney, to represent chiefly the caudate lobe, which is developed at the expense of the right lateral. The Spigelian lobe is long and tongue-shaped, and lies with its apex on the under surface of the left lateral lobe, with which it is partially united over the fissure of the ductus venosus. The common gall-duct terminates in a rounded eminence, about four inches from the pylorus. The pancreas is elongated, flat, and somewhat foliated.

The family *Phascolomyidæ* contains three or four species, of which the common wombat (*Phascolomys vombatus*) is the best known. The characters of their mouth and teeth resemble those of the rodents; and their food chiefly consists of roots and other tough vegetable substances which can be divided by their powerful gnawing incisors. The stomach is simple and thin-walled. On its lesser curvature, close to the cardiac orifice, is a large glandular mass, very like that of the beaver, the ducts of which open by conspicuous orifices on the mucous surface. The colon is capacious and longer than the small intestine. In the upper part of its course it is constricted

at its free border into a number of sacculations, the first of which may be considered to represent a short globular cæcum (Fig. 40, *cm*), so that it differs very greatly in this respect from the *Phalangistidæ*. The ileum (*i*) opens into the upper part of the colon by a slit-like valve with prominent lips, so well adapted that they will not allow fluid to pass upwards when the colon is filled. Within the upper commissure formed by the lips of this valve is a small opening only large enough to admit an ordinary-sized probe, which leads into a slender, tubular cæcal pouch (*v*), from an inch to an inch and a half long, and not thicker than a crowquill. This lies

Fig. 40.

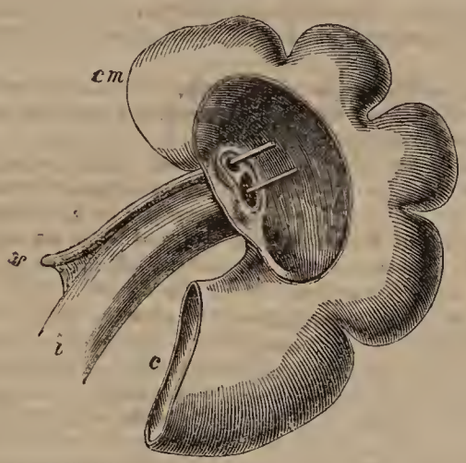


Fig. 40.—Junction of small and large intestine in the common wombat (*Phascolomys vombatus*): *i* ileum, *c* colon, *cm* cæcum, *v* vermiform appendix. The upper probe passes from the colon into the orifice of the vermiform appendage; the lower one into the ileum.

by the side of the lower end of the ileum, opposite to its mesenteric attachment, and bound to it by a reflection of peritoneum. It is the so-called "vermiform appendage" of the wombat. Whether it is, as in the higher primates, a remnant of an originally elongated apex of the true cæcum is not yet known, but it should be noted that in the youngest wombat I have had the opportunity of examining—one not larger than a common rat—the ileo-cæcal valve, vermiform appendage, and cæcum had precisely the same relative form and size as in the adult.

The last great group of mammals is the order *Monotremata*—great as regards the importance of the characters which differentiate them from all others, but very small as regards actual numbers, only two genera being known, both restricted to the Australian region.

The *Echidna* is terrestrial and fossorial in its habits, feeding exclusively on ants, and recalling in the structure of its mouth and various other parts related to its peculiar mode of life the true ant-eaters of the order *Edentata*. As in those animals, the mouth is elongated, slender, and tubular, terminates in front by a very small opening, and is unprovided with teeth. The palate, however, is furnished with six or seven transverse rows of small, hard, horny, retroverted spines, and the tongue, otherwise long, pointed, and extensile, like the ant-eaters, has the basal portion of the dorsum broad, flat, callous, and beset with hard papillæ. It is retracted by a sterno-glossal muscle. No parotid gland has been discovered, but the submaxillary is very large, and its duct, as described by Owen, has an arrangement unknown in any other mammals, splitting up into numerous branches, which end by many distinct orifices on the floor of the mouth.

The stomach is globular, with scarcely any fundus or projection to the left of the œsophagus. It has a slender tubular prolongation at the pyloric end, the walls of which are exceedingly muscular; elsewhere they are thin, but lined by a dense epithelium. The intestinal canal is about seven times the length of the body. There is no ileo-cæcal valve, nor great distinction between large and small intestines, but a small, tapering, slender, vermiform cæcum, about an inch in length, and with parietes beset with lymph-glands, projects from one side of the canal. The lining membrane of the small intestine is not raised into folds, as in the next genus, but has a very flocculent appearance, owing to the abundance and length of the villi.

The liver is strictly mammalian in its characters, the upper surface being very symmetrically divided into the usual number of lobes. The lateral lobes are cut off by very deep fissures from the central lobes. The latter form together a transversely extended oval mass, the right and left halves of which (the right being only slightly the larger of the two) are distinctly marked off by the suspensory ligament and a short umbilical fissure. The caudate lobe is very large and solid, and rounded at the extremity, which reaches to the outer border of the right lateral lobe; the Spigelian lobe is small. The sub-globular gall-bladder is attached to a fossa on the under surface of the right central lobe, near its right border, and projects beyond its free edge, but has no distinct cystic fissure. The gall-duct enters the duodenum rather more than an inch from the pylorus. The pancreatic duct opens separately rather nearer the pylorus than the last.

The other representative of the order—the *Ornithorhynchus*—is entirely aquatic in its habits, swimming and diving with great facility, and burrowing in the banks of rivers. It feeds on water insects, small molluscs, and worms. The structure of the mouth is quite different from that of the echidna, having a great resemblance to the bill of a duck, from which it derives one of its best-known trivial appellations of "duck-bill." This bill is formed by the elongated premaxillæ and rami of the mandible supporting the naked and very sensitive leathery lips, which are most abundantly supplied by branches of the fifth nerve. There are no true teeth, but the place of these organs is supplied by horny structures, elongated, narrow, and sharp-edged along the anterior part of the sides of the mouth, and broad, flat-topped, or molariform behind. There are cheek pouches, about two inches long and half an inch wide.

The tongue is of very peculiar form, being divided by a very deep crescentic groove across the upper surface into a broad, flat posterior or intermolar portion, and a narrow, pointed anterior portion. The surface of the posterior portion is nearly smooth, being faintly marked by transverse ridges and grooves, but from the middle of its prominent anterior edge a pair of stout, conical, horny tubercles project forwards over the groove. The anterior portion is covered with small retroverted horny spines, modifications of the conical papillæ, largest and most pointed near the tip. There is no parotid gland, and a moderate-sized submaxillary, the duct of which is simple, and in its forward course towards its termination near the frænum linguæ is folded transversely about twelve times.

The stomach is a deep sub-globular membranous bag, with the orifices of the œsophagus and pylorus very closely approximated, as in some of the true insectivora. The small and large intestines are continued into one another without any constriction or valve, but the point of their junction is marked by a small simple vermiform and glandular cæcum, like that of the echidna. The mucous membrane of the small intestine has a very remarkable appearance, being covered with delicate transverse folds or ridges, like the valvulæ conniventes of the human intestine, but far more numerous and close-set, so that the absorbing surface is vastly increased. These are largest and most abundant in the duodenum, and diminish in size and number and become more oblique as the lower end of the ileum is approached. In the upper half of the colon the mucous membrane is folded longitudinally; in the lower half it is smooth. In a specimen described by Professor Owen the small intestine was five feet three inches, and the large one foot in length. The cæcum lies in the right lumbar region, and the colon makes a simple wide arch, at the right side of which it is attached to the duodenum.

The liver is very like that of the echidna, but the caudate lobe is more pointed. The Spigelian lobe is well developed. There is a suspensory ligament and a large gall-bladder. The duct enters the duodenum about eight lines from the pylorus. The pancreas is thin, lobulated or foliated, as in the insectivora. Its duct joins the common bile-duct.(d)

Garrison Private Hospital, Woolwich.—This hospital has been open ten years, during which period 1100 midwifery, 600 general cases, and 400 sick children have been treated. As regards puerperal mortality, the average during the ten years has been 1 per cent. From December, 1869, to July, 1872, out of 355 cases, one death occurred. About 16 represent the general average number of patients daily under treatment. The receipts from January, 1871, to March 31st, 1872, were £345 3s. 8d., and the expenditure £191 15s. 6d., leaving a balance in hand of £153 8s. 2d.

(d) For further information concerning some of the subjects of this lecture, see the articles *Marsupialia* and *Monotremata*, by Professor Owen, in "Cyclopædia of Anatomy and Physiology."

The whole of the illustrations accompanying these lectures are from specimens in the Museum of the Royal College of Surgeons, or from original sketches by the author. With the exception of Figs. 27 and 33 they have been drawn on wood by Mr. R. W. Sherwin.

ORIGINAL COMMUNICATIONS.

ON INFLAMMATION OF THE LUNG AS A CAUSE OF CONSUMPTION.

By ARTHUR ERNEST SANSOM, M.D. Lond., M.R.C.P.,
Physician to the Royal Hospital for Diseases of the Chest, City-road, and to the North-Eastern Hospital for Children.

(*Continued from page* 622.)

CLASS IV.—CONDENSATION AND DESTRUCTION OF PORTIONS OF THE BASE OF THE LUNG IN PERSONS MANIFESTING NO SIGNS OF TENDENCY TO TUBERCULOSIS—CONSECUTIVE PHTHISIS.

Case 10.—*Cavity in the Base of the Left Lung—Hæmoptysis—Purulent Sputa—Subsequent Condensation of Right Apex.*

JOHN R., aged 20, grocer, of muscular appearance, applied at Royal Hospital for Diseases of the Chest, September 30, 1870. He complained of cough, especially at night and early in the morning, with expectoration of thick phlegm occasionally mixed with blood. Had been ailing for seven years, and frequently had cough; began to spit blood four years ago, sometimes as much as two fluid ounces at a time. No night sweats; no loss of flesh; he had gained three pounds in three years. There was practically no family predisposition to phthisis; the only instance was his father's father, who died of consumption (?) at the age of 56.

Physical Signs.—There were no abnormal signs whatever except over a limited space in the base of the left lung near the scapular angle. Here breathing was tubular, and at one spot there were undoubted gurgling râles.

Treatment.—Quinine and cod-liver oil, with sedatives for cough. Patient improved in general health; sputa were at first pinkish and muco-purulent.

On October 12 expectoration at one time of two fluid ounces of pus took place.

On the 29th hæmoptysis returned, but ceased after the administration of ergot.

On January 20, 1870, sputa were slightly blood-stained. The physical signs remained as before over a space of two inches in diameter; gurgling very manifest. He had gained weight from 8 st. 4 lbs. to 8 st. 13 lbs., and on March 3 to 9 st. 1 lb.

In March there was increased cough, and loss of weight to 8 st. 10 lbs.; but in April he improved considerably.

I did not see him again until January 10, 1872, when he told me that he had remained in fair health, but always with some cough, till the end of July or the beginning of August, 1871; he then wasted considerably; in November slight hæmoptysis had returned. On examining the chest I found over the spot of old mischief the croaking sounds of a small cavity surrounded by large râles, and around this finer râles. The right apex as far as the second rib was dull, and over it was heard diffuse tubular respiration and the voice-sounds exalted.

Case 11.—*Pneumonia of Base of Left Lung with Emphysema—Cavity—Progressive Phthisis.*

John H., aged 35, smith, applied at the Royal Chest Hospital February 3, 1871, suffering from headache, short breath, and cough, with opaque yellow sputa. He suffered cough in infancy, but had no other ailment till a month ago, when an acute cold came on and he was confined to his bed for a week. His mother was asthmatic, but there had been no consumption in his family.

Physical Signs.—Right lung, front and back, exalted resonance. Left base: front dull; very abundant liquid râles, fine and coarse; back, bronchial breathing with abundant râles. Ordered blisters over left base, front and back; effervescing ammonia mixture. After fourteen days' treatment cod-liver oil ʒss. bis die. Continued with very slight improvement, and on March 4 admitted as in-patient. Cough was now very distressing; sputa muco-purulent and blood-stained.

March 10.—Physical signs: Dulness confined to axillary and infra-spinous regions (base); over axillary region, friction; close to angle of scapula a patch of coarse, very liquid râles, approaching gurgling; breathing bronchial in patches, with loose râles. Ordered carbolic acid inhalations; quinine and ether; counter-irritation by pigmentum iodinii.

20th.—Discharged from hospital at his own request, to continue as out-patient; he had gained eight pounds whilst under treatment.

On 24th gurgling was very manifest, and there was a "splash" with each impulse of the heart heard over the cavity. The signs continued without change until April 27, when he ceased attending.

Case 12.—*Condensation of Base of Left Lung in subject of Chronic Bronchitis—Hæmoptysis—Improvement—Return of Symptoms with Condensation of the Upper Lobe of the Right Lung.*

S. B., aged 36, porter, applied at the Royal Chest Hospital, July 15, 1870; complained of pain in back and in abdomen, giddiness, and cough. He had been subject to "asthma" since boyhood. He was seized a week previously to application with rigors and vomiting; hæmoptysis followed. He says he expectorated half a pint of blood. There was no obvious predisposition to phthisis.

Physical Signs.—Rhonchi generally over all the chest; at the back over the base of the left lung abundant moist râles, some very fine.

Treatment.—Blister over left base; effervescing mixture with iodide of potassium; after fourteen days quinine with ether. Considerable improvement followed, but râles were heard in patches over the affected base. He gained weight, from 7 st. 7 lbs. to 8 st. 8 lbs. He continued treatment till December 9, and then stopped away for a fortnight. On reapplying there were general rhonchi, but no notable signs about the formerly affected base, but deficient resonance with moist râles over the upper lobe of the right lung.

Neither the signs manifested by these patients nor the details of their histories resemble the signs and course of tubercular phthisis; nevertheless, we observe progressive invasion of lung tissue with induced conditions which are clinically indistinguishable from the results of tubercle. The first case points the importance of carefully examining the base of the lungs in those manifesting signs of pulmonary disorganisation. I am quite sure I might easily have overlooked the small cavity which was nevertheless manifested by undoubted signs. We are accustomed to think that the initial lesions in ordinary cases of phthisis are, in the great majority of cases, situated in the apices or upper lobes of the lung. Is it not legitimate to hesitate before accepting this doctrine, and to consider whether, in many cases, there has not been broncho-pneumonia of the base, occurring at a period anterior to our examination, the signs of which have disappeared? In these cases there was undoubted broncho-pneumonia of patches of the lung, with more or less disorganisation up to the production of cavities. Consecutive to this was condensation of other portions of the same or the opposite lung. What was the relation of these secondary consolidations to the primary lesions? Let us briefly consider the course of pathological changes in a broncho-pneumonia which induces disorganisation of tissue. The accumulated exudation-cells resulting from the inflammation produce pressure; such pressure exerted on the capillary vessels may cause degeneration and destruction of these vessels and consequent hæmoptysis; or, further encroaching on the surrounding tissue, the pressure causes "the walls of the alveoli, deprived of nutritive fluid, to degenerate and die" (Niemeyer). What is the consequence of such breaking down of tissue in ever so small a portion of the lung? The conditions are dying and dead organic matter in constant relation, according to the physiological necessities of the lung, with air. The result must inevitably be putrefaction. We have, then, existing within the lung itself, a manufactory of septic poison. The experiments of Villemin, Andrew Clark, Burdon-Sanderson, Wilson Fox, Cohnheim, Fränkel, and many others have proved that in animals the inoculation of putrescible matter is followed by lesions indistinguishable from tubercle of the lungs. "Those materials," says Dr. C. J. B. Williams, "are most sure to produce tubercle, which either resemble it in its tendency to decay, or show a septic character, as foul pus, putrid muscle, carious bone, and the like." The probabilities of septic matters causing tubercle in the human subject were dwelt on by Dr. Andrew Clark in a paper read before the Medical Society of London, and published in the *Medical Times and Gazette* of May 23, 1868. What I wish to point out, is that in any case of local inflammatory mischief of the lung which has been of sufficient intensity at any point to cause a breaking down of the tissue of the lung, a manufactory of septic poison is instituted, which analogy and experience tell us is capable of transmission by the lymphatics of the pulmonary structure, with the effect of producing actual tubercles in the lungs. And I contend that there is sufficient evidence to show that this is a cause, and probably a frequent cause, of the disease which we know as pulmonary consumption.

I think most observers will agree that when once a cavity has formed in even a limited portion of lung the danger of

implication of other portions is far greater than it was before. Yet it may be objected that all cavities in the lung do not lead on to pulmonary tubercle—witness pneumonic abscess. It must be recollected, however, that the view I have just prepounded requires the concurrence of two conditions for the dissemination of tubercle. First, the breaking down of tissue, and communication with air sufficient to induce decomposition; secondly, the taking up of septic material, thus produced, by the absorbents. So, if the cavity in the lung tissue be lined by a false membrane, or if the tissue surrounding it be so indurated as to obstruct the lymphatics in their work of absorption, the septic poisoning will not take place, and the excavation be noxious only *per se*, and not as a centre for the dissemination of tubercles.

Many physicians must, like myself, have met with many cases of chronic bronchitis passing into phthisis. Patients past middle age, who have suffered from ordinary winter cough for many years, in whom no tendency to tubercle during the ordinary course of their bronchitis was ever suspected, get an attack of more than ordinary severity; after this there is a change from their former symptoms, their pulmonary distress is no longer intermittent, but constant—they waste, they manifest hectic fever, and finally assume all the characteristics of ordinary pulmonary phthisis. Observation of these cases shows that the first sign differentiating from ordinary chronic bronchitis is localisation in certain parts of the lung of patches of moist râles, both fine and coarse; diffuse tubular breathing is sometimes heard over them, but is often masked by the other bronchitic sounds; and dulness is sometimes, but not always, detected, because frequently the surrounding lung is superresonant from emphysema. The material point is that there are patches of lung where these moist sounds constantly are heard. These are patches of broncho-pneumonia; if they can be watched they will be found to manifest coarser and coarser râles until there are undoubted signs of cavity. Gradually the lungs become more and more extensively involved, and the signs, as well as the symptoms, are not to be distinguished from those of the third stage of phthisis.

I think that the extant evidence is sufficient to show that under the term pulmonary phthisis, as ordinarily used, are grouped many varieties of destructive disease of the lungs. It must be the labour of clinical observers to carefully differentiate these varieties. The large number of practitioners who have hitherto been accustomed to consider all cases of phthisis as cases of tuberculosis, will, I feel convinced, be induced on reconsidering the question to modify their views. Clinical and pathological research has much yet to do for the elucidation of the subject; but it appears to me that our present knowledge tends to the following points:—That local inflammations of the structure of the lungs, due to various initial causes, are capable of inducing all the symptoms and conditions of pulmonary phthisis; that consolidations of portions of the lungs, the result of such inflammations, are capable of resolution and absorption with restoration to normal health in many cases, even in those manifesting an apparently strong predisposition to phthisis; that there is no special diathesis which is associated with the production of a morbid poison called tubercle; that tubercles are portions of the tissues and exudations of the body in a state of degeneration; that they occur chiefly in weakly subjects, because such persons are predisposed to the low forms of inflammation that induce them, and have less chances of such inflammation ending in absorption and recovery; that the dissemination of tubercles throughout the lungs is effected by the lymphatics, which are well known to be influenced by septic matter; that in many cases of pulmonary phthisis it is very probable that a local inflammation has led to destruction of tissue, formation of cavity, decomposition of organic *débris*, absorption of septic material thus produced, and institution of new centres of tuberculous change on account of the poisoning of the lymphatics.

The special lessons concerning treatment inculcated by such considerations are—(1) to watch with great care inflammatory affections of the lung, however slight and apparently trivial, and never to feel satisfied until every trace of a local condensation has passed away; (2) to increase by every reasonable means, nutritive and medicinal, the powers of repair, so as to obviate the greatest danger in local affections of the lung—viz., the breaking down of tissue; (3) to prevent or arrest in whole or in part putrefactive decomposition in the lung structure. To this end I believe that antiseptic inhalations and antiseptic medicines are very valuable; but let no one imagine that they supplant the necessity for the adoption of means for promoting systemic nutrition or for the careful treatment of intercurrent complications.

RECORD OF IRREGULAR MUSCLES

NOTICED IN THE DISSECTING-ROOM AT KING'S COLLEGE, LONDON, DURING THE SESSIONS 1868-69, 1869-70, AND 1870-71.

By J. BESWICK-PERRIN.

(*Continued from page* 623.)

SUBJECT IV. (Muscular male.)

Adventitious Muscles.

1. *Dorso-fascialis.* Professor Turner first discovered and described this muscle.(a) The specimen mentioned here is described in the *Journal of Anatomy and Physiology*, No. 8 May, 1871.

2. *Anconeus epitrochlearis.* Both sides.

3. *Extensor carpi radialis intermedius.* Arose with longus and inserted into radial side of base of third metacarpal bone. Both sides.

Heteromorphous Muscles.

1. *Pectoralis minor.* Tendon of insertion prolonged across and grooving coracoid process. It then divided into two tendons—one joined coraco-acromial ligament; and the other, thicker and more rounded, was inserted into the outer extremity of the oblique line of clavicle, in front of trapezoid ligament. Both sides.

2. *Extensor ossis metacarpi pollicis.* Both sides double tendon. The additional one divided into two slips; one joined the abductor pollicis, and the other the opponens.

3. *Extensor carpi radialis longior.* Sent tendinous slips of insertion to pollex metacarpal base. A part of this slip was prolonged forwards, joining the outer head of origin of the flexor brevis pollicis. Both sides.

4. *Flexor sublimis digitorum.* Double coronoid origin on both sides. The ulnar artery passed between them.

5. *Soleus* (digastric specimen). The additional belly arose by a broad flat tendon from the anterior aspect of the proximal belly close to the point of its termination in the tendo Achillis. It was fusiform in shape, and its whole length measured five inches and a half. The tendon of origin extended some distance over the superficial aspect of the muscular part. The tendon of insertion arose from the deep surface of the muscle, rapidly became more rounded as it passed downwards, and was inserted into the tuberosity of os calcis, internal and superficial to the plantaris tendon. This is the largest and best specimen I have seen of a digastric soleus. Right side only.

Absentaneous Muscles.

1. *Palmaris longus* on both sides.

In this subject the external jugular vein divided opposite posterior border of sterno-mastoid into two branches. The additional branch was prolonged across the clavicle and joined the cephalic vein. Both sides.

The internal cutaneous nerve in the thigh passed behind the common femoral artery, and in this situation gave off a branch to the pectineus muscle. It then passed between the superficial and deep femoral vessels, perforated the fascia lata to become cutaneous. Both sides.

The ulnar artery was superficial throughout its whole course. Its recurrent branches were derived from the common interosseous on right side only.

SUBJECT V. (Sparo female.)

Heteromorphous Muscles.

1. *Omo-hyoid.* Clavicular origin in addition to its scapular. Both sides.

2. *Sterno-thyroid muscle.* Double on left side only. On the right side the single muscle gave off a muscular slip, two inches and a half long, in carotid sheath.

3. *Digastric.* Right anterior belly double; decussates with fellow of opposite side across the median line.

4. *Latissimus dorsi.* Achselbogen very large, joined pectoralis major. Left only.

5. *Subclavius.* Inserted on both sides into base of coracoid process.

6. *Pectoralis minor.* Tendon partly prolonged across coracoid process, pierces the capsular ligament, and is inserted into summit of glenoid cavity. Right side only.

7. *Flexor sublimis digitorum.* Double coronoid origin, arising with that of the flexor longus pollicis. Both.

8. *Extensor carpi radialis brevior.* Inserted into opposed sides of second and third metacarpal bones.

9. *Third lumbrical* (*manus*) of right side. Double.

10. *Extensor ossis metacarpi pollicis* gave origin to tendon of extensor primi. Independently it had a double tendon of

(a) *Journal of Anatomy and Physiology*, No. vii.

insertion on right side—the additional joining abductor pollicis. On left side it had three—1st, average; 2nd, trapezium; and, 3rd, into opponens and abductor pollicis.

11. *Right extensor indicis.* Double tendon; additional joined common extensor.

12. *Peroneus brevis.* Mainly inserted as average, but gave off a long tendon to base of first phalanx of little toe (peroneus quinti), and another one which became expanded and was inserted into whole length of dorsal crest of shaft of fifth metacarpal bone. The peroneus tertius tendon expanded over the latter in an arch-shaped fashion. Left only.

Adventitious Muscles.

1. *Abductor ossis metacarpi quinti.* On left side.

On left side the radial artery arose from brachial opposite base of axilla. It perforated the bicipital fascia, the deeper of the two layers separating it from its companion artery.

SUBJECT VI. (Spare female.)

Adventitious Muscles.

1. *Extensor brevis (manus.)* Consisting only of a single slip arising from os magnum and dorsal carpal fascia. Left side.

Heteromorphous Muscles.

1. *Scaleni.* Communicating slip between the medius and anticus. Left side only.

2. *Pectoralis major.* On left side detached. A remarkable tendinous slip of insertion to coracoid process and fascia covering the coraco-brachialis. It had also the common tendinous prolongation to capsular ligament.

3. *Coraco-brachialis.* Segmented.

4. *Extensor indicis.* Double tendon on right side. This is a mere splitting of tendon.

5. *Extensor communis digitorum.* Tendons differentiated on left side.

6. *Extensor carpi radialis brevior.* Inserted into opposed sides of second and third metacarpal bases. Both arms.

SUBJECT VII. (Muscular male.)

Heteromorphous Muscles.

1. *Latissimus dorsi.* Large achselbogen. Both.

2. *Pectoralis minor.* Partly prolonged across coracoid process joining capsular ligament. Both.

3. *Subclavius.* Inserted into coracoid process and coraco-clavicular ligament as well as into under surface of clavicle. Both.

4. *Flexor sublimis digitorum.* Double coronoid origin. Both.

5. *Abductor pollicis.* Double muscle. Left only.

6. *Lumbrical* (third). Double.

7. *Extensor carpi radialis longior.* Sends tendinous slips of insertion to ulnar side of pollex metacarpal base. Right only.

8. *Extensor ossis metacarpal pollicis.* Double tendon on right side. Furnishes also the tendon of primi, which is small. The additional joins abductor. On left side three tendons—two to metacarpal base, and one to the latter muscle. The primi is aborted on left side—its tendon apparently springing from the annular ligament.

9. *Extensor longus digitorum (pedis).* Gives a tendon of insertion to base of fourth metatarsal. Both.

Absentaneous Muscles.

Peroneus tertius wanting. Both.

SUBJECT VIII. (Male.)

Abductor ossis metacarpi quinti. Both.

SUBJECT IX. (Spare female.)

Heterogeneous Muscles.

1. *Levator anguli scapulæ.* On right side had five tendons of insertion. Serratus magnus continuous with levator.

2. *Pectoralis minor.* Tendon, partly prolonged across coracoid, perforating capsular ligament, inserted into summit of glenoid cavity. Right.

3. *Biceps.* Quasi third head, three-quarters of an inch wide, four inches long. Muscular. Joined biceps just above the commencement of its tendon of insertion. Left.

4. *Extensor carpi ulnaris.* Sends small slip from its average tendon of insertion to the middle of the fifth metacarpal shaft. Right side only. This tendon finds its homologue in the peroneus quinti from peroneus brevis.

5. *Extensor ossis metacarpi pollicis.* Two tendons to metacarpal base and trapezium. Both.

6. *Extensor carpi radius longior and brevior.* Each contributed a small tendinous slip from their opposed sides, then joined to form a single one, which is inserted with the tendon of the extensor carpi radius longior, on its ulnar side, into the base of the index metacarpal. Both.

7. *Peroneus brevis.* Besides average tendon of insertion, gave off a long slender tendon (peroneus quinti) to base of terminal phalanx of fifth toe, and another one to fascia covering fourth metatarsal bone. Both sides. On right side the tendon had evidently been ruptured some time before death, and the ruptured extremities had become adherent to peroneal tubercle of os calcis.

8. *Extensor primi internodii hallucis.* On right side arose muscular from anterior annular ligament. On left it was tendinous and detached from extensor longior hallucis. Inserted into base of proximal phalanx of hallux on both sides.

Adventitious Muscles.

1. *Chondro-epitrochlearis.*—From *Journal of Anatomy*, Fig. 5, No. viii.

2. *Extensor carpi radius intermedius.* Arose fleshy along with the *longior*, but only about half its size. Its muscular belly extended as low down as that of the *brevior*, terminating in a moderately strong tendon, which joined to be inserted with the latter. This muscle occurred on both sides, independently of the intercommunicating tendons I have described under the heteromorphous class.

SUBJECT X. (Moderately muscular female.)

Heteromorphous Muscles.

1. *Serratus magnus.* Had on right side an additional slip arising fascial in front of serratus posticus superior, and joined to be inserted with serratus magnus into middle of vertical border of scapula. It measured two inches and a half in width.

2. *Extensor ossis metacarpi pollicis.* Additional tendon to abductor and trapezium on right; on left differentiated into four, but with same distribution.

3. *Pronator radii teres.* Coronoid origin aborted on both sides.

4. *Flexor sublimis digitorum.* Radial origin extends to the coronoid process of ulna on both sides.

5. *Peroneus brevis.* Gave intercommunicating tendon, three inches long, to peroneus longus. The tendon joined the latter as it passed through the cuboid groove; besides, it gave off a tendon to base of first phalanx of fifth toe. Left side.

6. *Peroneus tertius.* On right side gave off two additional tendinous slips—one to middle of fifth metacarpal shaft, and the other to base of ungual phalanx. This is an example of a peroneus quinti coming from the tertius rather than its average parent the brevis.

Adventitious Muscles.

1. A fusiform slip, three inches and a half long, arose from fascia covering upper part of serratus magnus, joined the third tendon of origin of the tertius anguli scapulæ. Right side only.

This, the preceding, and subsequent specimens are described and figured in a paper communicated to the Royal Society by Professor Wood.(b)

(*To be continued.*)

A CASE OF

ACUTE PLEURISY—PARACENTESIS THORACIS—RECOVERY.

By GEORGE SCOTT, M.D.,

Physician to the Royal South Hants Infirmary.

J. H., AGED 21, a native of Cambridgeshire, a tall, well-nourished young man, of active habits, employed in an office in this town. On January 30, 1872, he sent for a medical man, who found him suffering from considerable gastric derangement. He was freely purged, and a large quantity of offensive fæces was brought away. He had at this time no pain in the chest, but he did not get very rapidly well. In about a fortnight, however, he was almost convalescent, when one evening, after eating a hearty supper with some young friends, he went out, caught cold, and was seized with pain in the right side, a little shortness of breath, and slight cough.

I first saw the patient at 11.30 a.m. on February 23, 1872, in company with Mr. Ware, who had been attending him all along. On entering his room I was very much struck on observing his rapid breathing. He was lying on his right side, breathing quickly and laboriously, his countenance at the same time wearing a very anxious expression. On examining the chest I found the right side anteriorly and posteriorly absolutely dull on percussion, except about the upper third, where there was also dulness, but less decided than below. The breathing was very indistinctly heard over all the right lung, and at the base it was almost entirely inaudible. There was total absence of the vocal thrill on the right side of the

(b) "On a Group of Varieties of the Muscles of the Human Neck," etc.—Royal Society's *Transactions*, June, 1869.

chest except at the upper third, where it was only slightly perceptible. Over the left lung the breathing was puerile, but otherwise the state of that side was normal. Heart normal. All these physical signs pointed to the presence of a large quantity of fluid in the right pleural cavity. Tongue horribly foul; bad taste in mouth; urine rather scanty. Mr. Ware has already purged him freely. Pulse about 120. To have plenty of milk, beef-tea, and other liquids, but no solid food. ℞. Potassæ nitr., spir. æther. nitr., āā ʒss., syrupi ʒij., tinct. aurantii ʒj., aquæ ad. ʒviij.—M.; cochl. magna duo omni 4tâ horâ sum. Evening: ℞. Pil. rhei co. gr. viij., divide in pilulas ij., h. s. s.

24th.—4.30 p.m.: Appearance of patient much the same. Dyspnœa great. Decubitus on right side. Tongue very foul. Pulse 120; respiration 40; temperature 102·5°. Drinks a large quantity of milk. Adde mist. potassæ nitr., etc., spir. æther. nitr. ʒij., et sumat æger cochl. magna tres omni 4tâ aut 5tâ horâ. Rep. pil. rhei co. hâc nocte. ℞. Tinct. iodinei ʒj., signa "to paint over right side."

25th.—2 p.m.: No better. Pulse 120; respiration 38; temperature 101·6°. Omittatur mist. potassæ nitr., etc., et ℞. pil. hydrargyri, pulv. scillæ āā gr. vi., pulv. digitalis gr. jss.—M.; divide in pilulas vj., una ter in d. sumenda. ℞. Potassæ acetatis ʒiij., syrupi ij., tinct. aurantii jss., aquæ ad ʒvj.—M.; pars 6ta ter in d. sumenda.

26th.—10 a.m.: Patient is in much the same condition as yesterday. Dyspnœa great. Pulse 120; respiration 35; temperature 101°. He has not passed so much urine since the nitrate of potash was discontinued. Evening: Rep. mist. potassæ acet., etc., ut heri prescript.

27th.—10.30 a.m.: Pulse 130; respiration 56; temperature 101·2. Rep. pil. hydrargyri, etc., ut 25 inst. prescript. Evening: Omittatur mist. potassæ acet. etc., et resumatur mist. potassæ nitr., etc., et sumat æger cochl. magna tres ter quaterve in dies.

28th.—10.30 a.m.: Pulse 128; respiration 44; temperature 101°. ℞. Potassæ nitr., spir. æther. nitr., āā ʒv., syrupi ʒiij., tinct. aurantii ʒij., aquæ ad. ʒviij.—M.; cochl. magna tres ter quaterve in d. sum.

29th.—10.30 a.m.: Patient is no better. State of chest much the same as when examined at the first visit, six days ago. Fluid in right side certainly not less. Pulse 128; respiration 44; temperature 101·7°.

March 1.—℞. Pil. scillæ co. gr. ij., pil. rhei co. gr. iijss.—M.; ft. pilula, h. s. s.

2nd.—Patient was seen by Mr. Ware at 7 a.m. Much depressed. Ordered a composing and stimulating draught, with ammonia, etc. 10.30 a.m.: Dyspnœa was now so urgent, pulse so high, and general symptoms so threatening, that we determined to try and relieve him by tapping. The operation was performed as follows:—Patient was brought to the right side of the bed and supported by pillows in a half-sitting, half-reclining posture; then, midway between the sternum and spine, the skin over the seventh rib was incised down to the bone to the extent of about three-quarters of an inch. The integuments were now slightly pulled up, so as to make the opening in the soft parts correspond to the sixth intercostal space. The small exploring needle of the aspirator, already connected with the latter, was now plunged into the pleural cavity. On turning the tap only about half an ounce of serum was obtained before the flow quite ceased. I concluded that this was owing to the needle becoming stopped up. This on examination was found to be the case. The fine tube was rendered quite impervious by what appeared to be a minute blood-clot. I should have substituted a larger one, but the patient was so faint and exhausted by sitting up for even ten minutes that I deemed it prudent not to prolong the operation at present. He had had some brandy-and-water administered before the operation was begun, and on putting him back to bed some more was given to him. Repet. mist. potassæ nitr., etc., ut 28 ult. prescript, et sumat æger cochl. magna duo ter in dies. ℞. Pil. rhei co. gr. iv., pil. scillæ gr. j.—M.; ft. pilula, h.s.s. Evening: Much exhausted, but not worse than this morning before the operation. Pulse 146; respiration 64; temperature 102°. 11.30 p.m.: Professor J. Marshall, of University College, London, now saw the patient. He advised the use of stimulants—half an ounce of brandy diluted with water every two hours; plenty of beef-tea, milk, and other liquid nourishment, such as he had all along been taking, in fair quantity; and the application over the whole of the right side of the chest, both anteriorly and posteriorly, of the oleates of mercury and morphia, the latter to be rubbed in night and morning.

3rd.—10 a.m.: Pulse 164; respiration 56; temperature 102·3°. ℞. Potassæ bicarb. ʒss., amm. sesquicarb., potassii iodidi, āā gr. xxiv., aquæ ad ʒviij.—M.; pars 8va omni 6tâ horâ sumenda ex ʒj. aquæ fontis c. gr. xv. acidi citrici. 9.30 p.m.: Pulse 164; respiration 54; temperature 101·8°. ℞. Pil. rhei co. gr. v., h.s.s. Continue brandy, etc.

5th.—10.45 a.m.: Very bad this morning. Dyspnœa very urgent. Had a restless night. I have never seen him look so ill as he does now. Pulse 172; respiration 64; temperature, 103·8°. 6.30 p.m.: After a consultation with Professor Marshall (who came down again this afternoon from London) and Mr. Ware, we determined to try again and relieve the patient by tapping, the medicines used seeming to have had but little influence upon the pleuritic effusion. There was *absolute* dulness on percussion on the right side anteriorly and posteriorly as high up as the level of the fourth rib, and *considerable* dulness above this up to the apex. Respiratory sound was heard only very indistinctly over the upper third of the right lung. Below this the breathing was quite inaudible. Over all the left lung the respiration was puerile. Vocal thrill was almost entirely absent on the right side of the chest. Accordingly, at 7 p.m., after having placed the patient in a half-sitting, half-reclining posture at the edge of the bed, I reopened the wound in the soft parts made three days before, and plunged in between the sixth and seventh ribs a good-sized trocar and canula of about one-eighth of an inch in diameter, and fitted with a tap; withdrew the trocar, and to the canula attached Bowditch's syringe, with which I drew off one pint and a half of yellowish-coloured serous fluid mixed with flakes of lymph. I continued using the syringe until no more fluid came. I did not get away so much as I expected, and I cannot help thinking that the canula must have at last become stopped up by flakes of lymph. From the urgent dyspnœa the patient was suffering, and from the physical signs before the operation, there must have been a great deal more fluid in the right pleural cavity than we got away. Nevertheless the operation gave great relief to the breathing; but the exhaustion was very great after the patient was put back to bed, and he required to have repeated doses of brandy administered to him. To keep very quiet. ℞. Sol. mur. morph. ♏xl., syrupi ʒss., aquæ menth. pip. ad ʒjss.—M.; ft. haustus horâ somni sum. Omit the application of the oleates of mercury and morphia.

6th.—8.15 a.m.: Pulse 140; respiration 50; temperature 101·6°. Patient slept pretty well last night, but sweated profusely, and is consequently very weak this morning; breathing better. 1 p.m.: Pulse 142; respiration 56. 9 p.m.: Pulse 140; respiration 52; temperature 102·4°. ℞. Pil. rhei co. gr. v., h.s.s. To continue half an ounce of brandy diluted with water every two hours, and plenty of beef-tea, milk, etc.

7th.—10.30 a.m.: Pulse 143; respiration 46; temperature 100·5°. Repet. mist. potassæ bicarb., etc., et acid. citr. ut 3 inst. prescript. 6.30 p.m.: Pulse 150; respiration 70; temperature 100°. The great dyspnœa and rapidity of pulse this evening seem to me to be owing to flatulence and to the bowels not having been freely opened during the last twenty-four hours, and not to any aggravation of the disease. ℞. Pil. rhei co. gr. viij., pil. scillæ gr. ij.—M.; divide in pilulas ij., h. s. s.

8th.—10.30 a.m.: Pulse 155; respiration 62; temperature 101·8°. Slept tolerably well last night, but perspired profusely; complains still of flatulence, and of a feeling of fulness. ℞. Pulv. rhei gr. x., sodæ bicarb. ʒj.—M.; ft. pulvis st. s. 6 p.m.: Pulse 156; respiration 55; temperature 102·1°. Aspect better; countenance less anxious.

9th.—10.30 a.m.: Pulse 153; respiration 50; temperature 100·4°. He passed a good night, not having perspired so much. 7.15 p.m.: Pulse 146; respiration 53; temperature 100·6°. Looks better; has had one motion since last visit. Takes his brandy, beef-tea, milk, etc., very well.

10th.—10.30 a.m.: Pulse 148; respiration 46; temperature 99·6°. 9 p.m.: Pulse 144; respiration 59; temperature 104°. Complains of some uneasiness, probably from indigestion. Two motions since last visit. ℞. Pulv. rhei gr. xl., sodæ bicarb. ʒiv.—M.; divide in pulveres iv., unus omni mane sumendus.

11th.—10.45 a.m.: Pulse 149; respiration 47; temperature 100·8°. One motion since last visit. 6.15 p.m.: Pulse 152; respiration 46; temperature 102·7°. Looks comfortable this evening, but is troubled a little with cough. ℞. Spir. chloroformi, sol. mur. morph. āā ʒij., tinct. hyoscyami ʒj., aquæ ad ʒvj.—M.; cochl. medium omni tertiâ aut quartâ horâ sumendum.

12th.—10.30 a.m.: Pulse 138; respiration 41; temperature 100·2°. Feels better. One motion this morning. 7.30 p.m.:

Pulse 138; respiration 44; temperature 101·5°. Has passed a good day. Ate a breast of pigeon for dinner.

13th.—10.30 a.m.: Pulse 133; respiration 43; temperature 100°. Better to-day. Slept well last night; cough rather better. Passes about one quart of urine in the twenty-four hours; it is loaded with lithates. Decubitus is still on right side; aspect of countenance better; sputa in small quantity, of a dirty whitish-yellow colour. 9.15 p.m.: Pulse 130; respiration 47; temperature 100·7°. One motion since last visit; cough a little troublesome.

14th.—10.45 a.m.: Pulse 130; respiration 42; temperature 101·3°. Patient feels very weak this morning, but he passed a very good night; perspired slightly; aspect good. There is heard to-day a bellows-murmur with first sound of heart. Repet. mist. spir. chloroformi, etc., et pulv. rhei, etc.

15th.—10.30 a.m.: Pulse 140; respiration 40; temperature 102·8°. Slept very well last night; cough not so troublesome; urine loaded with lithates; three motions since last visit. Endocardial murmur with first sound plainly audible. ℞. Mist. aperient. ℥jss., haust. st. s. 9 p.m.: Pulse 140; respiration 45; temperature 104°. Considerable sweating during the day. Draught acted seven times; stools offensive.

16th.—10.30 a.m.: Pulse 130; respiration 36; temperature 101·6°. Two motions since last visit. Profuse perspirations during the night. ℞. Quinæ sulph. ℥ss., acid. sulph. dil. ℥j., inf. gentianæ co. ad ℥viij.—M.; cochl. magnum ter in d. ante cibum sum. Repet. mist. spir. chloroformi, etc., ut 11 inst. prescript. 6.30 p.m.: Pulse 128; respiration 31; temperature 101·6°. Two motions since last report; a good deal of sweating during the day. Ate a very small quantity of mutton and bread for dinner. To have in the day three ounces of brandy, two yolks of eggs, and a mutton chop or other meat for dinner.

20th.—11 a.m.: Pulse 122; respiration 30; temperature 99·6°. Sleeps well at night; altogether going on well. Bellows-murmur with first sound of heart still audible. To continue quinine mixture regularly, and cough mixture and rhubarb powders occasionally when required.

21st.—10.30 a.m.: Pulse 124; respiration 28; temperature 99·8°. Better; breathing is now pretty well heard all over the right side posteriorly; anteriorly it is not so plainly audible.

25th.—Pulse 115; respiration 26; temperature 99·1°. Cough was a little troublesome yesterday afternoon; bellows-murmur with first cardiac sound still audible; breathing heard now pretty well anteriorly as well as posteriorly over the right side; respiration still puerile over left lung. He is getting rather tired of the brandy, so it is to be discontinued altogether, and two glasses of port wine to be given daily instead. ℞. Pulv. rhei, pulv. jalapæ, āā ℥ss., sodæ bicarb. ℥j.—M.; divide in pulveres iv., unus omni secundo mane sumendus.

28th.—10.45 a.m.: Pulse 108; respiration 24; temperature 99·3°. Cough better; vomited a teacupful of phlegm last night; sleeps very well at night, but still perspires a good deal; appetite bad. An aperient mixture given yesterday has acted three times since last visit.

April 2.—12.15 noon: Pulse 111; better; he is sitting up out of bed to-day for the first time; cough less troublesome; appetite good. Requires a purgative occasionally. To have a tumblerful of beer at dinner.

8th.—Pulse 106; cough almost gone; on percussion on the right side slight dulness begins anteriorly a little above the right nipple, and extends downwards; posteriorly there is general slight dulness from apex to base, but on auscultation the respiratory sound is heard tolerably well over the whole of the back part of the right lung, being a little tubular at the apex; anteriorly the respiratory sound is pretty natural, but slightly less distinct than on the left side; bellows-murmur with first cardiac sound much less distinct; tongue clean; bowels regular; urine in good quantity, clear, normal. Is taking no medicine now except the quinine mixture. Appetite good; eats meat three times a day.

20th.—Since last report he has been gradually improving and gaining strength; he has required an aperient occasionally, as he is liable to suffer from indigestion at times, owing, in all probability, to his being a hearty eater; bellows-murmur with first cardiac sound still existing; but it is not very distinct now. I examined the chest again to-day, and found the state of matters much the same as described on the 8th inst. He went home to-day to Ely, in Cambridgeshire, where he arrived safely at 7 p.m.

September 2.—Saw patient to-day. He looks fat and robust, and in perfect health; says he feels quite well; has never had a bad symptom since he went home; right side of chest expands equally well with the left on his taking a deep inspiration; heart sounds quite normal.

Remarks.—I firmly believe that in this case the operation of paracentesis thoracis saved the life of the patient. The great dyspnœa, the very anxious expression of countenance, the rapid pulse and high temperature, all pointed to the very critical state he was in just before the second and successful operation. The relief afforded was not only immediate and great, but permanent, for the youth improved gradually and surely from that time without a bad symptom with the exception of those which appeared on the evening of March 7, two days after the tapping. Both pulse and respiration were then very rapid, the patient at the same time saying that he felt very unwell; but these untoward signs were owing merely to some temporary derangement of the digestive organs causing flatulence, etc., and were soon relieved by a little purging. It will be seen by observation of the almost daily records of the pulse, respiration, and temperature, that on the early morning after the tapping all three had fallen very considerably. These indications quite coincided with the feelings of the patient, who felt and looked much relieved in his breathing, although for twenty-four hours after the operation the removal of the fluid from the chest seemed to have weakened him very much. From this time until March 28—*i.e.*, twenty-three days after the operation—all three, pulse, respiration, and temperature, with some slight occasional fluctuations, fell gradually and slowly until, at the above date, the respiration and temperature were but slightly higher than the normal standard—the pulse only remaining somewhat quick. Without the operation I doubt very much whether the patient's vital powers would have been sufficient to have borne up against the derangement to the natural functions caused by the compression of a great portion of one lung for a considerable time, and whether the vital strength necessary for the absorption of so large a quantity of fluid would have been forthcoming. Tapping the chest in acute pleurisy at a tolerably early period of the disease of course insures the immediate rising and restoration of the function of the compressed lung; time has not yet been afforded for the organ to form firm adhesions in its compressed state, so as to prevent its return to its normal volume on the removal of the fluid. As is now well-known, the operation itself rarely, if ever, gives rise to any untoward accident; and it becomes, therefore, the imperative duty of the physician, after medicines have been tried and have failed, to give the patient the relief afforded by the letting out of the fluid, and the consequent better chance he must necessarily have of overcoming the disease and being restored to health. One other remark it is necessary here to make. In performing the operation of paracentesis thoracis in acute pleurisy, the physician ought to use as large a trocar as is possible and safe, from the fact of the fluid to be let out being not merely serum, but serum mixed with flakes of lymph—which latter would, in all probability, fill up a canula of small calibre, and thus render the operation abortive, as was the case in our first attempt on March 2.

Southampton.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

WARD NOTES OF CASES UNDER THE CARE OF MR. HUTCHINSON.

Symptoms of Abdominal Obstruction coming on Suddenly—Abdominal Taxis—Recovery.

A MAN, aged 49, was admitted at 7 p.m. on November 29 almost in collapse, with extreme abdominal pain, well characterised stercoraceous vomiting, and constipation. Careful examination proved the absence of any kind of hernia, and there was no local swelling or tenderness of abdomen to aid in the formation of an accurate diagnosis. The history was in favour of some sudden displacement or knotting of intestine. At 5 a.m. on the morning of the day before admission, as he was walking hastily across the street, his foot slipped on the curb, and he immediately felt acute pain in the epigastrium. For about half an hour he took no notice of it, but within an hour of the occurrence he was so bad as to require help from a neighbouring public-house, where he had been for some brandy, to his home. In a short time vomiting began,

and continued at frequent intervals till relieved by the operation. Mr. Tay had him put under chloroform, injected water into the rectum, vigorously kneaded the abdomen, and, placing the patient's feet uppermost, had him well shaken. It was found that several hand-basinfuls of water could be injected and retained before the kneading was begun, and his abdomen was visibly distended by the fluid, proving that there was no obstruction in the large intestines. Relief speedily followed these measures, and two hours later, when Mr. Hutchinson and Mr. Tay both saw him, the patient expressed himself as almost well and quite free from pain, so that there was no longer any need to entertain the question of an exploratory abdominal section. He only vomited once after the operation. The enema was soon returned, and next day he had a free fæcal evacuation. To-day (December 2) he is nearly well.

Symmetrical Fracture of each Tibia, with unusual Displacement—Interval of ten years between the two fractures.

A man, aged 54, was admitted a few days ago with fracture of his right tibia rather above the middle, the unusual feature being that the upper end of the *lower fragment* was displaced forwards and inwards, the reverse of what commonly happens. It happened as he stepped from the foot-board of an omnibus still in motion, his weight coming chiefly on the right limb. After admission it was found that he had a united fracture of the *left* tibia, also just above the middle, and with exactly the same displacement as that in the right leg; this had happened ten years previously from being knocked down in a crowd.

Femoral and Inguinal Hernia, with Two Scrotal Tumours.

A man, aged 56, is now (November 28) under Mr. Hutchinson's care in Mellish ward (bed 41), who presents a curious combination of diseases in the hernial regions. He was admitted with a strangulated femoral hernia on the right side, which was reduced by taxis. It was then found that he had a reducible inguinal hernia of small size on the left side, complicated with a hydrocele of the upper part of the epididymis on the same side, about as large as the body of the testis; while on the right side there was a somewhat similar tumour of rather smaller size connected with the spermatic cord just above the testis.

EDINBURGH ROYAL INFIRMARY.

CASE OF RUPTURE AND CURE OF AN OVARIAN CYST.

(Under the care of Dr. MATTHEWS DUNCAN.)

[Reported by Dr. J. R. HARDIE.]

M. S., AGED 52, admitted to ward xvi. October 28, 1870. She is married, and has had nine children, the last eight years ago. Patient complains of great pain and swelling of the belly, and of darting pains down the thighs. She was a healthy woman until three years ago, when she twisted herself jumping hurriedly out of bed, to which she attributes an attack of pain in her belly, which necessitated her keeping bed for a month. For this attack she was treated by means of poultices and blisters. S. enjoyed comparative freedom from abdominal pains until three months ago, when they returned with increased intensity, keeping her almost entirely confined to bed. She has noticed that any exertion during the three years caused an accession of pain. Has had slight leucorrhœa, but never a bloody discharge.

The abdomen measures forty-three inches round by the umbilicus. The belly is prominent, swollen in every part, presenting to the hand a uniform soft feeling, with no elevation or depression; the subcutaneous veins are enlarged; there is indistinct feeling of fluid, and fluctuation is also imperfectly made out; the uterus is displaced backwards, but beyond this nothing abnormal is to be detected by a vaginal examination.

November 8.—She was tapped to-day, and 264 ounces of fluid were taken from the abdomen. This fluid was of a dark brown colour; specific gravity 1018; no clot found in it on standing; red-coloured crystals are seen in it on microscopic examination. After being relieved of the fluid in her belly, patient expressed herself as feeling much easier. Abdominal and vaginal examination failed to detect any unnatural structure in the abdomen.

21st.—Slight dulness on percussion is detected in the hypogastric region.

23rd.—Left the Hospital to-day, feeling well.

May 20, 1871.—Patient returned to-day, looking much thinner than when she left in November. She complains of weakness and inability to work, and that the tumour has become "as large as before." After leaving the Hospital she says that she kept quite well until three months ago, when the tumour began to increase in size, and it has continued to do so ever since. About three months ago she had a violent attack of vomiting, which lasted the whole day. The belly round by the umbilicus measures forty inches.

24th.—The belly now measures forty-two inches round by the umbilicus; it is prominent, globular, uniform to the feeling, soft, and fluctuating freely. Per vaginam, the uterus feels behind the tumour; no fulness or hardness in the pelvis.

June 2.—Belly increasing in size; patient's breathing is slightly embarrassed thereby.

13th.—Circumference of belly at the umbilicus forty-two and a half inches.

17th.—Patient's belly tapped to-day; 400 ounces of a dark brown fluid removed; specific gravity 1016; does not deposit a clot on standing. When treated with heat and nitric acid it becomes almost solid with albumen. Pulse before operation 112, afterwards 96.

18th.—Had some pain in epigastrium and back last night, but none in lower abdomen unless she coughed. Ordered an opiate and turpentine stupes to seat of pain.

19th.—Feels easier. Pulse 76.

20th.—Had another attack of pain in belly, accompanied with sickness and vomiting. Pulse 100. Opiate continued, along with turpentine stupes.

22nd.—Feels easier. Pulse 84.

30th.—Went home to-day, with a comparatively small belly. All pains had disappeared; general health fair.

December 6.—Readmitted. Complains that the swelling of her belly has gradually reappeared. Measures forty-three inches round by umbilicus.

January 8, 1872.—Tapped to-day, and 400 ounces of a dark-coloured fluid drawn off. Specific gravity 1019; reaction neutral; no clot on standing; when treated with heat and nitric acid it becomes almost solid. Microscopic examination detects granules and large granular corpuscles. Evening: Complains of pain at base of left chest. Pulse 96. Ordered an opiate.

9th.—She has a slight cold with cough, which causes pain in side. Pulse 76.

24th.—Has recovered from her cold. Measures thirty-five inches round by umbilicus. Went home to-day.

July 20.—Re-admitted to-day. She says that after having been a fortnight at home she had an illness which began with shivering, and was followed by pain in the belly. She sent for a doctor, who gave her a powder which she says made her very sick and brought on vomiting. The same night she passed by stool a large quantity of a thick brownish-black fluid. The amount passed cannot be exactly made out, but she says she half-filled an ordinary *pot de chambre* four times at consecutive sittings. The evacuation of this fluid was followed by pain in her back. She took castor oil, which brought away more of the brownish-black fluid. On examination per hypogastrium the belly is found to be quite soft and natural. Beneath the horizontal line at the navel dulness is detected, but no fluctuation is anywhere present. Per vaginam, uterus movable; everything else natural.

October 12.—She was seen to-day. Says she is enjoying as good health, and feels as strong, as at any previous part of her life. She looks strong and healthy. The belly has not again enlarged, and feels natural.

The case now under consideration is of peculiar interest at the present time, when the marvellous success of the operation for removing ovarian tumours is being laid before the Profession, both in the old and new worlds, in the recent publications on ovarian diseases.

A natural favourable termination to an ovarian dropsy is rare and scarcely to be looked for. Rupture of a cyst is, however, not infrequent, but its bursting is oftener fatal than not, a favourable issue to this occurrence being extremely uncommon. The dangers are manifold—shock, peritonitis, septicæmia being the principal. In S.'s case there was in all probability rupture of a cyst of considerable dimensions into the bowel at its lower part, and evacuation of the fluid per anum. The opinion that the opening was probably in that part of the intestinal canal hinted at is supported by the patient's statement, that she passed at consecutive sittings on the night-stool a large quantity of fluid matter. When the rupture takes place in the course of the small intestine, and is followed by a happy result, we frequently have no such copious discharge of the cyst contents by the rectum; they appear to be absorbed into the circulation, and the accident may by this

circumstance be entirely overlooked. The danger to the patient of rupture of an ovarian cyst into the bowel at any part of its course is manifest, the entrance into the emptied cyst of fetid air, or fœcal matter itself, being well-recognised occurrences, which are generally followed by a fatal termination.

The rupture of these cysts is often asserted to take place spontaneously. This may be so; but probably the greater number of cases admit of being referred to causes which can be ascertained—such as violence in various forms, directly by blows or indirectly by means of drastic cathartics, emetics, and the like. Repeated attacks of inflammation may affect the integrity of the structures composing the cyst-wall, and render them more amenable to the influences referred to, but of this we know little. In multilocular ovarian dropsy, when the size of the main cyst is being gradually increased by the bursting of smaller ones in its interior, rupture may take place without any apparent cause; the patient may be quietly sitting or even lying in bed when the event occurs. The explanation of some of these cases—which may with propriety be described as spontaneous ruptures—is probably as follows:—The main cyst is ever adding to its size by the absorption of the smaller contained cysts. The walls of these smaller cysts are observed on examination to be thinned, and it is probable that by this means rupture of them is brought about. This thinning, however, is seen not to be limited to one of the walls merely, but all seem to partake in it equally. Now, let us suppose—as does happen—that one of these walls looks towards the abdominal cavity, and another towards the cavity of the large cyst, and that these two walls had become very nearly equal in thinness, which equality would be encouraged by the pressure of the fluid inside being equal in all directions; let us further suppose that the wall of the small cyst looking towards the abdominal cavity gave way before or simultaneously with that looking towards the cavity of the large one. We should thus have what before was the inner wall of the small cyst forming part of the wall of the large one. In the one case thinning of the wall may proceed, and evacuation take place through an opening in the cyst-wall at the place where it was thinned when it formed part of the small cyst; in the other case immediate transfer of the fluid from the cavity of the cyst into that of the abdomen would occur. The same remarks would apply if the outer wall of the small cyst were supposed to be the first to rupture. In studying this subject physical points regarding the shape of the walls of the small cysts, whether curved or not, the amount of curvature, the nature of the contained fluid, etc., are to be taken into consideration. Although perhaps little enough time has elapsed since the rupture to enable us to state with great assurance that the relief afforded to our patient will be permanent, still we have grounds for the assumption that such will be the case. She has gained strength to a great extent; the anæmia and emaciation so characteristic of advanced ovarian disease, and from which she was beginning to suffer, have disappeared, and when last seen she reported herself as being now employed in all the hard work that falls to the lot of a housewife in the lower ranks of life. She was then robust and healthy-looking; in fact, her history since the disappearance of the abdominal swelling closely resembles that of a woman who has had the operation of ovariotomy performed upon her, and whose recovery has been rapid and uninterrupted.

The sum of £750 16s. 4d. was collected on the recent Hospital Sunday at Worcester.

The Local Board of Health for West Derby, the largest of the out-townships of Liverpool, have advertised for a Medical Officer of Health, at a salary of £100 for the year, the engagement to be terminable by three months' notice on either side. The Local Board will not receive aid from the Local Government Board, so as to retain sole control over its officer.

The Rev. J. Selby Watson, M.A.—Mr. W. J. Fraser, his solicitor, has been informed that the above convict has been removed to Parkhurst prison from Pentonville, where he had been confined nine months. Mr. Watson is, to quote his own words, "in tolerable health." He is treated just the same as the most ordinary convict, and is allowed no privilege different from the other prisoners. He is uncomplaining, but maintained much the same reserve as he had manifested throughout, when he was recently visited at Pentonville by Dr. G. P. Rugg, his former medical attendant, and Mr. Fraser.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, DECEMBER 14, 1872.

THE MEETING OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday, the 10th inst., there was a great gathering at the Royal Medical and Chirurgical Society, to witness—or, as the French say, to assist at—the return match between Dr. George Johnson and Sir William Gull and Dr. Sutton, the paper of the evening being "On the Pathology of Chronic Bright's Disease with Contracted Kidney, with special reference to the theory of Arterio-Capillary Fibrosis," by Dr. George Johnson. The library was crowded to its fullest, and everyone must have felt grateful, we should think, for the recent addition to the Society's rooms, as some marked improvement in ventilation and some additional air-space were gained by throwing open the doors into the new reading-room. It would be neither polite nor quite just towards Drs. Johnson and Sutton to say that to proceed without Sir William Gull recalled the idea of playing *Hamlet* without the Prince of Denmark, but undoubtedly there was a very general feeling of disappointment when it became known that a long-standing engagement prevented Sir William Gull from being present. The play, however, was a good play, though so important an actor was conspicuous by his absence. We have no intention of describing here either Dr. George Johnson's paper or the general discussion; a full report of both will be given in our pages next week. All who know Dr. George Johnson's work—and who does not know it?—all who heard his answer when Sir William and Dr. Sutton's paper was read, and who saw Dr. G. Johnson's microscopic preparations at the *soirée* of the Society, know pretty well what his reply to that paper would be, and feel sure that he made a straightforward and good defence of his views—a little irony here and there tinging his generally courteous tone and style. To us it seems that his strongest points were—his criticism of the cases illustrating his opponent's paper; his proofs that the peculiar hyaline-fibroid changes in the coats of the arterioles described by Sir W. Gull and Dr. Sutton were post-mortem changes, and entirely due to the fluids employed in mounting their microscopic preparations; and the fact, as we understood it to be, that all the

pathological specimens relied on by Sir W. Gull and Dr. Sutton had been mounted for them before being examined, and all in the glycerine fluids which, according to Dr. G. Johnson, will produce the hyaline appearance in healthy vessels. Of course he reasserted the correctness of his statement, that the true pathological condition of the arterioles in chronic Bright's disease with contracted kidneys is hypertrophy of their muscular coat, as had, he said, been proved, and could again be proved, by any number of preparations under the microscope. Dr. Sutton replied with as much courtesy, but chiefly, as it seemed to us, in the simply reasserting strain—"You say such and such a thing, but we have such and such another thing, and we say it again." And perhaps this could hardly be otherwise considering the chief point in dispute; and it must be allowed, we suppose, that his case was at any rate greatly damaged when it was admitted that in some of the preparations the hyaline-fibroid appearances might have been caused by the glycerine and camphor-water in which the specimens had been mounted. Many well-known Fellows spoke after Dr. Sutton—as Dr. Dickinson, Dr. Charlton Bastian, Dr. Sankey, Dr. Payne, and Dr. Green; but while they related very interesting things as to the pathological changes in the arterioles and the capillaries in various morbid conditions, we cannot say that they spoke much or directly to the point in question—the pathological condition of the arterioles and capillaries in chronic Bright's disease with contracted kidneys. Sir William Gull and Dr. Sutton say that this is due to a "hyalin-fibroid" formation in the walls of the minute arteries, and a "hyalin-granular" change in the corresponding capillaries, and that the change occurs chiefly outside the muscular layer. Dr. G. Johnson says the change is due to hypertrophy of the muscular layer of the minute arteries, and that the Gull and Sutton pathological changes are, so to speak, manufactured appearances; and it is no answer to him to affirm that the hyalin-fibroid changes do in some conditions appear as true pathological changes. Dr. Sibson and Dr. Broadbent adduced strong clinical evidence that the vascular change in the contracted kidney disease could not be a degeneration change, but one inducing increased tension in the arterial system; and Dr. Anstie expressed his astonishment that Dr. G. Johnson could believe that casts formed in the convoluted tubules of the kidneys could pass away as such through the straight tubules, which he asserted to be physically impossible. Dr. G. Johnson replied briefly and happily, recalling attention to the real matter in question, replying to Dr. Anstie by pointing out that a somewhat tough convoluted cast can pass down a straight tube, and resume its original shape again when set free, and that these casts are *seen*—and with epithelial cells of the convoluted tubules attached, —not merely imagined. To an implied charge of prejudice, he answered that when a man has studied a subject for five-and-twenty years he may be allowed to think he knows something about it, without incurring the risk of being told that he is prejudiced in his views. Finally, on the motion of Dr. Sibson and Dr. Quain, a resolution was passed asking the Council of the Society to appoint a committee to examine into and report on the whole question in dispute; and then the mass meeting broke up, each man going away, we venture to say, with very nearly, if not exactly, the same views as he had come with. The matter is especially one for close and careful examination by a skilled committee, not for general discussion in a society.

HOSPITAL SUNDAY.

A PROPOSITION has been started, and a meeting has been held at the Mansion-house, for the purpose of instituting what is called a "Hospital Sunday" for London. The idea is not new; it has been already carried out in a good many places, especially in Liverpool, Manchester, and Birmingham, where large sums have been collected and distributed in a way which seems, as far as we know, fairly satisfactory. In these places the number of so-called charities is limited, and on the whole their characters are known; further, as no complaints have reached us, we are fain to conclude that the thing works fairly well. But when we come to apply the same rule to London we confess we are fairly appalled at the prospect. London is not as Birmingham, Manchester, or Liverpool; the multitude of so-called "medical" charities is exceedingly great, and their characters quite as various. We have first of all the eleven great hospitals, which have schools more or less prosperous attached to them; three of these are fully endowed, and ought not in any way to be dependent on charity. After these come a number of institutions, all respectable, and more or less satisfactorily conducted. Then come the ruck, of which many are, in professional phrase, "utterly disreputable," and have not the slightest pretence to be called charities at all. Yet, if we are to have a true "Hospital Sunday," all must share, or those excluded will have a right to turn round and say—"This! Why this is no 'Hospital Sunday' at all, but simply a collection of money for a set of favoured institutions." Under the circumstances we are hardly surprised that the more respectable hospitals, especially those who are entrusted with the great responsibility of training the future practitioners of the kingdom, are hanging back, and that some have absolutely refused to take any share in the movement—indeed, our wonder would have been had it been otherwise.

At first sight the idea is so plausible and taking, that it appeals to men's minds as few others would. The idea of giving to the poor, and especially to the sick poor, is pleasing to most minds, and the desire to make any such donations as widely useful as possible is both natural and praiseworthy. But indiscriminate almsgiving is a baneful and pernicious practice, and we are certain that any contribution to some of our so-called charities would rank in the same category. In London, even more than in the provinces, have we hospitals got up for the glorification and advancement of single men, some of whom make a great part of their living out of their *soi-disant* charity. A man makes up his mind to settle in London, and, finding no rest for the sole of his foot in existing institutions, promptly sets to work to establish one for himself. The fees demanded at some of these "charities" would astonish people who suppose they are subscribing money for the good of the suffering poor. The establishment of such institutions is an unmitigated evil, however we look at them. Can it be wondered, therefore, that honourable men of position hesitate about showing them that amount of countenance which would be implied by sharing the proceeds of a Hospital Sunday with them? Many would rather face considerable difficulties in carrying on their work than do so.

Moreover, the whole management of these institutions is seldom opened to the light of day. Some years ago an energetic contemporary took in hand to expose the well-known shortcomings of some of the more prominent London hospitals, but he speedily found the difficulties in his way altogether insurmountable, and after showing that there were blots in the management of even our best regulated hospitals, he had to abandon his task before touching the more doubtful. This was not done, however, until glimpses were obtained of waste and bad management, if not something worse, which goes on in some of our miscalled charities. Is it wonderful, again we ask, that honourable men, who try to do their duty honestly and well, and to administer the funds entrusted to them to the utmost advantage, should hesitate to ally themselves in any way with such horrid shams?

Of course, to talk of difficulties in such a case is hardly the line to take, but undoubtedly the difficulty will not consist in the collection of the money, but rather in its distribution. We know of no possible criterion which will enable those who desire to act honestly in the matter to do so. The average number of beds filled might afford some test as regards a certain

number of hospitals, but not as regards others which are partly self- (or rather proprietor-) supporting—and then all dispensaries would be excluded. The number of patients seen would not do; for at some the same patient is reckoned over again at each visit, and at all after a certain length of attendance. Moreover, we feel convinced that it would be impossible to get at the truth in many instances.

We are very far from saying that there are not many deserving institutions in London which would be the better for some help, but we must either make a selection or the good must suffer for the bad. It has been the object of our profession for long to oppose special hospitals, particularly of certain kinds. Such a proceeding as this Hospital Sunday movement can only foster them. Even now they are far too numerous, and undoubtedly they would be the chief gainers by any such general subscription. We fancy our readers can have little conception of the extent to which this abuse of charity has spread of late years, so we beg leave to present them with the following list, which is under- rather than over-stated:—Hospitals for consumption and diseases of the chest, 5; for diseases of children (including, in some instances, women), 11; for deformities, 4; for diseases of the ear, 2; for epilepsy and nervous disorders, 3; for the eye, 5; for fistula and diseases of the rectum, 2; lying-in hospitals and dispensaries, 8; for skin diseases, 6; for stone and genito-urinary affections, 1; for the throat, 1; for diseases of women, 7; besides a host of nameless institutions.

From the report of the meeting at the Mansion-house it will be seen that the difficulties foreshadowed have been in part realised. Mr. Turner, the Treasurer of Guy's, was present, and put the question whether dispensaries were to be included, and suggested that Guy's stood in no great need of funds. The treasurer of St. Thomas's was not present, but sent a note suggesting a similar difficulty as regards special hospitals; and it is only necessary to look at the lists of expectants present to see what we have to dread. The Treasurer of King's College was present, but the prime authorities of most other general hospitals were conspicuous by their absence; and it is questionable if all who attended had been authorised to do so by the governing bodies of the other general hospitals. From the constitution of the small committee recommended at the Mansion-house, it may be fairly surmised that hospitals whose advertisements for paying patients may be seen almost every day in the daily papers will not be excluded.

THE EDINBURGH ROYAL INFIRMARY.

On Saturday last the judges of the second division of the Court of Session announced a decision which may at some future period seriously affect the prosperity of the Edinburgh Royal Infirmary. At the annual meeting of the Court of Contributors, in January last, a group of managers retiring by rotation had to be replaced by others chosen by the vote of the meeting. The opinions of the managers on the education of female medical students influences vitally the course to be pursued by the Royal Infirmary in the matter of female clinical instruction. The advocates on the female side recognising this fact, nominated a group almost or altogether exclusively favourable to their cause, and the vote resulted in their favour. The opposing party interdicted the newly elected managers from acting, on the ground that in their opinion, and in the opinion of the lawyers whom they consulted, firms and "composite" contributors were not entitled to a vote. Excluding these, the majority was against the group of managers nominated by the supporters of Miss Blake and her associates. Pending the decision of the Lord Ordinary and the inner house, the managers elected in January last have been excluded from participation in the management of Infirmary affairs. The judges of the second division have now, with a certain display of unanimity, expressed their opinion that the votes "tendered at the meeting in January last by individual partners of firms were properly tendered, those individuals being entitled to vote in respect of the contributions of their several firms." In the case of composite contributors, the Court decided that where the total contribution, "divided by the number of its contributors, was such as to give as the quotient a qualifying contribution to each of such contributors, then each of such contributors should be allowed to vote."

It cannot be concealed that this decision, as it stands, permits for the present the nominees of the female party to take their place at the Infirmary Board. Should they be equally successful in carrying the election of their nominees at the next annual meeting—which takes place, we presume, on New Year's-day—the Board of Managers will in all probability consist mainly of men more desirous of promoting the supposed interests of Miss Jex Blake and her friends than of cultivating the welfare of the Edinburgh Royal Infirmary. We are not aware what course the other party are likely to pursue in consideration of the decision of the Court of Session, but we feel assured that, whatever direction their views may take, their only motive will be the maintenance of the good name of the Royal Infirmary and the Edinburgh School.

The course recently pursued by the Infirmary managers has influenced to a marked extent the fortunes of these irrepressible ladies. When in November of 1870 the managers, under the influence of a petition from almost the whole number of medical students in Edinburgh, decided not to make provision for the clinical instruction of women, the female cause received a check which it has never overcome. The Board of Managers was chosen by the students as the authority pre-eminently suitable for the reception of their emphatic and unanimous avowal of repugnance to female clinical associates. In justice to the 500 students who claimed their consideration, the managers refused to upset the arrangements of the institution for the benefit of a handful of female enthusiasts.

When the supporters of the women found that the Infirmary could not be reserved for their special purposes, they did not scruple to retaliate on the whole establishment. They publicly requested subscribers to abstain from paying their usual donations till the female students should be admitted—a request as unsuccessful as it was unworthy. They moved Edinburgh society to the utmost to procure voters in favour of managers devoted to their cause, and exercised the borrowed influence of more than one daily newspaper with a feminine vehemence which, had not the eminence of a great medical school and hospital been at stake, would have been simply ludicrous. It is not to be wondered at that an agitation so persistent and misleading should to a certain extent have been successfully employed against the interests of an institution under the government of managers elected by popular suffrage. The supporters of medical women have by a narrow majority secured a list of managers favourable to their interests. The Court of Session has determined a technical difference in their favour. If these managers, who have been elected with the special view of promoting the clinical teaching of women, should be allowed to take office, we shall watch with interest what measures they may take to find room for a new supply of students in a hospital already too small for the extent and character of its teaching. We feel certain that any assignment of wards for the special use of women would be an injustice to the present students, and we are equally certain that high-spirited and decent young men will never consent to study clinical medicine and surgery with persons of the opposite sex.

MEDICAL REMUNERATION.

The Scotch have a proverb that

> "You should take the fee
> When the tear 's in the e'e."

It would be well for us if we could always act on this distich. With many persons the benefits which they receive from their

medical attendants are forgotten as soon as rendered. The doctor is a very different person in the eye of his patient when he comes to relieve pain and suffering and when his bill is presented for payment after an interval of months, or it may be in some instances years. The surgeons in general practice in this kingdom are, as a rule, much underpaid, and many bitter disputes arise when even a moderate account is rendered. This arises partly from a want of uniformity of charges amongst practitioners in general. Notwithstanding the praiseworthy efforts which have been made by the Shropshire and other medical associations to remedy this evil by issuing a universal tariff of fees, we confess that the difficulties of such a task are almost insurmountable. The physician to Henry VIII. used to say that the honoraria of the rich should pay the doctor for his attendance upon the poor. This is a wise and benevolent aphorism; but so far, at best, as large cities are concerned, it is met by a serious difficulty. How are "the rich" to be known from "the poor"? Not always, certainly by outward appearances; not always in the manner in which medical practitioners are "rewarded" by the different classes of patients. The "poor" are often more, liberal, *quoad* their means, to their doctor than are the "rich." What, then, is the remedy for this unpleasant state of things? If we could adopt the system common throughout our Indian empire, of making no stated charge and trusting to the honour and gratitude of our patients for remuneration, a satisfactory solution of the difficulty could be found. This system, however, it would be impossible to carry out in this country. Next to this would be a contract between the doctor and patient to attend by the year for a sum agreed upon between them. This, at the present time, could scarcely be carried out; but in all cases in which it is practicable it should be adopted. We venture to suggest that a modification of such an arrangement might be acted upon with great advantage to the parties concerned. The honorarium of the consultant is generally understood by the public; and the instances are very rare in which the amount of the fee is disputed. With the surgeon in general practice, who supplies medicines to his patients, the case is altogether different. His charges for attendance and medicines—for the latter of which the respectable family doctor usually makes no distinct item in his account—vary to an extent of which his patient has no positive knowledge. The modification we have referred to appears to us likely, if carried out, to meet most of the objections to the other plans we have mentioned. On being called for the first time to a patient there should be a clear understanding as to the fees which are to be paid. Such a contract if properly understood, would save an immense deal of trouble, and place the practitioner and patient in amicable relations. Why should not this arrangement be generally entered into? We should be glad to know what objection there is to it. Numerous cases in which we have been called upon to arbitrate, or to give evidence before a legal tribunal, have convinced us that it would be a very important step in the right direction. We throw out these remarks in the interests of those of our brethren who constitute nineteen-twentieths of the family doctors of the kingdom. Men of high professional honour should recollect that they have to live by their calling, and it is not derogatory to them in these days of commercial enterprise to enforce those principles and those practices which honourably prevail amongst other educated members of the community.

THE WEEK.

TOPICS OF THE DAY.

THERE are vacancies at University College Hospital for an Assistant-Surgeon and an Assistant-Physician, but we hear that a considerable difference of opinion exists as to the candidate who is fittest to fill the latter office. Several rising physicians have, we believe, established some claim on the electing authorities of the Hospital; but Dr. Gowers, it is said, has the support of some of the most influential members of the medical staff. When several men of equally, or presumably equally, high attainments apply for the same position, the choice must, after all, be made upon personal grounds.

Dr. C. Meymott Tidy, Joint Lecturer on Chemistry and Professor of Medical Jurisprudence at the London Hospital, has been appointed Medical Officer of Health for Islington.

Mr. R. Oke Clark, of Farnham, has been summoned before the police magistrates at Farnham by the Commissioners of Lunacy for having signed a medical certificate relating to a pauper lunatic without having personally examined the lunatic. Mr. Clark pleaded guilty to the charge; and although, as the bench said, it was clear that he had intended no moral wrong, and his act was only a legal offence and an error, they fined him £10, but not the costs of the prosecution. The fact was that the woman was a known and acknowledged pauper lunatic, and Mr. Clark had examined her on previous occasions, but on the occasion which was made the subject of inquiry, in order to comply with the Act he signed a certificate of having examined her on a particular day, on which he had not seen her. Of course this was a grave error, but we should have thought that, under the circumstances, a nominal fine with a caution might have sufficed. The whole case proves how necessary it is to be most careful in filling up and signing these documents.

At the Oxford Assizes, held at Stafford on December 6, a woman named Penelope Vaughan was sentenced to fifteen years' penal servitude for feloniously using an instrument for the purpose of procuring abortion. The person on whom the instrument was used was a factory girl. On the day following the operation she was delivered of a dead immature child, which was taken away and disposed of by the prisoner.

The departure of the *Challenger* has of late engrossed the attention of scientific circles. On Friday last week she was visited by a deputation from the Royal Society, which included Doctors Sharpey and Carpenter, Professors Allman, Huxley, and Williamson, and Dr. Hooker. It is just a hundred years since Captain Cook started on his expedition, and much might be said as to the improved circumstances under which the *Challenger* starts over those of the great circumnavigator. The *Challenger* is not only to sail round the world, but she is to traverse the three great oceans from north to south and from east to west. The loss of Professor Wyville Thompson, who is the head of her scientific staff, will be greatly felt at Edinburgh.

CERTIFICATES OF DEATHS OF INFANTS.

THE laxity that prevails with respect to the burial of infants is really alarming. It is essential for the safety of infant life that stillborn children should be properly registered. At the present time there can be no doubt that many children are buried as stillborn who were born alive and lived for some time. With respect to this subject some remarkable disclosures were made at an inquest held at Plymouth upon the body of a child 3 weeks old attempted to be passed off as stillborn. The mother of the deceased had been induced by an undertaker to bury it as stillborn, through a woman who, professing to be a midwife, had recently brought stillborn children to the cemetery to be buried in large numbers. She had brought five in one week, and on one occasion she told a cemetery official she expected to be there again in two days, and came accordingly. It was shown that the number of children buried in the cemetery purporting to be stillborn had doubled the usual average, and that over 300 had been so buried this year. A verdict of "Death from natural causes" was found, it being intimated by the registrar that proceedings for giving the proper certificates would be instituted. No certificate, whether from a male or female unqualified practitioner, should be

received as proof that the child was stillborn. This to some extent, at least, would remedy the evil.

PROFESSIONAL ETHICS.

THE subject to which we alluded on the 23rd and 30th ultimo occupied the attention of the Council of the Royal College of Surgeons on the 12th instant, and their deliberations resulted in the Secretary being directed to write to Mr. Harry Lobb for an explanation of the unprofessional advertisements which appear with his name in the daily newspapers. A committee, it is stated, will be formed to take into consideration the advertisements which appear in newspapers from other members of the Profession, and to submit their report for the consideration of the Council. At the meeting on Thursday the name of John Fletcher Fletcher, convicted at the Lincoln Assizes in July, 1868, of the abduction of a young girl, was ordered to be removed from the list of Members, and notice to be sent to the Registrar of the General Medical Council.

WARMING AND VENTILATION OF ROOMS.

MR. SEDDON, in a paper on "The Warming of Houses," read before the National Health Society on the 5th instant, referring to the necessity for economy in the use of fuel at its present cost, reviewed the various methods of warming dwellings now adopted, and the several appliances for the purpose. "The open fire, as the Englishman's privilege, not likely to be superseded," he said, "might yet be rendered less wasteful than it is." He described the proper construction of flues, chimneys, fire-places, and urged the introduction of warm air to every apartment as a means of diffusing warmth and preventing cold draughts. The burning of coal upon solid fire-clay slabs, resting on the hearth instead of upon raised iron gratings, was mentioned as a means of obtaining economy. Stoves, though less suitable for rooms, were, he considered, valuable for tempering the air in halls and corridors if supplied with (and made, as it were, fountains of) fresh air, but not otherwise. Air, he pointed out, was needed in abundance, and would be drawn from somewhere by the fires in a house; and if chinks in windows were pasted up to keep out the cold, the soil-pipes were generally the main, if not best, resource left. Failing these, fortunately the fires smoked, and the precious element was then perforce admitted. Gas, as the essence of coal, would, he thought, hereafter be more used for warming purposes, but, whether for warming or lighting, it is necessary that the products of combustion be removed. By attention to very simple rules, and combining ventilation with warming, not only might health be preserved, but the unsightly disfigurements of cowls and tallboys to our chimneys dispensed with.

NECESSITY FOR SANITARY REFORM.

OPPONENTS of sanitary reform must be surely unacquainted with the horrible state of certain localities. After reading the following, which we have selected from many cases that have come under our notice, if their opinion is not altered, it is useless to argue with them. The *Oswestry Advertiser* of last week calls attention to "a shocking revelation made at the last meeting of the Wrexham Board of Guardians by the Nuisances Inspectors in reference to the defective sanitary condition of Brymbo and Broughton. There seems to be no redeeming case, and the Inspectors' report was a plain statement of revolting facts. We are told that after the report had been read the most glaring cases were gone into, and notices of abatement were ordered to be served on the proper parties."——Dr. Williams, in his report of the sanitary condition of Corris, North Wales, says—"The beds have not time to cool, as they are occupied by parties alternately day and night, and the windows of the rooms are never opened to get rid of the foul air. In addition to this the place is badly drained, and the atmosphere is so bad that animal food soon becomes tainted. It is almost unnecessary to say that typhoid and other fevers are prevalent here."

UNION MEDICAL OFFICERS' DEPUTIES.

BOARDS of guardians, however negligent they may be in the performance of some of their duties, generally seem on the alert when anything relating to their medical officers is on the tapis, particularly if they can in any way find fault with these gentlemen. At the meeting of the St. George's-in-the-East Board of Guardians on Friday last a letter was read from Dr. Pitt, the Medical Officer of the South District of the parish, who nominated Dr. Sutcliffe, the Medical Officer of the North District, as his deputy. Dr. Sutcliffe also sent a letter nominating Dr. Pitt as his deputy. Mr. Serle objected to the proposition of the medical officers, as he thought it would lead to serious difficulties. The chairman said it appeared to him that the law did not absolutely prohibit such a course as that proposed, but he could hardly think that it was intended by the spirit of the law. It would therefore be better to submit the matter for the decision of the Local Government Board. Mr. Barrett said at the same time it would be advisable to state that there was a great scarcity of doctors in the parish—a statement which probably produced some surprise.

APPOINTMENT OF MEDICAL INSPECTORS OF PASSENGER SHIPS.

THE reports which have lately been published respecting the horrible condition of several emigrant ships has aroused the Government to the importance of the subject, and the Board of Trade have given notice that after January 1 next they will require the services of a medical gentleman competent to inquire into and report upon the sanitary condition of ships, to inspect emigrants, and perform such other duties in connexion with ships, seamen, and passengers as may be required by the Board. The salary fixed by the Department is £300 a year, which is altogether inadequate. It is, however, a good beginning on the part of the Board of Trade. No doubt when the onerous duties which the Medical Inspector will be called upon to perform shall become appreciated, an increase in his stipend will naturally follow.

MENTAL *versus* PHYSICAL CULTURE.

THE mental training of children is unquestionably of the greatest importance, but it is of the first moment that the physical condition of the child should not be deteriorated in the process of developing the mind. We are glad to perceive that at a meeting at Leamington, held last week, this subject was alluded to by Sir Robert Hamilton, Bart., who, speaking on the Education Act, said that the compulsory attendance of children at schools within a radius of three miles was simply impossible in rural districts, where inclement weather and bad roads had to be contended against. He advocated dame-schools being affiliated to the ordinary parochial schools.

FROM ABROAD.—M. FAYE'S ADDRESS TO THE ACADÉMIE DES SCIENCES —DR. WESTPHAL ON PARAPLEGIA AFTER SMALL-POX.

IN the address delivered by M. Faye, Vice-President of the Académie des Sciences, on the anniversary meeting of that body, he indulged in some very justifiable congratulations on the position which French science held during the two years of trouble—1870 and 1871. It was never found wanting, and always at its post, the weekly meetings of the Academy having only been suspended on one occasion, and then by barricades and flames. The subjects brought forward one after another related to the defence and the feeding of the capital. "All was considered at this epoch of ardent patriotism, from new apparatus for exploding mines to electric lights for illumination, photography for the multiplication of despatches, and balloons for

their dispersion. You discussed at the same time measures for arresting the epidemics which prove so fatal to cities under siege, and the means of feeding this immense and heroic population. Moreover, during all these dreadful sufferings, the engagement which had been made with the world of science to join in the eclipse observations in Sicily and Africa was fulfilled, and while the means of egress were hermetically closed, our representative reached his destination through the air. How just was the confidence the Academy entertained in science and her *savants* is shown by what is even now taking place, giving a full denial to their supposed diminished *prestige:* France, apparently beaten down and ruined, girds up her loins, and prepares to take a foremost place amidst the congress of *savants* assembled to observe the transit of Venus. The astronomers of the whole world are to be, so to say, marshalled out in groups along the circle separating on our globe night from day, and having at their command all necessary instruments." France contributes her contingent of astronomers for Palestine, the Red Sea, Pekin, and Yeddo in the north, and many points of observation in the south. Another remarkable circumstance, also testifying to the vitality of French science, is the distinguished and learned assemblage, that "Œcumenic Council of Science," which is holding its sittings at Paris, composed, as it is, by representatives from all the great states of Europe, and having for its object the international institution of the metric system.

It is pleasant to observe the cheering tone of the entire discourse; and certain it is that if all classes of society in France had exhibited (and still exhibited) the same abnegation and devotion to duty which characterise her *savants*, the past would have been less sad and the future more hopeful.

At a recent meeting of the Berlin Medical Society (*Woehenschrift*, November 15) Dr. Westphal read a paper "On Disease of the Spinal Cord in Paraplegia following Variola." He has already made communications upon disease of the central nervous system consequent on variola, the most remarkable symptoms of which being a peculiar disturbance of the faculty of speech, and ataxy of the lower extremities without great motor debility of the same. The present paper relates to two cases of actual paralysis of the lower extremities, one of which came under the author's own care, while of the other he had only performed the autopsy. His own case occurred in the person of a man 22 years of age, who was seized on November 5, 1871, with precursory symptoms of variola. The attack itself was so slight as not even to confine him to bed; but on the third day he found weakness of his limbs in mounting the stairs, which increased until complete paralysis was established by the 12th. He was brought from the Small-pox Hospital on December 2 to the Charité, and placed under Dr. Westphal's care. He found complete motor paralysis of the lower extremities, increased reflex action with the sensibility intact, paralysis of the bladder, and decubitus. The patient was gradually recovering, so that by January 19 he was able to walk a few steps by the aid of a stick. This favourable course was cut short by an attack of perityphlitis, which, after many vicissitudes, ended fatally on April 8.

The second case was that of a man, 32 years of age, who on January 24 was seized with non-confluent small-pox. On February 4 his urine passed involuntarily, and next day there was complete motor paralysis of both legs. He succumbed under decubitus and cystitis on March 3. At the autopsy, while the spinal membranes presented nothing remarkable, sections of the lumbar portion of the cord exhibited great vascularity, and differences of colour of the grey substance on the right and left sides—the former being of a pure grey, and the latter of a dark brownish-red. Sections made somewhat higher up exhibited the latter colour on both sides, this gradually diminishing upwards, so that at the cervical portion the appearance was normal. The white substance was not discoloured, and but slightly vascular, and the roots of the nerves were of a normal appearance. The cerebral pia mater was somewhat œdematous and turbid, but the brain exhibited nothing remarkable. By the aid of a solution of the bichromate of potash the extent of the abnormal coloration, which was for the most part of an unusual intensity, was easily determined. It extended very irregularly, the grey and white substances of both sides being sometimes affected, and at others only or chiefly one side. Spots of white softening of the size of a large pin's head were found extending over about a centimetre of the grey substance of the dorsal portion. Under the microscope there were observed immense accumulations of fatty granules at all the points at which the change of colour indicated pathological changes, as also around the softened spots. The hyperæmia, which was considerable, was strictly confined to the diseased portions, and unaccompanied by hæmorrhage. In the other case the pathological appearances were quite similar, but in this the diseased portions of the white substance much predominated over those of the grey.

Dr. Westphal thinks that the best designation of this diseased state of the spinal cord will be *myelitis disseminata*, and he believes that the paraplegia in these cases is explained by the changes in question. Paraplegia after variola would therefore have to be removed from among the so-called "functional" paralyses; and whether the paraplegia and paresis which follow various other acute and infectious diseases depend upon a similar process set up in the cord, further investigation will show. Dr. Oertel relates a case of paralysis of the four extremities occurring in diphtheria, in which similar changes in the cord (accompanied, however, with numerous hæmorrhages) seem to have existed.

DRUITT TESTIMONIAL FUND.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions since Wednesday, December 4:—

	£	s.	d.
A Friend	50	0	0
Mr. James R. Hope Scott	21	0	0
Mr. Octavius E. Cooper (Brentwood)	10	0	0
From three Ladies and a Gentleman (by Mr. Burney Yeo)	5	1	0
Mr. John Churchill, jun....	5	5	0
Mr. Augustus Churchill ...	5	5	0
Mr. Walter G. Phillimore	5	5	0
Dr. Chepnell	5	5	0
Mr. Thomas Bryant ...	3	3	0
Dr. Hawksley	3	3	0
Messrs. Dymock & Guthrie (Edinburgh)	3	3	0
Dr. Edward Ballard ...	2	2	0
Dr. H. Maudsley	2	2	0
Mr. F. Manly Sims ...	2	2	0
Dr. R. Jackson (Oxon.) ...	2	2	0
Mr. Walter Coulson ...	2	2	0
Mr. Alfred Woodhouse ...	2	2	0
Messrs. Trapp and Sons...	2	2	0
Dr. Latham (Cambridge)...	2	2	0
Dr. James Bankart (Exeter)	2	2	0
Dr. Park (Boston, U.S.) ...	2	2	0
Dr. Murchison	2	2	0
Mr. Gaskoin...	2	2	0
General Water Purifying Company	2	2	0
Dr. Peacock...	2	2	0
Mr. R. Hall	2	2	0
Dr. Herman Weber ...	1	1	0
Mr. Henry Morris... ...	1	1	0
Mr. William Dickinson ...	1	1	0
Dr. W. H. Day	1	1	0
Dr. Cumberbatch	1	1	0
Dr. William Ogle	1	1	0
Dr. Markham	1	1	0
Dr. Roth	1	1	0
Dr. Sturges	1	1	0

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. Norton, 6, Wimpole-street; or be placed to the account of the Druitt Testimonial Fund, Union Bank, Argyle-place, Regent-street.

Amounts received will be acknowledged in one or more of the medical journals.

DISEASE AND MORTALITY AT HOME AND ABROAD.

Out of a European population of 98 at Sierra Leone, over 20 have died from fever since January, or more than 200 per 1000. The type of fever has been bad this year along the whole coast.

Last week at the Worcester Small-pox Hospital there were 12 patients under treatment, and 1 death had occurred.

The medical officer of Oswestry reports an outbreak of scarlet fever in that town.

The *Times* correspondent writes from Calcutta on November 15—"I have had very bad accounts indeed this week of the advance of the Burdwan fever. It is spreading rapidly into other districts, some of them heretofore noted as healthy, and unless it is checked speedily it seems likely to overcome Lower Bengal. The Government is acting, it is true, but not with sufficient vigour. Everyone I speak to is of opinion that a most energetic effort ought to be immediately made."

In the metropolis last week 1205 deaths were registered, being 554 less than the average number.

Typhoid fever is making havoc among the inhabitants of Athens, particularly among the younger population, while other malignant fevers are prevalent.

REVIEWS.

The Beginnings of Life. By Charlton Bastian, A.M., M.D., F.R.S., etc. In two volumes, with numerous illustrations. London: Macmillan and Co. 1872.

We should have thought that the "Earliest Appearance" might have been a safer title for the work than the "Beginnings of Life," inasmuch as the opening scene of its microscopic record points not so much to the "becoming" as to the "become"; not to the "*natura naturans*," but to the "*natura naturata*." We will not, however, commence with a quibble, but rather with the willing admission that whoever peruses the volumes of Dr. Bastian, whatever may be his opinion of the doctrines they are intended to inculcate, must close them with a favourable opinion of the talent of their author. A facile writer, an experimentalist at once practised and laborious, and one moreover thoroughly conversant with his subject-matter, he stands upon the highest vantage-ground. But despite even these qualifications, it cannot be supposed that his views will gain unqualified adhesion. We opine that the grounds of his conclusions will be most narrowly surveyed. Between the advocates of such divergent doctrines as those of "spontaneous generation" and "pre-existent germs" disputes will as heretofore continually arise, the scale turning temporarily within narrow limits; but, in the mean, with perhaps little substantial gain on either side. When the balance-sheet of the century is struck, the actual results will show; but we venture to prophecy that the relative position of the parties will be found but little changed, each still clinging to cherished convictions. Unless we mistake, however, not only will the work of Dr. Bastian demand that the entire subject of "spontaneous generation" should be reopened, but necessitate a counter-series of equally well-contrived experiments to detect the flaws—if any—in his argument.

The first part of vol. i. constitutes the *prolegomena* to the main work. It deals with the great questions of physico-chemical and biological phenomena, and forms an ably written and instructive *résumé* of the opinions of the most advanced thinkers in the respective sciences. The second part commences with introductory observations on the subject of "archebiosis" proper. A most interesting parallel is drawn between the comportment of crystalline and colloid substances. Facts are cited to show that no impassable barrier exists between the two. Within certain limits they seem as mutually interchangeable with respect to their outward shape as they may be intimately blended in their molecular composition. It is even asserted that Trécul observed the more or less immediate passage of a statical into a dynamical aggregate,—amylobacter. Experiments in reference to crystallisation, and interesting in their morphological aspect, show how the visible form of the organic element is foreshadowed. Dr. H. Bennett "has figured a peculiar pellicle that forms upon the surface of lime-water, in which the crystalline material very closely resembles a layer of tesselated epithelial cells." And we know that Schwann considered the cell to be comparatively but an imbibing crystal. The experiments of Mr. Rainey indicate how, by a process of "coalescence," crystalline matters, both in point of physical formation and shape, approach some of the organic compounds, such as calculi and the starch granules existing in the tissues of growing plants. We might further add that Berthelot and others have produced, artificially, crystalline organic compounds that but a short time ago were considered the exclusive manufactory of the vital laboratory. After pointing out further particulars connected with the phenomena of crystallisation, the author lays stress upon what he alleges to be now a truth of demonstration: that crystals may depose from given homogeneous solutions and mould into specific shapes by virtue of "inherent polar" aided by "incident" forces, without the necessary assumption of any nucleus or "pre-existent germ," that constituting the statical condition of matter. The parallel, however, is carried further onwards, and it is argued that what holds with regard to the "crystalloids" by parity of reasoning applies to the more unstable "colloids." The larger and far more composite molecules of these, also without the aid of any "pre-existent germ," may, by virtue simply of their "organic polarity," aided by incident forces, rearrange and evolve that dynamic aggregate we designate as "vital." Now, although it may make no great demand on our belief (never, perchance, very strong upon the point) to admit that crystals may *immediately* form from their solvent by virtue of their "atomic polarity," it would with many require a very perfect demonstration to carry conviction to the point of conceding that the molecules of a colloid mixture, be they ever so composite and unstable, should, simply by virtue of their "organic polarity," aided even by incident forces, so readjust themselves as to form *immediately, de novo*, a substratum capable of manifesting phenomena hitherto regarded as inherited attributes—our contrary belief here being very strong, and probably in part dependent upon the depth of those vital grooves in which we have so long been running. And we must not forget that with both old and modern supporters of the "heterogenetic" theory—Needham, Buffon, Burdach, O. Müller, Treviranus, Tredemann, Pouchet—the "organic molecules" were supposed to be instinct with properties they considered that no mere physical forces could impart. It may, however, be possible that in proportion as we become more thoroughly indoctrinated with the idea of the possibility of conversion of "physical" into "vital" force under given conditions—as we more clearly realise the *energia* of the remarkable colloid compounds—our preconceived views may undergo modification, and become moulded more into harmony with the teaching.

During the earlier and larger part of the century the "panspermic" doctrine was held with an almost unquestioning faith—a faith barely disturbed by sparse and perhaps feeble attempts to undermine its foundations. It is only within comparatively recent times, more particularly since the researches of Pouchet (notwithstanding the reactionary efforts of Pasteur), that a strong counter-current has set in, bringing to the opposing ranks such sturdy recruits as will tax the skill of their great antagonists to do successful battle with them. Perhaps one of the most signal advantages gained by the school of observers to which Dr. Bastian belongs was with regard to the question of the universality of the distribution of "germs." Indeed, so marked has been their success as to compel even Pasteur to modify his views in this particular. There can be no doubt that our author is correct in his statement that their number has been greatly over-estimated. He evidently does not altogether agree with Shelley as to the existence of

> ". . . . those viewless beings,
> Whose mansion is the smallest particle
> Of the impassive atmosphere;"

but proves that these mansions are not so generally tenanted as the poet and others imagined. It is now regarded as probable that there are atmospheric "germal" districts with comparatively blank intervening spaces, as there are such districts immediately around us. Bacteria do not exist—at all events in any number—in the atmosphere. We have for this the additional valuable testimony of Dr. Burdon-Sanderson. It is therefore highly probable that their vast numbers visible in organic and decomposing media simply result from their formation (?) and rapid multiplication according to a law of geometrical progression, rather than from numerous "germs" descending from the atmosphere.

Experiments we can only hint at, but of apparent interest and importance, have been instituted to determine the limits within which life is possible as regards temperature, more particularly in reference to the theory of "Fermentation." The author is supported in the results by the authority of Liebig, the great exponent of the "chemical" as opposed to the "vital" theory. Grave doubt is cast over the conclusions of Pasteur, which will require to be carefully considered by the distinguished observer. And as against those among the evolutionists who uphold the dogma "*omne vivum ex vivo*," Dr. Bastian forcibly urges—"They have never attempted to explain why those life-evolving laws, whose existence they postulate, should have ceased to operate in the present day." The answer is not on the surface, why a process which, *ex hypothesi*, commenced in time, should not in time be still continuous? It might be met by the supposition that if, in the

fulness of time, life were evolved from one or more centres, such an evolution would suffice—"Nature, greedy of her means, is prodigal of results." But how operative these laws even still may be will be seen when the final verification of the problem of "archebiosis" is attempted.

But we would now direct attention to the experiments detailed in the closing chapters of the first volume, in direct proof of the occurrence of "archebiosis." Analysis is not attempted, not alone from the want of necessary space, but from the desire, in fairness to the author, that they should be most carefully and completely scrutinised. Their value to his cause is extreme—indeed, the gist of the matter is here.

Leaving the question of the *de novo* formation of living units from non-living matter, we proceed to the history of the passage of such units, by fusion, into a higher life; in other words, of "heterogenesis," or the process by means of which "the matter of already existing things engenders others entirely differing from themselves and exhibiting no tendency to assume or revert to the parental type." Here we are brought in contact with the "proligerous pellicle of Pouchet"—the great nursery of heterogenetic transformations—transformations comparatively as sudden and startling as those of the kaleidoscope. Bacteria fuse into vorticellate types, while fungus-germs, monads, or amœbæ may be produced at will by merely regulating the amount of heat at which the infusion is prepared. And what is more singular, good observers state that the infusoria met with in different kinds of infusions have never presented similar characters; nor have they been more uniform in the same infusion when its different parts have been submitted to the incidence of different conditions. The slightest variation either in quality or quantity of materials employed was invariably followed by the appearance of different organisms, these being oftentimes strange and peculiar, and unaccompanied by any of the familiar forms. Pouchet states that he has seen new forms arise in solutions, which never again in the course of years presented themselves to his notice.

The observations of Trécul, Cohn, Robin, Lionel Beale, and the author with regard to the existence of living organisms within the closed cells of plants and vessels of animals are very remarkable. Are they to be accepted as examples of trustworthy observation?—we mean, of course, as respects the *de novo* origin of the organisms. On the theory of Dr. Beale—the interpenetration of the lowest with the highest forms of life—their presence would be explained. Otherwise, are they to be regarded as the true *autocthones* of the cell, or may they have gained entrance *ab extra?* If this were so, we could quite believe that under the influence of the "environment" transformations might occur. The author would also doubtless concede that rapid and almost indefinite multiplication of bacteria and vibriones before alluded to—at least, in unhealthy tissues to which these germs might have gained entrance. That they may live and increase in the blood of the frog is shown by the recent experiments of Hueter and Greveler. Nor must we forget what recent science has taught us concerning the mode of escape of the wandering leucocytes of the blood from their abode. It is therefore not impossible that minute amœboid specks—plastides—might find a similar mode of entrance. Further and more recent observations are required to decide the point, though admittedly, as it at present stands, strong in favour of the author's views.

We confess to read with surprise the statements of Dr. Gros as to the transformation of an algoid into an infusorial organism, and of the many and various transformations of euglenæ; nor does Dr. Bastian hardly surprise us less when he tells us he has actually witnessed the direct transformation of a vaucheria spore into a nematoid. We should have suspected an error of observation, and thought that the apparent worm might have been an abnormally-shaped gonidium, or rather zoospore, of the algal; but when the nematoid was kept under observation until the process of oviposit, what further can be opposed to so direct a statement—and supported as it is by the researches of De Barry? Surprise, however, culminates with Nicolet when he states "that the protoplasmic contents of one of the internodes of chara may be seen to give birth to a living progeny of independent living things, which subsequently undergo the most startling series of developmental transformations"! He *was*, however, supported by Mr. Carter in the statement that the infusorium named otostoma arose within the closed internode of the allied genus, nitella. In a foot-note, however, it is stated that this able observer has since changed his opinion as to the independent origin of the infusorium. Nicolet wrote in 1859, and it would be interesting to know whether he also has modified his view.

The larger part of the second volume is taken up with the further observations of other excellent observers—Pringsheim, Braxton Hicks, Moxon,—observations replete with high interest, and more or less converging upon the points at issue, to which we must refer the reader, and pass on to further experimental proof of what it is the great object of the work to show—"the beginnings of life."

Appendix A first describes organisms and other products of uncertain nature found in boiled solutions of ammonic tartrate and in others containing ammonic silicate. These solutions, if not boiled, but exposed to a moderate temperature, in three or four days become turbid and full of bacteria and vibriones; but if previously boiled, they exhibited no tendency to become turbid, but might be kept for a long time freely exposed to the air without any trace of these organisms, although the mixture was eminently favourable to their growth if brought in contact with it. An utter absence of infusoria has been a marked characteristic of these boiled solutions. Other sorts of organisms however, occur—fungus filaments, torulæ, coloured granules, etc. In consequence of the lowered tendency to fermentation from boiling, the torulæ grow very slowly. In addition to the organisms named which were found to be alive, other bodies of doubtful character appeared. First, the sarcina, considered by the experimenter to be not a living but a silicious compound formed by the process of "coalescence" described by Rainey; the next variety was a tangled spiral fibre, the engraving reminding one of a fibre of connective tissue. Another result deserves mention. In solutions containing nitrogen, oxygen, and hydrogen the carbon was replaced by some other element—either silicon, boron, chromium, aluminium, or iron. Except in those solutions replaced by silicon, no living beings appeared after boiling, and the necks of the flasks sealed during ebullition. This result seems suggestive, since silicon most nearly resembles carbon, and might therefore best replace it in compounds otherwise similar to those which constitute the basis of living matter.

Appendix B describes living matter and organisms contained within the crystals of neutral ammonic tartrate. In crystals of this salt among other matters present were, more rarely, a small quantity of tenacious mucoid matter containing refractive protein-looking granules of various sizes; a colourless confervoid-looking mass, some of whose smaller filaments looked like a mere linear aggregation of irregular masses of protoplasm, though in certain larger filaments continuous with these, the irregular protoplasm masses were contained within a delicate hyaline cylinder, across which dissepiments were sometimes to be seen, as in very minute fungus filaments; lastly, certain fungus spores. The question is, How came they there? From without? This Dr. Bastian doubts, and believes that they were formed *within* by the readjustment of the atoms of the crystal and of the dead organic particles it enclosed.

Appendix C (comparative experiments) contains an account of many and varied experiments with different substances boiled, and then either exposed to the air, or simply plugged, or hermetically sealed. The results are remarkable, and in proportion to the degree to which the fermenting power of the solutions has been modified by the process. We can only direct attention to those more directly bearing upon the question of spontaneous generation, in which the solutions were boiled and then hermetically sealed during ebullition, and must again refer the reader to the experimental evidence contained in the work itself, our mere reference doing but scant justice to the author.

We believe to have found justification for asserting that Dr. Bastian has made out for himself (to say nothing of concurring testimony) a fair *primâ facie* case in favour of "archebiosis,"—so far, at least, as what would seem admirably contrived experiments can conduce to such an end. For if in certain fluids inclosed in hermetically sealed and airless flasks, and submitted to such an elevation of temperature as is admitted by most leading biologists (of whatever creed) to be incompatible with the existence of any form of life, actual or potential—if, after a longer or shorter interval, myriads of living infusoria, "armed in proof," with other organic forms, at once appear—to be consequent, how are we (assuming every source of fallacy eliminated; but this, after all, is the real question at issue) to resist the conclusion that they have been, in some way, generated *de novo* in the circumambient medium? However opposed to the pure evolution theory, it seems an *experimentum crucis*, and without appeal. Grant but the spontaneous formation of the most insignificant vital unit, aloof from the influence of pre-existing protoplasm, and most else that Dr. Bastian contends for naturally follows, even to the marvellous phenomena the microscope reveals as

effected through the process of "heterogenesis." And thus the tiny picture of the hour may assist the imagination somewhat in speculating on those changes occurring on a grander scale among the higher types of being, which, if we admit the laws of pure evolution, may be supposed to have happened during the illimitable "process of the suns."

Here we must rest. The *quomodo* still remains untold. Before the primordial change the most highly-aided vision dims. We may, provisionally, ascribe it to the polarity, rearranging powers, etc., of the unstable and highly complex colloid molecules; but, *en rigueur*, do such terms really serve to unravel all the underlying law of the "αρχή" of the life-evolving complex? Is not such a view of the "beginnings of life" too mechanical—almost as much so as the "inherent tendencies" postulated of the atoms by Democritus? Does it not require to be supplemented by one coeval with the last, but now read by a purer light—the Anaxagorean "νοῦς"? Across the stage of the *immediate genesis*, even of the lowly bacteria, a dark veil is drawn, and under its cover leads the path from physical research into the domain of metaphysical speculation.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

December 3.

What is Adulteration of Milk?—Sanitary Matters in the Wrexham Union—New Hospital for Infectious Diseases at Liverpool.

A case of some importance under the Adulteration Act has just been heard by the Liverpool stipendiary magistrate, Mr. Raffles. It was that of the admixture of two parts of skim with one of new milk, and the sale of this compound as new milk. In the opinion of the magistrate such an addition did not render the defendant liable to the penalties imposed by the Act, inasmuch as, whether skimmed or not skimmed, milk is milk and not "another substance," which the 3rd section says must be added in order to constitute the proceeding one of adulteration. The offender, a Mrs. Waterworth, promised not to do the like again; but her ingenious evasion of the law may not be lost on some of the culprits who in this town have recently been fined for selling milk and water as milk, and who, if the magistrate's interpretation of the Act be the correct one, of which there seems but little reason to doubt, may now sin with impunity.

If reports, printed and circulated in Liverpool, are correct the application of the Public Health Act has not come at all too soon for many places. Of the condition of Brymbo and a part of the township of Broughton, both in the Wrexham Union, the most deplorable account is given. The Inspector has reported that there is no regular system of drainage, and that the few pipe drains are worse than open gutters in consequence of there being no traps, the foul gases being readily conveyed to the houses. The inconvenience in getting clean water for drinking and domestic uses is said to be very great, and the Inspector is reported to have seen water taken by some of the inhabitants for ordinary purposes from the common outlet of all the filth of the district. Of 403 inspected houses, ten are said to be totally unfit for human habitation; and twenty-four privies discharge their contents into the stream from which water is obtained for domestic use.

Happily Liverpool still retains the comparative healthfulness which it has now for so many months enjoyed. No serious epidemic having invaded it during the year, the death-rate has continued much below the average. To meet a want more felt in this, perhaps, than in any other town in the kingdom, a commodious hospital for infectious diseases, which is capable of accommodating 100 patients, has recently been opened. When, therefore, the next epidemic comes, there will be an asylum to which that class can be removed, who, although they have no permanent homes of their own, are not in the position to be sent to the workhouse hospital, which, however, was until recently alone available for them.

Medical Fees in Egypt.—Mahomed Ali Bey, an Arab surgeon, has received a fee of £1000 sterling, and been raised by the Viceroy to the rank of a pacha, for curing the mother of the Khedive of a serious malady which had seriously affected her health.

GENERAL CORRESPONDENCE.

MEDICAL TEACHING AND EXAMINATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am glad that you are taking this subject up. Having been a student, a lecturer, and an examiner (in a local school), permit me to give my experience.

As a student, I found the amount of labour which I had to undergo was enormous. Coming to London from the country, and already moderately well read, I attended lectures and took notes during five hours daily, not including dissection or hospital. My night's work, to put me in a position to meet the weekly class examinations, cost me four hours more. In other words, my student labour extended from 9 a.m. to 1 p.m., with an average interval of three hours daily.

I had no work to do outside professional study. No one could have worked more sturdily than I did, according to my lights. Some certainly "plodded" more.

My friends and I were too proud to "grind." Now for examinations.

I went up to "the Hall" for "preliminary Latin." The passage given for translation was ridiculously easy, and in two minutes my task was done. But a neighbour wanted my assistance, and then we became "observed." I rose at once, and took up my exercise, and "parsed" it. The adjective "neuter gender" came under observation, and I said that the construction was "a rule of the Latin language." "No, sir," was the rejoinder. "Oh," remarked I, "it used to be said that the adjective agreed with '*negotium* understood,' but that has been given up long since." "Indeed!" said the examiner. I gave my authorities, and he "shut up," my idea being that if I had to question him in Latin he would be plucked most assuredly.

A long period intervened ere I went to "the Hall" again. Once more I was face to face with one whom I thought then, and believe now, to have been incompetent to maintain his position.

One of his questions was, "Does a pound of lead weigh the same all the world over?" I answered, according to the then opinion, "that weight diminished in proportion to distance from the earth's centre." "No, no, no," was the rejoinder to all my replies; and my urgent inquiries elicited that the expected reply was that weight diminished at the equator, in consequence of the rotation of the earth round its own axis. I have never ceased to admire the ignorance of my questioner. Had he been the student, and I the examiner, he would have been plucked—*i.e.*, if it had seemed to me proper to put such interrogatories.

After having borne with this man's comparative ignorance about physics, I had to give replies about certain botanical names. Amongst others I was shown an "umbel," and asked its name; I knew the character well, but "suddenly to nominate it" was impossible, and I anticipated being "plucked." Had I been so, it was my resolve to challenge, by advertisement in every journal, my questioner to be examined by me. Time advanced, and I had to pass "the College." As it happened, it was my fate to sit only before three sets of examiners. The late Sir B. Brodie was one of a lot, and a more stupid set of questions than those put by him I never heard, either before or since. From that time to this I have been unable to understand what he was "driving at." I did get through; but had I not I should have consulted a lawyer as to whether the examiner had treated me fairly and an action would lie. My personal friends, who were "reading men," told me much the same thing. Nevertheless, we saw the nincompoops pass both "the Hall and College" easily, some with compliments. They had "ground."

My next experience was at the London University; and so long as the examinations were in exact science, such as anatomy, chemistry, etc., there was no reason to complain. Yet when the questions and answers related to hygiene, medicine, surgery, etc., the student who was advanced in knowledge felt that his examiners were incompetent. I speak seriously when I say that, were the then questioners examined now by the very men upon whom they sat in judgment, not one would be in the first class. As I did get through, and in "honours," my opinions are not framed upon any disappointment.

When I was "over the river," it was still a pleasure to see how other men "passed," or tried to do so. This feeling gradually turned into disgust when I saw that every questioner

seemed to try "how not to do it"; for example, the examiner in "Materia Medica and Therapeutics" asked about the treatment of bronchitis or other disease,—and there was a similar "wideness" in every department.

Next came my own turn to be an examiner—local, it is true, yet one in an important sense. My colleagues and I agreed that our questions should be "practical," and, as a result, we found that the students knew more than we had even hoped. Since then—having long been laid by on the shelf—my mind has been exercised upon the proper style of a collegiate or an university examination.

The conclusion arrived at is this—That for every "pass" examination the questions ought to be issued by one examiner alone; *e. g.*, suppose Dr. X Y Z is an examiner at the London University in medical matters, he must put all the queries in Physiology, Materia Medica, Chemistry, Hygiene, Medicine, etc. A B C must put similar ones in Anatomy, Surgery, Physics, etc. Multiply, if necessary, the questioners; yet every one of them must give questions upon *all* the subjects of inquiry—not upon one alone. Every examination-paper ought to bear the questions of every examiner, with a secret cipher attached to each lot; and no set of answers should be judged of by the individual who framed the questions—*i.e.*, A judges of answers to B's queries. If this plan is tried no one can have a fair right to complain.

Now as to lecturing. I have worked, and in no ordinary way, at preparing materials for the instruction of my pupils. I have studied to the best of my ability to make my hearers understand and remember what I have told them; yet I must say that I would infinitely prefer to lecture for three hours than to examine for one. I manfully did my duty, nevertheless, and after some experience found that a written was superior to an oral questioning. The replies which this plan brought about induced me to modify my style of lecturing, and from being didactic I became conversational. But every step forward was tentative; and now, when all my personal interest in teaching has gone, I still watch with thoughtfulness the effect produced by others' instruction. It seems to me that what has steadily stood in the way of advancement is the incompetence of examiners. By "incompetence" I do not mean that they are, as a body or individually, unworthy of their position in the Profession; but I assert that the very best surgeon or physician may be, and generally is, unable to ascertain the amount of knowledge possessed by a student. Until such examiner has himself been tested, there ought, in my opinion, to be a sort of "*concours*" ere any examiner is allowed to sit in judgment upon others, especially the young who have new lights, whether of their own or of their teachers.

The tribunal for examiners ought to be a committee, or the whole body of associated lecturers, whose questions should be made public, so that there should be no "catch" or "puzzling" questions. When once anything approaching to this scheme is adopted students will have a fair chance of obtaining a "pass" degree.

For "honours" the examination may stand pretty much as it is. The way in which the present system "works" is, that students study the idiosyncrasies of the examiners under whom they may come. Instead of working up the most important parts of their subjects, *quoad* their future profession, they work at out-of-the-way matters, because Mr. A or Dr. B is known to have "a fad" in a particular direction. Thus I once, from curiosity, attended a grinder's class and heard a sort of lecture about animal heat. "Now, gentlemen," the professor observed, "if Mr. C asks you the source of animal heat you must answer, 'D, E, F'; if Mr. G inquires you must reply, 'H, I, J'; if Mr. K is the man you must be sure to tell him that it is caused by 'L, M, N.'"

Let me now inquire whether Mr. C would have passed Mr. G, or whether both would not have been "plucked" by Mr. K? Such contingencies ought not to be possible. Allow me to finish my letter by an anecdote.

A personal friend of my own, and another individual, both of whom are in the forefront of the metropolitan physicians, took their M.B. (Lond.) examination in honours at the same time that I did; my friend was second, the other first, yet neither was adjudged worthy by the examiners of an exhibition—the first and best only took a second place. Dr. Dash said to me, "I don't deny that Dr. Stroke may have been better than I, but if he has been it is a shame to deprive him of his due reward." We thought then, as we do now, that the examiner was not fitted for his place. For your private eye I mention the names involved, including my own, but allow me to subscribe myself a

PAST PARTICIPLE.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 22.

J. COOPER FORSTER, F.R.C.S., Vice-President, in the Chair.

Dr. HERMANN WEBER read a paper for Dr. Schliep "On Two Cases of Dilatation of the Stomach, with speedy Improvement and Recovery under the use of the Stomach-pump." In many other cases, also, the results of the application of the stomach-pump had been eminently satisfactory, and appeared in general in the following order:—Vomiting ceased, pains disappeared, appetite and action of the bowels soon became better, the general health was improved, and the patient's weight was increased. In some cases it was found desirable to wash out the stomach with solutions of various medicines; and he tried soda, creasote, boracic acid, and permanganate of potash with good effect. The patient soon became accustomed to the introduction of the pipe; and, after several applications, the unpleasantness of the operation disappeared entirely. The fear of sucking some mucous membrane into the opening of the tube was almost without foundation, and such an event might be avoided by care and by inserting an indiarubber tube between the pipe and the pump, which would close as soon as any impediment opposed the flow of liquid to the pipe. It happened once to Dr. Schliep in about six hundred applications of the pump, to bring up a small piece of the membrane, when the patient himself pulled out the tube somewhat suddenly after the finishing of the operation; but no bad consequences followed. Considering the advantages of the stomach-pump in the cases alluded to, Dr. Schliep believes that this method of treatment will take an important place in the therapeutical agents in stomach diseases.

Dr. CHOLMELEY, having read Kussmaul's paper on the subject, had looked carefully for cases appropriate for the treatment, but though that was some time ago, he had failed to find any. But that paper extended the use of the stomach-pump to almost all cases of chronic dyspepsia. Usually, he found these cases amenable to ordinary treatment. Extensive dilatation of the stomach was rare, except as the result of obstruction at the pylorus. In cases of sarcinous vomiting the plan might be useful.

Dr. HILTON FAGGE's attention had been directed to these cases of dilatation of the stomach, and he had found them more common than he had supposed. He thought the diagnosis of them might be helped by actual examination and looking for the peristaltic action. In them the stomach is dragged down and its own proper space vacated. He had lately observed another form of dilatation coming on suddenly, so that the stomach filled the whole abdomen except the right hypochondrium. The condition came on suddenly with sickness. The stomach-pump was used in one of these cases, and seven pints of fluid removed. This relieved the patient for a time, but death followed from exhaustion. In another case there was more difficulty in making out the cause of death; yet the only malady seemed to be an enormously distended stomach. After death, in this case, the stomach fell back to its normal size on being emptied.

Dr. H. WEBER, for Dr. Schliep, said dilatation was not quite so rare as Dr. Cholmeley thought. Sarcinous cases were among the first operated on. The effects of the proceeding were not limited to cases of general dilatation alone. In some of chronic phthisis where it was used great good followed. The number of operations mentioned in the paper did not refer to single cases, but to the same case over and over again sometimes. He thought that by this plan we might learn something of the digestibility of different kinds of food in any given individual. In malignant disease it improved the condition of the patient, and under no circumstances did it inflict any particular harm on the stomach.

Mr. NUNN read a paper "On Two Cases of Cancer of the Left Breast"—the first of eight years', the second of twelve months', duration. The first case was that of Ann F., spinster, aged 44. The patient came under Mr. Nunn's care as out-patient in 1868, two years after removal of a cancer from the left breast by Mr. Henry Smith at King's College Hospital. In 1870 she was admitted in-patient at the Middlesex Hospital. Soon after her admission the recurrent cancer sloughed out, and the sore healed, and remained healed until her death, in August, 1872, from cancer of the liver; the lungs, spleen,

and kidneys being normal, while secondary deposit was found on the inner and outer aspects of the ribs of the right side and also in the manubrium sterni. The second case was that of Mrs. R., who was brought to Mr. Nunn by Dr. Saunders, of South Molton-street. The patient was the mother of five children, and was only 27 years of age. At the sixth month of her last pregnancy she had discovered a small lump in the left breast. Two months after her confinement she came under Mr. Nunn's observation. The tumour was at that time undefined. After two months the patient suffered from ptosis of the left eye, and ultimately with paralysis of the third nerve generally. She became extremely fat; and she died paralysed in the lower extremities, frequently having suffered from severe neuralgic pains in the upper cervical and dorsal regions. Towards the end of her life the temperature in the axilla was 104°, the cancer of the breast having become of stony hardness. Mr. Nunn remarked upon the uncertainty of surgical practice in respect of cancer, which, he said, must remain uncertain so long as our knowledge of the disease was incomplete. The variety of forms in which cancer presented itself was in some measure due to the modification of the disease by the peculiarity of the structure in which it was found, and by the situation and surroundings of the selected structure. In the first case the cancer occurred in an unmarried, undersized woman, whose frame was undergoing involution; in the second case the disease appeared in a woman in full reproductive activity. Assuming cancer to be a local disease, we were still unable to say what rendered the cancer germs stationary, living their life and undergoing retrograde changes without travelling to distant parts and there proliferating; and we were unable to tell what constituted the difference between cancer germs content with a local career, and those of a propagandist order, or what conditions provided each of these opposite degrees of activity. Was non-contamination due to resistance of the parts or tissues exposed to contamination, or to some local change in the cancer destroying its power of contaminating? What share had inflammatory action, by softening the tissues and stimulating proliferation, in promoting diffusion? Assuming, on the other hand, that cancer was a blood disease, how could one justify the removal of a cancer by operation? A clinical study of cancer showed that, if the surgeon did not step in with knife or with caustic, the disease itself, by inducing gangrene or ulceration, produced a wound that very rarely healed; and that, therefore, the surgeon did in a clean and effectual manner, *pro tempore*, what sooner or later the disease would more painfully and ineffectually attempt. Mr. Nunn asserted that he had seen no instance in which diffusion of cancer was really accelerated by operation.

Mr. Hulke read a paper "On Œsophagismus in a Young Boy." A very pale emaciated schoolboy, aged 10, was placed under Mr. Hulke's care, in the Middlesex Hospital, on October 17th, by Mr. C. Rose, of Hampstead. During four months he had constantly vomited food and drink, so shortly after taking them that Mr. Rose thought they could not have reached the stomach; milk returned uncurdled. A probang appeared to meet an obstruction just above the lower end of the œsophagus. Giving him a cup of milk before the class, the child swallowed a couple of mouthfuls, then his face flushed, he retched and threw up the milk quite unchanged. Some sopped bread was thrown up in the same way. He said he felt the milk pass down to a spot (pointing to the middle of his breast-bone) beyond which it could not get; then it choked him and made him sick. The extreme rarity of organic disease of the œsophagus diminishing its calibre at so early an age, except as a consequence of chemical or mechanical injury (and there was no history of such an antecedent), and the absence of any physical signs of a mediastinal tumour which might press on the tube, pointed to a spasmodic contraction, and this was presumed to be a simple neurosis, and not to be due to a circumscribed inflammation or ulcer in the mucosa, as no pain was felt in the spot where the food and drink seemed to stop. He was closely watched, and ordered milk and any simple food he fancied. Next day it appeared that he was not invariably sick directly after taking food, but he had kept down some milk at least half an hour. Three days later he said that he knew he could not get better, because no medicine was given him to make him well. To meet this difficulty, with much gravity he was ordered to take two teaspoonfuls twice a day of a mixture of two drachms of compound spirit of lavender in six ounces of water, and was told that we expected at the next visit to learn that the sickness had quite ceased. This answered completely. A fortnight later he went home, having been sick once only, and that in a violent passion, just after dinner. His mother was extremely hysterical.

THE PATHOLOGICAL SOCIETY.

Tuesday, December 4.

Mr. J. Cooper Forster, F.R.C.S., in the Chair.

Mr. Arnott read a full report on Mr. T. Norton's specimen of loose cartilage from a joint. Its structure was not purely cartilaginous, but partly also contained hardened deposits resembling bone. It had no epithelial covering, but one of fibrous tissue only.

Dr. Julius Pollock exhibited a young woman, aged 18, who presented a Curious Obstruction to the Circulation in the left arm and side. At the same time there was marked want of development in that arm, which was both shorter and smaller than the other. Five years ago she observed enlargement of the veins on that side; later on the arm was observed to be smaller and weaker than the other, and the pulse was rather weaker on that side. The only complaint was of weakness. There were some nodules on the spine of the scapula. He would be glad if anyone would help him to an idea as to the site of the obstruction. Perhaps there was pressure on both arteries and veins.

Mr. Hulke exhibited a peculiar-looking Tumour from the Axilla of a middle-aged man. Five years ago a knot appeared above the right breast; this was removed. A year later another was removed. Three years later one in the arm-pit was removed. After this there was a fourth recurrence exactly on the site of the third; it was lobulated. The skin was tight but not infiltrated—it was beginning to ulcerate; and the chest was traversed on that side by large veins. The mass when removed presented a singularly spongy appearance, but when examined by the microscope it turned out to be a true sarcoma, consisting of cells of the connective-tissue type, with a certain amount of interstitial substance.

Dr. C. Theodore Williams exhibited a specimen of Mediastinal Tumour constricting the right bronchus and causing enormous dilatation of the smaller tubes from accumulated secretion. The tumour, which under the microscope proved to be one of soft carcinoma, was about the size of a fist, invaded both bronchi, and beautiful villous outgrowths of it appeared on the mucous membrane. It also compressed the œsophagus, causing dysphagia, and narrowed the aorta considerably, involving the left recurrent and sympathetic nerves. The patient, a man aged 41, with a history of cough, wasting, dyspnœa, slight aphonia, and scanty expectoration of nine months' standing, was admitted into the Brompton Hospital under Dr. Williams, who, from the symptoms and physical signs, diagnosed compression of the right bronchus by a tumour. Paralysis of the left vocal cord was detected by the laryngoscope; and after several attacks of stridulous dyspnœa, the patient sank from catarrhal pneumonia. The cervical glands were affected, but the narrowing of the aortic arch did not give rise to any perceptible murmur.

Dr. Powell remarked on the way in which pneumonia was sometimes set up by retained secretions, even though not fetid. A case somewhat similar to this had been under the care of Dr. R. Thompson. In the case of Dr. Williams there was a high temperature. Dr. Burrows relates a case somewhat similar, where there was a pneumonia caused by obstruction.

Mr. T. Nunn exhibited the cast of a Thigh, the subject of a Peculiar Curvature. The patient had long been under observation. As she grew it was found that this curvature was formed, the other limb being straight. He fancied this might be due to imperfect development of the inferior cartilage, as the thigh-bone had been injured or diseased, and so the limb had grown unequally, one side of the bone growing faster than the other. The mother's forehead was peculiar and badly shaped. It was just possible there might be traumatic syphilis.

In reply to Dr. Goodhart and Dr. Ballard, Mr. Nunn said there was no other indication of syphilis.

Mr. Arnott showed a specimen of Epithelioma of the Labia Pudendi from a young woman aged 21. Some time ago a sore appeared on the vulva, which was taken to be venereal, and the girl was treated with mercurials. Under this treatment she rapidly got worse, and at last it was made out to be malignant. It was hard, papillary, and painful. It was removed, but six weeks after the operation the wound was not healed. The tumour was epitheliomatous; on its surface was a papillary growth, beneath that squamous epithelium, and in its stroma were many rounded bodies. Such a growth was rare in one so young, and rather rare in these parts. Out of 130 cases of epithelioma he had collected, in only four were the

female genitals affected, and the early ages of some were also doubtful.

Mr. Butlin said a young child had been operated on for such a growth on the vocal cords. It was, however, probably a papilloma.

Dr. Edis had seen three cases of epithelioma of the female genitals; one in a patient aged 42, the second was aged 43, and the third 45.

Dr. King exhibited a specimen of extreme Aortic Stenosis from a woman aged 45. She had been healthy to the age of 33, when she had rheumatism, and five years ago she had a second attack. Last summer she began to show signs of heart disease, which speedily became greatly aggravated. Her legs began to swell, but there was no ascites; the heart's apex beat at the seventh interspace, and there was a loud, coarse, systolic bruit at the base of the heart. The second sound was roughened. The pulse was small, and there was cough and purulent expectoration. She latterly had frequent fainting fits, and died in her sleep. The left lung was diseased, the pericardium adherent, and the heart was very large. The aortic valves were destroyed, and the opening almost occluded; water would not pass through. The aorta was dilated, and the kidneys granular.

Mr. W. Spencer Watson exhibited five Recurrent Tumours removed from the Leg by Dr. J. Swift Walker, of Hanley. Several tumours had been already exhibited at the Society from the same patient, and had proved on examination to be spindle-celled sarcomata, with extravasated blood in the interstices. The patient was a lady aged 31, who first noticed the disease in her leg about April, 1870, and since that date fourteen separate operations have been performed, the tumours returning after each operation with extraordinary rapidity, notwithstanding the free use of strong solutions of chloride of zinc at each operation. On one occasion a tumour of the size of a pigeon's egg sprang up within a fortnight after a previous growth had been excised. Previously to removing one of the largest tumours, which presented a bleeding, fungoid surface, Dr. Walker tied the femoral artery of the limb affected, and then at the same sitting removed the tumour. There was no recurrence of the growths after this double operation for nine months, when a growth made its appearance in the calf of the leg, but no return of the disease in the cicatrix of the original wound was noticed till fifteen or sixteen months after.

Mr. Arnott said tying the femoral artery was certainly novel, but complete excision of the tumour would have been far better for the patient. The way in which the tumours had been removed almost insured the leaving behind of some of the elements growing in and outside the so-called sheath. The case was a warning rather than anything else.

Mr. Watson said the earlier ones were completely extirpated.

Mr. Arnott replied that he examined the tumours, and found them cut close to the soft mass, and the substance was in part cut off, though this, he believed, was done after removal.

Dr. Silver exhibited a specimen of Pancreas which had undergone Fatty Degeneration and in part become calcified. This was removed from the body of a man who died of diabetic phthisis. The condition, though rare, was not unknown, having been noticed in the cliniques of both Traube and Frerichs. Out of thirty-three sections made by Rokitansky in diabetes the pancreas was described as being unusually small in sixteen, but fatty degeneration was not noted. During life the man passed large quantities of oily matter by his bowels.

Mr. Coupland had recently seen in a case of diabetes the pancreas large and fibrous.

Dr. Silver pointed out that the common degeneration of the pancreas in such cases was cirrhotic, and it was a mere accident whether it was found in the early and enlarged stage or in the later contracted one.

Dr. Goodhart showed a specimen of Cancer of the Tonsil from a male aged 18. The malady was supposed at first to be tonsillitis, but in the Nottingham Hospital, where he died, the malady was diagnosed. A large flocculent mass occupied the site of the right tonsil. At first he took it for a lymphoma, but found it allied to a medullary growth.

Arts Examination.—The half-yearly preliminary examination of candidates for the diplomas of Fellow and Member of the Royal College of Surgeons was commenced at the London University on Tuesday last, and brought to a close this day (Friday). There were 305 candidates—viz., 95 for the Fellowship and 210 for for the Membership.

OBITUARY.

GEORGE SKINNER, M.R.C.S., L.S.A.

This gentleman, whose death occurred on the 12th ult., was an old and successful practitioner in the city of Bath. He commenced practice about the year 1818, and in the early part of his career was for some time associated in partnership with Dr. Pring, author of the Jacksonian prize essay ("On the Absorbents") for 1813. Mr. Skinner had a high reputation among his medical brethren as an accomplished obstetric surgeon, and in 1831 edited Gooch's "Lectures on Midwifery," from notes taken by himself while attending Dr. Gooch's course. Of this little work it is scarcely too much to say that it is one of the best really practical manuals on the subject which can be in the hands of the student or practitioner. The eldest son of Mr. Skinner gave great promise of high reputation, he having gained one of the Studentships of the Royal College of Surgeons, and afterwards an appointment in the H.E.I.C.S., from which, however, he returned home in about three years, just in time to die in his native land of consumption. This was a great shock to his father, who shortly afterwards retired from practice, although continuing to reside in the vicinity of Bath. Mr. Skinner's death was very sudden, the writer of this brief notice having conversed with him (he being apparently in his usual health) an hour or two previously. He had a presentiment that such would be the case, and had often expressed it to his friends. The deceased gentleman was much respected by a large circle of friends, professional and private. Under a quiet and somewhat reserved demeanour was hidden much sound judgment, business aptitude, and shrewd intelligence. Mr. Skinner had completed his 75th year.

CHARLES NATHAN, F.R.C.S.,

Died at Sydney on Friday, September 20. He practised his profession upwards of thirty years, and had attained the 56th year of his age. During the long period of his residence in Sydney he gave the assistance of his great talents to many public institutions. To the Sydney Infirmary he rendered eminent services, and was Honorary Surgeon of the Sydney Female Refuge from the date of its establishment. He took an active interest in educational as well as philanthropic movements; and as a member of the Senate of the Sydney University and a Fellow of St. Paul's College he participated in the government of those institutions. He has left a numerous family, who will inherit an honoured reputation. He was held in high esteem by the Profession, and universally beloved. We are glad to perceive that the friends of the deceased gentleman called a meeting, which was most influentially attended, for the purpose of raising a fund to be presented to his family in testimony of the great public benefits rendered by him to the community, and especially to the poorer classes, during a long course of years. The sum of £1150 was at once subscribed.

MR. ALFRED KIDGE,

House-Surgeon of the Newport (Monmouthshire) Infirmary and Dispensary, was, we regret to state, found dead in his bed on Wednesday week, with his throat cut. On Monday he gave evidence at a coroner's inquest on the body of a child, who, it was alleged, had died from poison. Mr. Kidge had attended the infant before its death, and the parents accused him of poisoning the child, and abused him openly at the inquest. He had refused to give the parents a certificate for the burial of the child, and himself made, on the authority of the coroner and jury, a post-mortem examination, from the particulars of which the jury found that the child died from living in an ill-ventilated house. The deceased gentleman suffered greatly from deafness and was of a nervous temperament, and it is surmised that the abusive treatment of the parents of the child preyed upon his mind and caused him to commit suicide. He had been most energetic in his duties to the Infirmary patients both in and out of doors for a long time past, and was much esteemed and respected in the town. He was middle-aged and unmarried.

BENJAMIN GODFREY, M.D. St. And., M.R.C.S., L.S.A., Died at Enfield on November 22 last. He was born at Romsey, Hants, in 1829, was articled to Mr. Taylor, of Romsey, and in 1840 entered as a student at Guy's Hospital, where he successively held the appointments of Obstetric Assistant and House-Surgeon, and subsequently qualified himself for prac-

tice, and in November, 1845, went to Enfield, where he had an extensive practice for upwards of twenty years. He was author of "Vaccination, its True Use and Power," and contributions—"Porrigo *versus* Eczema," "Cases of Diphtherite," "Case of Internal Uterine Hæmorrhage," and several other papers to medical journals. Dr. Godfrey was highly esteemed by a large circle of friends.

WILLIAM GIBNEY, M.D. Edin.,

Died at Bath on the 4th instant, aged 78. In 1813 he entered the army, and served as Assistant-Surgeon in the 15th Hussars at Waterloo. He afterwards practised at Cheltenham, and became Physician and Consulting Physician to the Cheltenham General Hospital and Female Orphan Asylum. On his retirement from practice he resided at Totnes and afterwards at Torquay.

MEDICAL NEWS.

University of London.—The following are lists of the Candidates who have passed the recent M.S. and B.S. Examinations :—

The Degree of M.S.

Aveling, Charles Taylor, student of St. Thomas's Hospital.

The Degree of B.S.

FIRST DIVISION (HONOURS).

Godlee, Rickman John, B.A., of University College, Gold Medal. } Equal.
Greenfield, William Smith, of University College, Gold Medal. } Equal.
Cane, Leonard, of University College.(a)

SECOND DIVISION.

Wall, Alfred John, of St. Mary's Hospital.

Royal College of Surgeons of England.—The following Members of this College having undergone the necessary Examinations for the Fellowship on the 21st, 22nd, and 23rd ultimo, and being reported to have acquitted themselves to the satisfaction of the Court of Examiners, were admitted Fellows of the College at a meeting of the Council on Thursday, the 12th inst., viz. :—

Clarke, Thomas Kilner, M.A. and M.B. Cantab., Huddersfield, diploma of Membership dated January 24, 1871, student of Guy's Hospital.
Howell, Horace Sydney, M.D. St. Andrews, L.R.C.P. Lond., Great Dunmow, Essex, April 10, 1861, of St. Bartholomew's Hospital.
Owen, Edmund Blackett, M.B. Lond., Cleveland-square, May 19, 1868, of St. Mary's Hospital.
Parker, Rushton, M.B. Lond., Kirkdale-road, Liverpool, April 20, 1869, of University College.
Pritchard, Urban, M.D. Edin., L.R.C.P. Lond. and L.S.A., St. Paul's-road, Highbury, November 19, 1869, of King's College.
Smith, Herbert Alder, L.S.A., Christ's Hospital, Newgate-street, January 25, 1870, of St. Bartholomew's Hospital.
Wall, Alfred John, M.B. Lond., South Lambeth-road, November 19, 1869, of St. Mary's Hospital.

Four candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months.

The following Members of the College were elected Fellows at the same meeting of the Council, viz. :—

Evans, Charles, L.S.A., Bakewell, Derbyshire, diploma of Membership dated August 23, 1839.
Palmer, Frederick, L.S.A., Great Yarmouth, February 17, 1837.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 5, 1872 :—

Deacon, Henry Pelham, Clapham.
Hickman, Richard, Newbury, Berks.
Juler, Henry Edward, 115, Holborn, E.C.

As Assistants in Compounding and Dispensing Medicines :—

Bishop, Charles Henry, Woolwich.
Cunningham, Thomas, Chelsea.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Allden, John Horatio, London Hospital.
Arthur, Walter, Westminster Hospital.
Butter, George Bleeck, St. Bartholomew's Hospital.
Gilmour, John Henry, St. Thomas's Hospital.
Mahony, John Robert, R.C.S. Dublin.
Winkworth, Frederick Sydney, University College.

APPOINTMENTS.

Barber, Oliver, M.R.C.S. Eng., L.S.A.—Assistant House-Surgeon to the General Infirmary, Sheffield.

Brown, Robert Ross, L.R.C.P. and L.R.C.S. Edin.—Medical Officer for the Strood District of North Aylesford Union, Kent.

(a) Obtained the number of marks qualifying for a Gold Medal.

Farr, Archer, L.R.C.P. Edin., L.S.A.—Chloroformist at Charing-cross Hospital.

Ford, T. H., L.R.C.P. & S.—Assistant-Surgeon to the Hospital, Leith.

Heutcheon, H. S., L.R.C.P., M.R.C.S.—Medical Officer to the Friendly Societies' Medical Association, Derby.

Jones, Robert Arthur, M.R.C.S.E., L.S.A.—Surgeon and Admiralty Agent at Carnarvon.

Meadows, G. F. W., M.R.C.S. Eng., L.S.A.—Medical Officer for District No. 4 of Woodbridge Union, Suffolk, *vice* G. F. Meadows, M.R.C.S. Eng., L.S.A., resigned.

Reid, Alexander, M.A., M.D., C.M.—Medical Officer for the Canonbury District.

Robertson, A. Milne, M.B.—House-Surgeon to the Infirmary, Alnwick, *vice* D. C. M'Vail, L.R.C.P. Edin., resigned.

Snell, John, M.R.C.S. Eng., L.R.C.P. Edin., L.M. Edin.—Medical Officer for the Holme District of Howden Union, Yorkshire.

Tidy, Charles Meymott, M.B., M.R.C.S. Eng., L.S.A., F.C.S.—Medical Officer of Health for Islington.

Tindale, Wentworth Raynes, M.R.C.S. Eng., M.B., M.S.—Medical Officer for the New Hampton District of Kingston Union, Surrey.

Turner, John, M.D. Edin., M.R.C.S. Eng.—Medical Officer to the Provident Dispensary, Leicester.

MILITARY APPOINTMENTS.

War Office—Medical Department.—Surgeon-Major Thomas Fraser, M.D., from the 10th Hussars, to be Staff Surgeon-Major, *vice* Staff Surgeon Thomas Rawlings Mould, M.D., appointed to the 20th Foot; Assistant-Surgeon William Sly, from the Royal Artillery, to be Staff Assistant-Surgeon, *vice* William John Campbell, appointed to the Royal Artillery.

BIRTHS.

Farrington.—On December 5, at The Moat, Penshurst, Kent, the wife of W. H. Farrington, M.D., of a son.

M'Clean.—On December 8, at 10, Stephen's-green North, Dublin, the wife of Francis M'Clean, L.F.P.S. Glasg., L.M., of a son.

Lownds.—On December 10, at Egham-hill, the wife of T. M. Lownds, M.D., retired from H.M. Indian Army, of a son.

Peniston.—On December 9, at Malvern, the wife of John Peniston, M.R.C.S. Eng., L.S.A. Lond., of a daughter.

Roberts.—On December 8, at 30, Kensington-square, the wife of Arthur Roberts, M.R.C.S., L.R.C.P. Lond., of a son.

Sibley.—On December 8, at 12, New Burlington-street, W., the wife of Septimus W. Sibley, F.R.C.S., L.S.A., of a son.

MARRIAGES.

Adams—Moore.—On December 8, Edward John Adams, M.R.C.S., L.S.A., L.M., Medical Officer to St. Mathew's Infirmary, to Sarah Catherine, daughter of the late Dr. Edward Moore, of Victoria-park, London.

Arbuthnot—Atkinson.—On November 14, at St. George's Cathedral, Madras, Captain Archibald Ernest Arbuthnot, 8th Madras Light Cavalry, third son of A. F. Arbuthnot, Esq., to Anne Elizabeth, widow of the late Alexander Russell Atkinson, M.D., Surgeon-Major Bengal Army, and eldest daughter of W. W. Ball, Esq., of Cape Town.

Carmichael—Chatfield.—On December 3, at St. Ann's parish church, Lewes, James Carmichael, M.D. Edin., eldest son of William Scott Carmichael, F.R.C.S. Edin., to Elizabeth Lash, eldest daughter of Edward Chatfield, Esq., St. Ann's, Lewes, Sussex.

Horniblone—Sherwood.—On December 4, at the parish church of St. Marylebone, George Horniblone, M.D., of Leamington, late 72nd Highlanders, to Catherine Porshouse, youngest daughter of the late Wm. Stacey Sherwood, Esq.

Rowan—Lowder.—On December 4, at Newport, Isle of Wight, Thomas, eldest son of John Martin Rowan, Esq., of Beechwood, Partick, near Glasgow, to Blanche Amy, youngest daughter of Charles D'Oyly J. Lowder, M.D., of Lansdowne House, Ryde, Isle of Wight.

DEATHS.

Gibney, William, M.D., formerly Assistant-Surgeon in the 15th Hussars, and present with that regiment at Waterloo, at Bath, on December 4, aged 78.

Kibbler, Rosina, fourth daughter of R. C. Kibbler, L.R.C.P., M.R.C.S., L.S.A., at Mordaunt House, Hackney, on December 10, aged 16.

Morgan, William Francis, F.R.C.S., at 2, Berkeley-square, Bristol, on December 9, aged 72.

Simpson, Eliza, widow of John Treadwell Simpson, late Surgeon-Major Coldstream Guards, at Chipping Barnet, on December 8, aged 82.

Warneford, Emma, widow of the late Charles Warneford, surgeon, Brighton, at the residence of her sisters, the Misses Galley, Norbiton, Kingston-on-Thames.

Young, Isabella, wife of G. E. Young, M.D., at Grosvenor Lodge, Headingley, Leeds, on December 2.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Addenbrooke's Hospital, Cambridge.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

Charing-cross Hospital Medical School.—Demonstrator of Anatomy. Preference will be given to candidates who will undertake the Lectures on Comparative Anatomy in the Summer Session. Applications and testimonials to Dr. A. J. Pollock, Dean of the Medical School.

Coventry and Warwickshire Hospital, Coventry.—House-Surgeon. Candidates must possess both medical and surgical qualifications. Applications, with testimonials, to the Secretary, on or before Dec. 21.

Derbyshire General Infirmary.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification from one of the recognised licensing bodies of the United Kingdom. Applications, with testimonials, to Mr. S. Whitaker, 4, Victoria-street, Derby, on or before December 21.

Dorset Lunatic Asylums, near Dorchester.—Assistant Medical Officer for Forston Asylum. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee of Visitors (under cover to Mr. J. Brown, Dorchester, Clerk to the Visitors), on or before January 6, 1873.

German Hospital, Dalston.—Honorary Assistant-Physician. Candidates must be natives of Germany or prove themselves thoroughly conversant with the German Language, and possess a Diploma from a foreign or British University. Applications, with testimonials, to A. Walbaum, D.D., Honorary Secretary, on or before January 6, 1873.

Howden Union.—Medical Officer for the Newport District. Candidates must be duly qualified. Applications, with testimonials, to George Green, Clerk, on or before December 26.

Isle of Man General Hospital and Dispensary, Douglas.—Resident Medical Officer. Candidates must be duly qualified. Applications, with testimonials, to E. L. Watts, Esq., Honorary Secretary, on or before December 17.

Lexden and Winstree Union.—Medical Officer for the Ninth District. Candidates must be duly qualified. Applications, with testimonials, to W. Howard, Clerk to the Board, on or before December 31.

Manchester Royal Infirmary.—Senior House-Surgeon, or, in the event of the Junior being appointed, the post of Junior House-Surgeon. Candidates must possess both a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Weekly Board, on or before December 14.

Oldham, Borough of.—Medical Officer of Health. Candidates must be duly qualified. Applications, with testimonials, to John Ponsonby, Town Clerk, Town Hall, Oldham, on or before December 31.

Royal Portsmouth Hospital.—Superintendent of the Lock Wards. Applications, with testimonials, to E. Madeley, Esq., House-Surgeon and Secretary, on or before January 2.

Royal Surrey County Hospital.—House-Surgeon. Candidates must be legally qualified and duly registered. Applications, with testimonials, to the Assistant-Secretary, on or before January 6, 1873.

St. George's Dispensary, 59, Mount-street.—Resident Medical Officer. Applications, with testimonials, to Dr. Wegg or Dr. Sutherland, at the Dispensary.

Samaritan Free Hospital for Women and Children, Lower Seymour-street, Portman-square.—Physician and a Surgeon for the Out-patient Department. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before December 23.

Worcester General Infirmary.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Bath Union.—Mr. Hugh Massey has resigned the Second District; area 617; population 11,268; salary £43 per annum.

Lambeth Parish.—Mr. Henry S. Hutcheon has resigned the Seventh District; salary £75 per annum.

Malton Union.—Mr. George Buckell has resigned the Leavening District; area 18,380; population 2605; salary £40 per annum.

Wirral Union.—Dr. Gibson has resigned the Bebington District; area 6152; population 6328; salary £40 per annum.

APPOINTMENTS.

Daventry Union.—Benjamin C. Gowing, M.R.C.S. Eng., L.S.A., to the Fifth District.

Ecclesall Bierlow Union.—Charles M. Meller, M.R.C.S. Eng., L.S.A., M.D. Univ. Aber., to the Second District.

Glanford Brigg Union.—Lucas M. Bennett, M.R.C.S. Eng., L.S.A., to the Burton Stather District.

Kington Union.—Thos. J. James, M.R.C.S. Eng., to the Huntington District.

An examination of Assistant-Surgeons in the Royal Navy, who are eligible and who may be desirous of qualifying themselves for the rank of Surgeon, will be held at the Royal Naval Hospitals at Haslar and Plymouth on Thursday, January 16, 1873.

The election of an examiner at the Royal College of Surgeons, in the vacancy occasioned by the resignation of Mr. John Adams, will take place at a special meeting of the Council in January. The member of the Council next in rotation—if this be observed—is Mr. Luther Holden, of St. Bartholomew's Hospital, a choice which we think would give general satisfaction.

The total number of medical students attending the University of Glasgow during the present session is 324. Of these eighty are of the first session.

The West Ham Local Board of Health have declined to receive any payment from the Government towards the salaries of the Medical Officer and Inspector of Nuisances.

Prizes.—One of the Actonian Prizes of one hundred guineas has been awarded by the managers of the Royal Institution to Mr. Benjamin Thompson Lowne, M.R.C.S. Eng., Lecturer on Physiology at the Middlesex Hospital, for his essay "On the Theory of the Evolution of Living Things." Mr. Lowne, who passed the Anatomical and Physiological Examination for the Fellowship of the Royal College of Surgeons last month, is well known from his other numerous contributions to science, especially for his descriptive catalogue of the teratological series in the Museum of the Royal College of Surgeons of England, and his "Natural History of the Blow-Fly." The other prize was obtained by the Rev. George Henslow, M.A.

Paris Faculty of Medicine.—Two of the three vacant chairs have been filled, by the election of M. Charcot into that of Pathological Anatomy and of M. Léon Le Fort into that of Operative Medicine.

University of Cambridge.—The Board of Medical Studies have recommended the following amendments in the present regulations for certificates of medical study in the University, and of attendance on lectures:—"As evidence of medical study in the University, the student shall produce certificates of diligent attendance in each term on courses of lectures, or practical instruction, on some two of the subjects of the examinations for medical or surgical degrees; or of diligent attendance in each term on a course of lectures, or practical instruction on one of those subjects, and also on the practice of Addenbrooke's Hospital. Certificates of attendance on courses of lectures, or practical instruction, shall be deemed satisfactory, if the lectures be delivered, or the courses of practical instruction given, either by a professor of the University, or by a teacher approved by the Senate, provided that in each case the course be approved by the Board of Medical Studies; and they further propose to substitute the above for the present regulations 10 and 11."

Remenstruation by the Breasts at Advanced Age.—Dr. Tueffard relates the case of a lady, aged 56, in whom menstruation had ceased at the age of 50 without any disturbance of the health ensuing. Four years since she had a superficial ulceration of the os uteri, which soon yielded to treatment. In November, 1871, the breasts became large and firm, with projecting nipples, whence a fluid—at first serous, and then of a bloody colour—was discharged. This discharge continued for about eight days, when it gradually ceased, to reappear again in a month, accompanied with cephalalgia, loss of appetite, and swelling of the breasts. Down to the present time it has continued to reappear every month with almost an exact regularity, the patient being aware of its approach almost as surely as a young woman is of that of her menses. During the intervals the breasts become again flaccid. There is no uterine disease, and in other respects her health is quite good.—*Union Méd.*, November 30.

Composition and Quality of the Metropolitan Waters in November, 1872.—The following are Dr. Letheby's returns to the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	...	...	...	...	...	...
West Middlesex	18·93	0·105	0·131	0·002	14·8	4·2
Southwark & Vauxhall	18·17	0·117	0·111	0·003	14·3	3·6
Chelsea	...	...	...	...	...	...
Lambeth	20·23	0·152	0·125	0·005	15·6	4·2
Other Companies.						
Kent	27·67	0·011	0·208	0·000	20·4	5·6
New River	20·50	0·094	0·131	0·002	15·4	4·2
East London	21·33	0·088	0·121	0·002	16·0	4·4

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was more or less turbid—namely, in that of the Lambeth, and of the Southwark and Vauxhall Companies.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 108,373,287 gallons; and the number of houses supplied was 499,786. This is at the rate of 32·7 gallons per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 24·1 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

The returns of the Grand Junction and Chelsea Companies have not been received.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Bothered.—We regret we are unable to advise you.

Dr. Tizard.—At Hansard's, Great Queen-street, or through a bookseller, or at the Office for Parliamentary Papers, Victoria Tower, Westminster.

Kalinan.—Muspratt's "Chemical Dictionary" or the new edition of "Ure's Dictionary."

M. S. S.—Received with thanks.

Quis.—Dr. John Fothergill, a quaker, was interred at the Friends' Burial-ground at Winchmore-hill.

Medicus.—Apply to Allen and Co., Waterloo-place, who are connected with Oriental literature.

S. M.—An excellent digest of the statutes relating to the public health, by Mr. G. F. Chambers, of the Inner Temple, is published by Stevens and Sons, Chancery-lane.

Poor-law Medical Officers' Association and the Public Health Act.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Honorary Secretary of the above Association, Mr. Wickham Barnes, has published a letter with certain resolutions adopted at a meeting of London Medical Officers (how called together I cannot say) opposed to the views so well expressed by Dr. Rogers, and purporting to represent the feeling of provincial Medical Officers on the subject. Allow me to say that this is a pure assumption. Individually, and so far as I have been able to sound the opinion of my brother Medical Officers of the district, the feeling is entirely with Dr. Rogers, and I believe that five-sixths of the provincial District Medical Officers would be of the same mind.

I am, &c., Geo. R. Barnes, M.D. Edin.

Antiquary.—Asclepiades, ante Christum 123, of Prusa, in Bithynia. He is again supposed to have lived about 120 years before Scribonius Largus. He lived to attain the age of 80. Pliny relates that he died from a fall.

De Candalle.—Mr. Barham is not quite correct in the most amusing account he gives respecting the Medico-Botanico Society and its "director," whom he calls Frost. It should have been Mr. John Foot, M.R.C.S., who practised in Tavistock-street, Covent-garden, where he died at a comparatively early age. He was a great friend of the late Mr. Guthrie—in fact, his right-hand man.

Junior Practitioner.—Dr. Thomas Denman was the son of a respectable apothecary at Bakewell, in Derbyshire. He was the author of some valuable aphorisms for the use of junior practitioners, an introduction to the practice of midwifery in which most of his tracts on the subject were incorporated, and a small treatise on cancer. He was the father of the eminent judge of that name.

Medical Fees.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me most respectfully to enter my protest against the now much prevailing custom amongst consulting men in town of demanding the extra guinea when the ordinary medical attendant accompanies the consultant.

On what ground can such a claim be entered? Is it that greater time is expended in such consultation, or is it that the patient is supposed to derive a greater degree of benefit from the information the expert can obtain from the medical attendant, and that therefore such consultation is of more money value to the patient? If my former hypothesis be the one assigned, I doubt its applicability, believing that time may be economised by the digest the medical attendant can give of the case, thus avoiding the too often tedious circumlocution of the anxious invalid, besides the check he often has to put to the number of irrelevant questions the patient is apt to deluge the physician with when for all practical purposes the interview should have terminated. With regard to my second hypothesis, though fully admitting the bare possibility of increased benefit accruing to the patient by the presence of the general practitioner, I do contend that the natural and legitimate sequence of such a privilege should not be in a doubled honorarium to the consultee, and that the family doctor should not be a cat's-paw for the purpose of inflating the physician's income.

By all means would I have our leaders and teachers sufficiently remunerated for the services they render to the medical and the general public, and fully admit their entire right to place the highest value on their rendered services; but I cannot but think that the present method is of doubtful advantage to the physician or surgeon, as the less wealthy patient, dreading the expense of the double fee, and at the same time not caring to enter the dreaded precincts of the great man's studio unsupported by the presence of the more familiar medical attendant, struggles on without further aid to the bitter or more blissful end, unless the advice of some kindly expert can be obtained who does not make the presence of the family doctor the basis for the double honorarium.

December 8. I am, &c., Rectus.

Mr. Percy D.—The epigram on the illness of the Regent, subsequently George IV., was from the pen of Luttrel, viz.:—

"The Regent, sir, is taken ill,
And all depends on Halford's skill.
'Pray what,' enquired the sage physician,
'Has brought him to this sad condition?'—
When Bloomfield ventured to pronounce
'A little too much cherry bounce.'
The Regent, hearing what was said,
Raised from the couch his aching head,
And cried, 'No Halford, 'tis not so!
Cure us, O Doctor,—*Curaçao*.'"

H. B., jun.—The results of the Arts Examination at the University of London cannot be known for at least a month. If successful you can commence your professional studies at the half-session in January next. The entrance fee, about one hundred guineas, will secure you a perpetual ticket at the hospital mentioned.

On the Death of the Princess Charlotte of Wales.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Although an old practitioner in the country, I am much pleased to read the notice, summary, and criticism of what was at the time, and is even now, matter of obstetric science and practice affecting an important case, furnished by the communication of Dr. W. S. Playfair. Having had during fifty years' practice a great number of cases of midwifery, on reading Baron Stockmar's reference to this sad event I was anxious to learn more particulars, and I cannot but believe the enlarged particulars furnished by Dr. Playfair will be both acceptable and instructive to accoucheurs. In these days, when bleeding and antiphlogistic means constitute rather the exception than the rule (an alteration in treatment, according to Dr. Richardson and the late Dr. Symonds, carried too far the other way sometimes), the mistake regarding preliminary treatment in pregnancy, and delay of help in parturition, is not so likely to take place. In the case of the Princess Charlotte there seems no doubt the vital powers were too much weakened during pregnancy, and also by delay during parturition. By way of appendix, I would like to make a few remarks. I remember a robust woman with slow labour and unyielding os uteri brought into easy, safe, and speedy delivery by a free bleeding; also, a woman of pale, lymphatic temperament, under painful and slow labour, obtaining the same advantage by a warm bath. Very prompt measures are often called for in midwifery practice, especially the use of forceps, the perforator, the plentiful cold affusion, and stimulants. The late Mr. Hicks, of Bath, was said to mount into practice and position on suddenly pouring a bucket of cold water over a lady who appeared after delivery to be sinking from hæmorrhage. The ergot of rye is very perniciously given before the os uteri is sufficiently dilated, with a sluggish uterus, and if given persistently during labour may paralyse uterine action altogether; in hæmorrhage of course otherwise.

Nailsworth, December 9. I am, &c., Thos. Stokes.

Diary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In a noble cathedral Alfred, Canute, William Rufus, William of Wykeham, warriors, bishops, celebrities, including good old Isaac Walton, are represented by honoured dust. The legs crossed above the knees, the trusty sword grasped by the marbled knight in chain armour, distinguish the crusader's tomb. Without detracting from services emblazoned in immortal annals of chivalry, to a doctor the language of Groves suggests the thought that the greatest conquerors *cannot* drive away pain, relieve burning thirst, or induce sleep; *cannot* restore vitality to the paralysed, sight to the blind, or reason to the maniac. Associated with this ancient city are saints, sieges, and coronations, also the names of bluff King Hal, the crabbed Cromwell, the Merry Monarch, Cardinal Wolsey, Sir Walter Raleigh, and the origiual founder of Chelsea Hospital—fascinating but extremely improper Nell Gwynne. In 1666 the so-called London Plague found its way here, reducing the population in twelve months to less than one-half. Cart-loads of dead bodies were daily carried out for burial in pits on the downs; trade and intercourse with outsiders rigidly prohibited; the miserable inhabitants penned within the fever-stricken city, whilst the grass grew in the deserted streets. The sanitary arrangements, supply of food, and methods adopted to prevent the spread of contagion, will repay perusal. Also the pages of history record the discovery of the body of William Rufus by a charcoal-burner, driving in the New Forest; how on the road to Winchester (a distance of twelve miles) the cart broke down, and the corpse fell into a ditch. Even supposing the Royal Hants County Hospital (108 beds; in-patients 688, out-patients 2631, annually) established, nothing could have been done for a fatal case of hæmorrhage from the axillary artery. Judging from eighty-three cases related in American reports, such wounds appear extremely dangerous. The initial velocity almost equal to that of a musket-ball, aiming at the umbilicus the Indians shoot one arrow after another with marvellous rapidity. In the *Medical Press* an account is given of a remarkable suicide by a rifle-shot, with perpetuation of attitude and facial expression curious to witness, difficult to explain. In the last Blue-book there are several instances—one of a German soldier, shot in the chest whilst looking at his wife's photograph, instantaneously changed into a life-like statue; the figure still rivetted its fearful gaze on the beloved picture rigidly held in the cold hand of death. The suicide alluded to was apparently committed seven hours before discovery, and the ball, blowing away the heart from its connexions, besides dividing the left lung, struck the spine, broke the transverse processes of three vertebræ, smashed articulating portions of fourth, fifth, and sixth ribs, and finally lodged itself in shapeless splinters among the muscles of the back. My clients destroy themselves by hanging, drowning, throat-cutting, shooting, by jumping out of window, throwing themselves in front of railway trains; else by taking poisons, such as opium, arsenic, prussic acid, chloride of zinc, or cyanide of potassium. Unfortunately the habit of note-taking is but recent; still the peaceful, placid expression of instantaneous death after taking the last-named poison vividly recurs to recollection. Children also have inadvertently been given tincture of iodine, belladonna, and opium by blundering mothers; and as to the amount of infanticide by the administration of cordials to fractious teething babies, heaven only knows! In the novel of "Ten Thousand a Year" Oily Gammon, the scoundrel solicitor, cleverly pretends to die of heart disease. How many since have repeated this fraud? If Medical Officers of Health are to be analytical chemists, all cases of suspected poisonings in addition to adulteration of food will come within their range. The other day a curious fact was mentioned—that lunatics, ever ready to tear up sheets to hang themselves, never use blankets for this purpose. Taking up Bryant's "Surgery" (1088 pages, 507 engravings), dip into gunshot injuries. There are illustrations of the English and foreign bullets now employed. Inspector-General Longmore freely quoted; also the opinions of Stromeyer and MacCormac, in favour of amputation after secondary hæmorrhage. Dr. Gordon states that in the late war amputation was more suitable when the subject had to be carried on with the army; that excision and resection were more satisfactory in the upper extremity; that excision of the knee in cases of gunshot wounds did not answer; and that the practice of conservative surgery in stationary hospitals was an entirely different matter compared with battle-field exigencies. MacCormac preferred a bullet-

forceps with claw points at a right angle with the handle, and slightly overlapping so as to admit of easy ingress. On this important subject note a valuable paper by Professor Longmore, C.B., in Braithwaite. The finger, Nélaton's probe, the probe-nippers of Lecomte, electrical indicators by galvanometer or bells, are compared as to diagnostic value. Also we have Sayre's snake-jointed probe, Coxeter's bullet-extractor, Redfern's and Lucas's sharp-pointed instruments, besides the endoscope of Dr. Fenger, to choose from at the various stages of difficulty. Burning note-books to-day, the following extracts are curious:—Men recovering from yellow fever exhibit furious sexual passion, and wives long barren become pregnant. Joan of Arc was so malformed that marriage could never have been consummated. Old Parr married, at 120, a second wife, who soon fell pregnant; and at 130 performed penance for an amour. One man for thirty years daily took drachm doses of corrosive sublimate. A sailor swallowed thirty-five clasp-knives. A dwarf without hands, feet, legs, or thighs married four times, had eleven children, and battered his wives with his stumps. Thomas Wood had rheumatism, variola, and epilepsy; up to the age of 44, leading a hard life, grew fat and dyspeptic; then became abstemious and lived many years. Scarcely ever touching fluids, he subsisted on a pudding made with skimmed milk, sea biscuit, and eggs, of which he took three pounds a day in two meals.

I am, &c., PEPYS SMITH, M.D.

COMMUNICATIONS have been received from—

Dr. A. REID; Dr. MACKINTOSH; Mr. STOKES; Mr. W. G. NASH; Mr. A. ROBERTS; Mr. O. BARBER; PAST PARTICIPLE; Mr. W. P. SWAIN; Dr. MEYMOTT TIDY; Mr. J. CHATTO; Professor FLOWER; Dr. J. R. HARDIE; Mr. E. NETTLESHIP; Dr. G. R. BARNES; Dr. WHITMORE; Mr. J. PENISTON.

BOOKS RECEIVED—

Holdsworth's Household Guide to Family and Civic Rights, etc.—Physiologie du Système Nerveux, par le Dr. Edouard Fournié.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—Anti-Game Law Circular—North Devon Journal—Medical Press and Circular—Dublin Medical Journal—Indian Medical Gazette.

APPOINTMENTS FOR THE WEEK.

December 14. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

16. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Farquharson, "A Case of Traumatic Pericarditis." H. Royes Bell, "A Case of Tumour of the Forearm." Dr. J. T. Dickson, "A Case of Traumatic Epilepsy treated successfully by Trephining." Other Communications by Messrs. Adams, R. B. Carter, and Davy."

17. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ANTHROPOLOGICAL INSTITUTE, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Report by the Morbid Growths Committee on Mr. Nunn's "Tumour of the Liver." Dr. George Johnson, "Aneurism of the Aorta associated with Paralysis of the Vocal Cords." Dr. Robert King, "Stomach from a Case of Poisoning by Hydrofluoric Acid." Dr. Way, "Specimens from a Case of Poisoning by Carbolic Acid." Mr. Vandyke Carter, "Drawings of the Fungus Disease, Mycetoma, of India;" "Drawings of the Eruption in Leprosy." Dr. Crisp, "Heart Clot from a Case of Sudden Death." Mr. Wagstaffe, "A Milk-yielding Tumour of the Breast." Mr. Gay, "A Varix, an unusual form of Femoral Hernia." Mr. Charles Carter, "Supernumerary Pulmonary Valve." Dr. Cayley, "Syphilitic Tumours of the Gall-bladder associated with Peritonitis."

18. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

SOCIETY OF ARTS, 8 p.m. Professor Leone Levi, "On Russia: her Industries, Commerce, and Means of Communication."

19. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

20. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 7, 1872.

BIRTHS.

Births of Boys, 1136; Girls, 1138; Total, 2274.
Average of 10 corresponding weeks, 1862-71, 2016·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	623	582	1205
Average of the ten years 1862-71	802·9	796·6	1599·5
Average corrected to increased population	...	...	1759
Deaths of people aged 80 and upwards	...	...	45

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	2	1	1	5	1	4	...	1
North ...	751668	3	4	6	2	8	2	7	...	4
Central ...	333887	...	1	...	...	1	...	2	...	2
East	638928	...	1	2	...	7	...	3	...	6
South... ...	966132	5	2	3	2	9	1	5	1	4
Total	3251804	8	10	12	5	30	4	21	1	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·380 in.
Mean temperature	41·9°
Highest point of thermometer	50·5°
Lowest point of thermometer	27·7°
Mean dew-point temperature	38·3°
General direction of wind	W.S.W.&N.N.E.
Whole amount of rain in the week	1·13 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 7, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Dec. 7.	Deaths Registered during the week ending Dec. 7.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2274	1205	50·5	27·7	41·9	5·50	1·13	2·87
Portsmouth ...	115455	12·1	84	44	52·4	24·8	41·2	5·11	1·69	4·29
Norwich	81105	10·9	56	40	50·0	31·0	40·6	4·77	0·75	1·90
Bristol	186428	39·8	136	74	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	56	27	47·4	26·1	39·0	3·89	0·43	1·09
Birmingham ...	350164	44·7	295	181	47·5	27·5	39·7	4·28	0·61	1·55
Leicester	99143	31·0	90	39	47·0	25·2	39·7	4·28	0·28	0·71
Nottingham ...	88225	44·2	71	34	48·5	25·2	38·2	3·44	0·66	1·68
Liverpool	499897	97·9	369	254	48·1	28·3	40·2	4·55	0·37	0·94
Manchester ...	352759	78·6	300	193	49·2	24·0	39·8	4·33	0·63	1·60
Salford	127923	24·7	125	57	50·5	23·8	38·9	3·83	0·50	1·27
Oldham	84004	20·2	62	52	47·5	...	...	...	0·41	1·04
Bradford	151720	23·0	115	85	...	...	...	...	...	...
Leeds	266564	12·4	250	142	48·0	29·0	40·4	4·66	0·33	0·84
Sheffield	247847	10·9	200	103	49·0	26·5	39·3	4·06	0·52	1·32
Hull	124976	35·1	99	69	47·0	25·0	38·1	3·39	0·59	1·50
Sunderland ...	100665	30·4	104	54	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	98	56	46·0	28·0	37·7	3·17	0·45	1·14
Edinburgh	205146	46·3	130	83	50·0	24·7	38·3	3·50	0·15	0·38
Glasgow	489136	94·8	369	244	47·4	25·0	38·1	3·39	1·31	3·33
Dublin	310565	31·9	156	162	51·0	27·5	40·9	4·94	0·62	1·57
Total of 21 Towns in United Kingd'm	7393052	34·0	5439	3198	52·4	23·8	39·5	4·17	0·64	1·63

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·38 in. The lowest was 28·70 in. at the beginning of the week, and the highest 29·83 in. on Thursday morning.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

THE SELF-ILLUMINATING OPHTHALMOSCOPE.

Arranged by Professor LIONEL BEALE, F.R.S. (King's College). May be used to examine a patient in any position, in daylight, generally without atropine. Is held in the hand. No dexterity required in its management. Is adapted to form an Otoscope, Endoscope, Laryngoscope, &c. Descriptive Circular forwarded. *Vide* "British Medical Journal," April 2nd, 1870. Price, in case, 42s. Sole Maker, HAWKSLEY, Surgical Instrument Maker, Blenheim-street, Bond-street, London, W.

HAWKSLEY'S PATENT CLINICAL THERMOMETER.

HER MAJESTY'S LETTERS PATENT have been granted for this Thermometer, the index of which cannot be shaken into the bulb, or the black divisions rubbed out. Prices of the 6-inch patent instrument, in safety case, upon which are three engraved scales, 12s. 6d.; 5-inch ditto, in ivory case, 13s. 6d.; 3-inch ditto, in silver case, for waistcoat pocket (Prof. Beale's), 16s. Post free.

Hawksley's Improved Clinical Thermometer.

Section showing actual size, range 90 to 110.

Vide "Lancet" Report, July 3rd, 1869; Brit. Med. Association Reports, 1869.

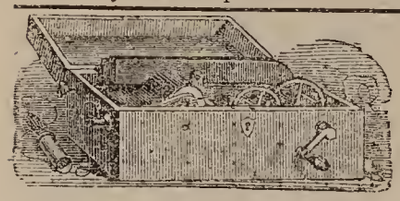
At the last meeting of the British Medical Association, in a paper read by Dr. Cornelius Fox, on "Clinical Thermometers," it was announced that this instrument was far superior to that of any other maker. Prices of the Improved Clinical Thermometers, with indelible divisions, in similar cases to the patent instrument, 6-inch, 10s. 6d.; 5-inch, 12s. 6d.; 3-inch (Prof. Beale's), 15s. Post free. Temperature charts bound for the pocket. Descriptive Circulars forwarded. Inventor, Patentee, and Sole Maker, **HAWKSLEY**, Surgical Instrument Maker, Blenheim-street, Bond-street, London, W.

SECOND-HAND SURGICAL INSTRUMENTS.

The Largest Assortment in London is at C. BAKER'S Old-established INSTRUMENT WAREHOUSE, 244 and 245, HIGH HOLBORN. Every description of NEW *supplied at the Wholesale prices.* Second-hand Instruments of all kinds Purchased or taken in Exchange.—Observe, 244 and 245, HIGH HOLBORN (opposite Day and Martin's).

SECOND-HAND MICROSCOPES.

C. BAKER begs to call the attention of the Profession and Microscopists to his extensive Stock of first-class SECOND-HAND MICROSCOPES, by the most esteemed Makers, many of which are equal to new, and are sold at very moderate prices.



NEW IMPROVED MAGNETO-ELECTRIC MACHINES,

From 22s. 6d. to 35s., in handsome Mahogany Cases.

C. BAKER begs to call the attention of the Profession to the above. They are of great power, yet capable of giving the mildest current, and they have the advantage of being clean and always ready for use.—244 & 245, High Holborn, W.C.

Special Appliances for Local Application, from 3s. each.

STUDENTS' MICROSCOPES, £3 3s.

C. BAKER'S Students' Microscopes have all the latest improvements, with Object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 and 245, HIGH HOLBORN.

PRIZE MEDAL, 1862. PRIZE MEDAL, 1865.

JOSEPH F. PRATT,

SURGICAL INSTRUMENT MAKER, ORTHOPÆDIC MECHANICIAN to St. BARTHOLOMEW'S HOSPITAL,

420, OXFORD-STREET, W.

SOLE AGENT FOR Dr. E. STÖHRER'S GALVANIC APPARATUS.
ELASTIC STOCKINGS, LADIES' ABDOMINAL BELTS, IMPROVED WATER-PAD TRUSSES for SCROTAL and UMBILICAL HERNIA.

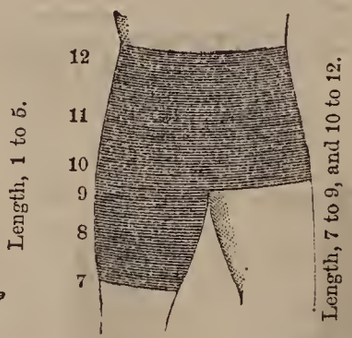
Second-hand Surgical Instruments by Weiss, Savigny, Coxeter,

Simpson, Maw and Son, and all the best makers, at greatly reduced prices. A large assortment of Microscopes by Powell and Lealand, Ross, Collins, and others. Astronomical and other Telescopes of great power, by Ross, Dollond, Dixey, &c. Race and Opera Glasses by Voigtlœnder, Callaghan, Burrows, Chevalier, &c. Cameras and Lenses by Dallmeyer, Ross, Voigtlœnder. Amateur Photo. Sets from £2 2s.
WILLIAM LAWLEY, 78, Farringdon-st., London, E.C. Revised Illustrated Surgical Catalogue, 4 stamps. Mathematical Catalogue, 3 stamps.

HOOPER'S SPIRAL ELASTIC BANDAGES.

The Measures should be taken next the Skin, as follows:—

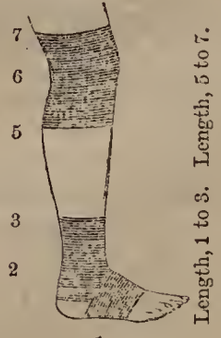
Stocking.



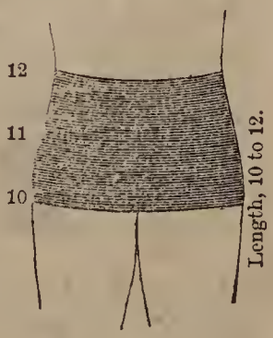
Abdominal Belt & Thigh-piece.

1, Round thickest part of instep.
2, Round ankle-bone.
3, Round small of leg.
4, Round thickest part of calf.
5, Round leg just below knee.
6, Round knee-cap.
7, Round leg just above knee.
8, Round middle of thigh.
9, Round top of thigh.
10, Round body at hips.
11, Round body at umbilicus.
12, Round waist.

The Length should also be given.



Knee-cap & Ankle-sock.



Abdominal Belt.

HOOPER, Manufacturer, 7, Pall-mall East, and 55, Grosvenor-street, London.

ORIGINAL LECTURES.

LECTURES ON INSANITY.

By EDGAR SHEPPARD, M.D.,

Professor of Psychological Medicine in King's College, London, and one of the Medical Superintendents of Colney Hatch Lunatic Asylum.

Lecture IV.

(*Continued from page* 619.)

Moral Insanity (so-called).

In giving evidence as to the existence of impulsive insanity in criminal cases, you will be sorely pressed by cross-examining counsel concerning the probability of a homicidal act being the first symptom of a disordered mind. Cases of this kind are very naturally and very properly regarded with grave suspicion by the judges and the public; and I am disposed to think that this suspicion has of late been greatly heightened by attempts on the part of medical witnesses to advance the theory of irresponsibility upon insufficient evidence of disease. Now, of course it is impossible to say with absolute certainty that an overt act of criminal magnitude may not have been the first external utterance of a pre-existing insanity. But the likelihood of such a circumstance is so highly improbable as to render its negative an approximative certainty. These impulsive acts are common among persons known to be mad, and under confinement as such, but not among those in whom insanity was never previously dreamed of. In Esquirol's famous treatise on mental diseases, the subject of homicidal mania is comprehensively handled; and he gives a large number of illustrative cases, in all of which, as I read them, there was unmistakable evidence of insanity prior to the aggressive deed. In the *American Journal of Insanity* for October, 1857, the details of no less than fifty-two homicidal cases are placed on record, in all of which previous insanity was undoubted. Dr. Blandford says—"I think you will find, if you go to the root of the matter, that the act which is supposed to be committed under the influence of insane impulse is rarely, if ever, the first symptom of insanity or brain affliction shown by the alleged lunatic. You may be told by friends that they have never seen any insanity in him; but some people cannot see it in five out of the six patients in an asylum. If you can get sufficient information you will probably discover that he has had former attacks, from which he may or may not have been considered as recovered."(a) Dr. Sankey says—"I have taken the precaution to read a large collection of reports, published from time to time in the *Annales Médico-Psychologiques*, upon the state of mind of persons accused of different acts of violence. I have never yet discovered a case in which an act of violence was committed by a lunatic as his first insane act. There are several cases in which the patient was not considered insane by his own relations, or by inexperienced medical practitioners, but who, on the closer scrutiny of the physician who had studied insanity, was clearly proved to have been so for a long period."(b) I gave evidence to this effect at the Old Bailey in January last in the case of the Rev. Mr. Watson, when of course the effort made by the defence was to prove that the prisoner had already demonstrated by acts previous to the murder his mental unsoundness. But I did not perceive insanity in the acts alluded to, and therefore I pronounced him to be of sound mind.

You will observe that in this impulsive or emotional insanity the motiveless character of a homicidal act cannot but furnish evidence of derangement, and *vice versâ*. For instance, if a man kills a wife whom he adores, the act is *à priori* more likely to be an insane one than if he kills a wife whom he hates, and from whom he has received the greatest provocation.

There is no doubt that the unstable condition of nerve element, which lies at the root of epilepsy, furnishes some of the most desperate instances of homicide as of every vicious impulse. I have at this time under treatment a very instructive case of masked epilepsy in a boy only 13 years of age; and, while we are on this subject of impulsive insanity, I cannot do better than present the same to your notice. I had been looking out for an epileptic fit to furnish the only explanation of the most ungovernable and motiveless fury possible, when on the 13th day of February it came, and the demoniacal rage which had previously been so disastrous was transmuted into a distinct and characteristic convulsion.

J. C., aged 13, having nothing abnormal in his cranial conformation, was admitted into the Asylum on October 7, 1871. The statement made by the certifying medical officer was as follows:—"Found him sitting almost naked over the fire, frying some potatoes and making a knife and fork red-hot, with which, he said, he was going to eat his dinner and stab his mother. States he has a house of his own, and defies the Queen, bishops, magistrates, or police to turn him out under twenty-one days. The mother states that five months ago he ran a chisel down his throat. He has been twice locked up for maliciously breaking windows. A fortnight ago he first used threatening language, and has gradually become worse. On Friday last he attempted to stab his mother and poison her with paraffin oil. Threatens to stab his brother, and also to burn down the house."

Now, this is a nice promising little episode in a life which has not yet run over fourteen years; but you will hear presently of an unpromising history and background which will explain all and invite your sympathy.

Observe, under the mask of epilepsy we have pyromaniacal impulses, matricidal impulses, fratricidal impulses, together with general depravity and ferociousness. For the first few days after admission this boy was excited and savage at being removed from home. Subsequently he toned down into perfect quietness and propriety of conduct, until the end of December, when he suddenly broke out into the most ungovernable passion, attacking everyone within reach, and using the foulest and most blasphemous language. It was necessary to seclude him for a few hours, when he became tranquil, though he was not himself for some days afterwards. The mother, on visiting him, confirmed the previous history, and supplied the following additional and important facts:—The lad had always been passionate, and latterly he had become more so, when matters culminated in the acts previously described. She was sure he had never had an epileptic fit, though she fancied that one day after being in a passion he appeared somewhat faint and giddy. The father was a confirmed drunkard, and had run away to America two years ago. She herself acknowledged to habits of intemperance, and to bad health. She is small of stature and of unpleasing physiognomy. I was beginning to think of sending out this little fellow on a month's trial, and I mentioned my intention to the mother, but she was greatly alarmed at the prospect, and begged me to keep him a little longer. Luckily, I acceded to her request. A week afterwards, on February 13, the boy became again excited, and had a distinct and severe epileptic seizure, from which he did not recover complete consciousness for some hours. The mask is hereby removed; that for which the rod and the treadmill were threatened before he came here now needs asylum supervision and care. Since the above date there has been no fit, no excitement, but a general improvement in health and physiognomy. How long am I to keep this young subject, and what is likely to be his future? I cannot tell. I have no doubt his disease has been conditioned by the antecedents of his parents, but I have much hope that under care and discipline he will stamp out his terrible inheritance and merge into a healthy and unfettered manhood. [Has since been discharged, recovered.]

In all cases which are included under Dr. Prichard's definition of moral insanity, it may be doubted whether, although there may be perfect freedom from delusions, there is not some disturbance of the intellectual faculties. Certainly in those which he has recorded, and which have been analysed and commented upon by various authors, the intelligence does not appear to have been altogether normal, and in the majority delusions were subsequently developed. In children, more frequently than in adults, you find this moral insanity dissociated from serious intellectual derangement. A lad or a young girl will suddenly become depraved and vicious, lose all sense of decency, openly and defiantly commit self-abuse, destroy clothing, and perform acts which are the very antithesis of all which has been ever done before. Such cases, where the insane temperament is not marked or hereditary, are of hopeful prognosis; but, failing to improve, will become complicated by delusions and hallucinations. It is not improbable that the general erethistic condition which is so often leagued with the insanity of early life is as much dependent upon irritation of the spinal and sympathetic systems as upon centric disturbance of the cerebral hemispheres.

The moral insanity of later years is ordinarily associated with melancholia, and may or may not be complicated with suicidal impulses. A general change comes over the habits and inclinations. One previously remarkable for energy and decision will doubt and vacillate; slovenliness will take the place of order and cleanliness; little acts of impropriety will

(a) "Insanity and its Treatment," pp. 329, 330.
(b) "Lectures on Mental Diseases," p. 97.

manifest themselves in one of previously unblemished life; he may become likewise reckless in his expenditure of money, though his antecedents have been those of thrift and economy. Subsequently the memory becomes impaired; there is more emotional disturbance and general incapacity; and a state of what is termed senile dementia precedes and ushers in the "dreariness and duskiness of age."

DEMENTIA.—ACUTE PRIMARY; CHRONIC PRIMARY; SECONDARY.

You will remember that I spoke to you on a former occasion of a derangement termed *Melancholia Attonita* or *Mélancolie avec Stupeur;* and I pointed out its diagnostic features from acute dementia. The latter disease now comes under our notice.

Although considered to be curable, acute primary dementia is a very alarming malady. The complete suspension of the faculties, the reduction from intelligence to the most abject passivity of automatic life, are of themselves startling even to the utter bewilderment of the lookers on. Moreover, the circumstance of its occurrence so frequently in the young, in whom we look for the highest manifestation of vital force and happiness, gives to it by contrast with our hopes and expectations a character of unmodified sadness. It is probable that in most cases of this nature there exists a previous instability and imperfection of nerve-element, which, though it may not have attracted notice by anything marked and special, is now retrospectively apprehended on the occasion of the sudden suspension of mental power. A very common cause of acute primary dementia is fright. I have a case now in the Asylum where fright resulting from the bite of a dog produced this shattering of the higher life and intelligence. The case is incurable, for epilepsy has supervened. An enormous responsibility attaches to those who terrify the young. A blow on the head, masturbation, fever, and the acute exanthematous diseases are concerned likewise in the factorship of this distressing malady. There is no doubt that the ear-boxing and head-thumping, once so practised at our schools, have laid the foundation of fatal cerebral mischief in a large number of cases. I once saw a lady who became suddenly and completely demented during convalescence from small-pox. She did not recover for eight months, and I feared that her case was hopeless. This derangement is incidental also to the puerperal state, as I shall have occasion to point out to you in another lecture. By sudden grief, or even sudden and ecstatic joy, is conditioned likewise this suspension of the moral and intelligential life. Pinel has recorded several instances, and I once knew a gentleman of large and robust frame who suddenly became oppressed to melancholy by the responsibility of a large fortune which had been unexpectedly left him, and then rapidly lapsed into a state of acute and confirmed dementia.

The symptoms of this disease are worthy of your attention. From one or other of the causes which I have above mentioned, you will find a previously intelligent youth or girl in a state of complete passivity. The countenance is blank and expressionless; the motor functions are ordinarily suspended, or, when existing, are of a monotonous and purposeless character. The calls of nature are unheeded—frequently the bladder has to be emptied artificially; food has in the same way to be administered by spoonfuls or the stomach-pump. The circulation is feeble, the temperature low, and there is general congestion of the venous system. Everything indicates want of vital energy and force. The patient will sit or stand with a vacant stare for weeks together; the perceptive and reflective faculties are alike suspended. He has to be dressed and undressed, and occasionally this is a process which he will resist, forming perhaps the only exception to a state of complete passivity. Sleep is not disturbed, as in melancholia; and this forms one of the diagnostic signs between the two affections. Another diagnostic mark is the relaxed vacuity of expression, as compared with the utter gloom and moroseness and anxious physiognomy of melancholia—the former indicating what Guislain terms the "extinction," the latter the "oppression" of mental power. As a watch that has stopped from some unascertained cause will sometimes upon succussion resume for a few moments its ordinary movements, so these acutely demented subjects may occasionally be roused by shaking, or the action of a galvanic battery, into a momentary renewal of the intelligential life.

Acute dementia is not a common form of insanity, and when it takes place from a well-ascertained shock, in a constitution not otherwise materially impaired, the prognosis is decidedly favourable. But when by its approach the term primary is obviously not synonymous with acute dementia, there are frequently causes at work which forebode the most unpromising results. Self-abuse is of these the most pernicious and ineradicable. When to this is added the hereditary taint, so commonly ascertained to exist, chronic and complete dementia can be alone predicated as the issue.

The treatment of acute dementia is based upon well-recognised principles. Life is below par; we must bring it up to par. I often add quinine to the spoon food, or to that which it is necessary to throw in by the stomach-pump—four or five grains twice a day; wine, warm clothing, friction, Turkish baths, occasional purgatives (aloctic), or an enema containing a teaspoonful of turpentine. A galvanic current transmitted through the spinal column morning and evening is decidedly beneficial. The cleanliness of these patients must be particularly attended to, the hairy parts being washed with carbolic acid soap, for vermin are quickly generated.

The recognition of chronic primary dementia in its earlier stages is not by any means easy, inasmuch as those who are obnoxious to it are very variable in their states and conditions. The stumbling memory and bewildered aspect of to-day may have changed into comparative retentiveness and intelligence to-morrow. There is an absence of delusions and hallucinations, and you naturally hesitate to stamp with incapacity those whose symptoms of fatuity have not yet become matured and permanent. I have a case now under observation of primary dementia which has been coming on for the last six months. The patient is utterly bewildered at times: he has no memory; he picks pockets, and, unconscious of the habit, wonders, when taxed with having certain articles which do not belong to him, how they came into his possession. At other times he is comparatively bright and intelligent. Probably the brain-cells are undergoing a process of atrophic degeneration known as "white softening."

Many men after an active life, in which the faculties have been unduly strained, or sensuality inordinately indulged in, gradually evidence enfeeblement of thought and judgment, strangely contrasting with their former vigour and capacity, and fall step by step into "second childishness and mere oblivion." There may have been complete freedom from maniacal or melancholic symptoms. The failure of memory, especially for recent occurrences, is one of the earliest symptoms of approaching mental decay; or an apoplectic attack, with temporary hemiplegia or loss of speech, may precede the mental symptoms. Such cases are very hopeless, though certainly at times a very marked and inexplicable (though temporary) improvement takes place when least expected and not at all prognosticated.

The subsidence of the various forms of acute insanity which have been brought under your notice, when not resulting in recovery or in death, is transmuted into secondary dementia as its almost inevitable tomb. There the pride and splendour of the intellectual life are ended, and upon its portals is written no "*Resurgam.*" Considerably more than half the cases which fill our asylums are "compounded of the remains" and effects of antecedent maladies. And the forms assumed by the "shattered wrecks of mental organisation," which make up the aggregate of consecutive dementia, are endless in variety of detail, and constitute an interesting study in walking the wards of a large asylum. In some there is a quiet and orderly passivity, which, though associated with delusions, finds no outward expression, as under those acute ideational disturbances which once rioted here, and have now made shipwreck of the supreme centre of intelligence. These subjects will state their delusions when under pressure, and affirm the reality of their convictions with a temporary and emotional excitement; but you perceive they lack the intensity which they once possessed, and are babbled out with a childish reiteration contrasting strangely with the fervour and sparkle of earlier days. "The paths of mental association," as Dr. Maudsley expresses it, "are broken up, so that the delusions are cut off from any active influence upon such mental functions as are left, and all real interest in the past or present is abolished."

The actions and attitudes of many dements and chronic maniacs are singularly grotesque and amusing; so also are their modes of personal decoration and adornment. They almost equal in variety of shape and colour the uncertificated daughters of the folly which bears the name of Fashion, and the Fair which is labelled Vanity. In looking into the airing-courts of an asylum you may see geometrical figures which have been paced into shape by the daily treadings of these monotonous movers. Some walk in circles, some in straight lines, some in rhomboids. Some lie on the ground, having lost all energy, manifesting nothing but the listlessness of life. Some always sit in the same corners, stand in the same places and positions, with closed eyes and expressionless faces. Others are more demonstrative, dancing and singing, gesticu-

lating, shouting, tearing their clothes, or stripping themselves naked. Some are engaged in top-like gyrations, others in somersaults, or in fantastic muscular displays worthy of those young Arabs of the pavement who invite by their revolutions the loose halfpence of thoughtless passers-by. And these are not the extremes of that degraded condition to which these miserable creatures are ultimately reduced. There is a lower stage, in which the calls of nature are unheeded; they eat and drink their own excretions; swallow glass, rags, crockery, rubbish of any kind. In a patient who died last year I found in the stomach 9 lbs. of rubbish, chiefly consisting of pieces of cloth, stones, and bits of crockery and tobacco-pipe.

There is nothing to do in these cases but to watch them carefully, bathe, and change their linen frequently; try to establish periodicity of function, by taking them to the closet at fixed times. Much is to be done in this way; but even then their last years of life—or rather existence, for such a condition is unworthy of the name of life—are filthy and degrading to an extent which cannot be realised by any but those who are familiar with what we call the "dirty" wards of an asylum.

ORIGINAL COMMUNICATIONS.

STILLBORN INFANTS, THEIR PROPOSED REGISTRATION.

By FRED. W. LOWNDES, M.R.C.S. Eng.

DEFECTS OF THE PRESENT SYSTEM OF NON-REGISTRATION—CERTIFICATES OF STILLBIRTH—INTERMENT—ADVANTAGES OF REGISTRATION, ACTUAL AND PROSPECTIVE.

THE compulsory registration of all births, whether of living or dead children, has often been urged; its importance having been long known to, and understood by, members of our Profession, registrars, officials in charge of cemeteries and burial-grounds, coroners, and many others whose occupation renders them cognisant of the many abuses to which the present system gives rise. As its adoption in these kingdoms has been proposed in the House of Commons, and can only now be considered as delayed for a time (a Bill being, as I am informed, in print), I propose to consider the defects of the present system as they present themselves to medical practitioners, and to show how the registration of stillbirths may be easily accomplished with great advantage to the public and the Profession.

The instructions issued to the various registrars of births and deaths are as follows:—"Stillborn children must not be entered either in the register of births or of deaths; but if a child is born alive, although it dies immediately after birth, both the birth and the death must be registered separately in the proper form." Again, in the instructions issued with respect to registering deaths on the coroner's "information" (21 Vic., c. 25), the following occurs:—"It must be borne in mind that stillborn children are not to be registered; nor should an entry be made in any case where, according to the finding of the jury, the evidence was insufficient to prove whether the child was born alive."

The proof of live birth is "breathing"; if a child once draws breath it is enough to entitle the registrar to record duly both its birth and death.

Let us now take two imaginary cases as illustrations, and place them in juxtaposition.

Mrs. A. is delivered at the seventh month of a child which breathes once and then immediately dies. Its birth and death are registered in due form, just as as if it had lived to old age.

Mrs. B. is delivered of a fully matured child of more than averago development, which ought to have been and would have been born alive but for some untoward circumstance, such as tedious labour, etc. No notice whatever is taken of it by the State, and all regulations as to interment are left to haphazard.

It is somewhat difficult to conceive how this glaring deficiency in our registration system could ever have been permitted when the Act was framed thirty-five years ago. Still more incredible is it that in this year (1872) we should still be urging it on the Legislature.

That certificates stating that children were stillborn, when in fact they had survived their birth for a time varying from minutes to hours, and even days, have been given by midwives and others, is a fact only too well known; and on my inquiring of the authorities at Somerset House whether any penalty attached to such persons, the following very candid answer was sent me by Mr. Hammick:—"The answer to the inquiry of Mr. Lowndes, as to 'whether there is, under the Registration Act, any penalty attaching to any person who shall give a false certificate of stillbirth," is simply that there is none. A person may write falsehoods on this subject, as on many others, without bringing himself within the criminal law. Such certificates are frequently given for the purpose of facilitating the burial of tho body of an infant born alive as that of a stillborn child, thereby saving burial fees and funeral expenses." Mr. Hammick proceeds to explain that if a sexton or grave-digger buries the body of a child as stillborn, wilfully and fraudulently knowing that it was born alive, he comes then within the penalty clause of the Registration Act (27th section), which requires notice to be sent to the registrar within seven days after death, under a penalty of £10. Again, should a registrar be refused "information" from a qualified informant, on the grounds that the child was stillborn, when in fact it was born alive, he is liable to prosecution for a misdemeanour. Hence it will be seen that the prosecution of such offenders is next to impossible. In the one case it would be necessary to prove that the sexton knew that the child he was burying had lived; in the other, the registrar must possess the gift of omniscience, be perfectly aware that a qualified informant—viz., the father or mother of an infant, or the occupier of the house—is concealing the birth of a child born alive, and request to be furnished with the information which his omniscience has revealed to him ought to be forthcoming.

But this is not all: numerous cases have occurred in this town where the bodies of two infants—one stillborn, the other one that has survived its birth—have been placed in one box, with a certificate of stillbirth for one child, such act being a fraud upon the registrar, and a double fraud upon the cemetery authorities, since the larger fee for the interment of one child is evaded, while the fee for the other is evaded altogether. In one well-marked instance of this species of fraud I sent the particulars to the Registrar-General, requesting him to inform me if such persons could be proceeded against. Major Graham's answer is as follows:—"As to your second question as to burying two infants in one coffin, if an offence against the Registration Act is committed, I think it would not be easy to prosecute to conviction the offender."

The result of such a state of matters may be imagined by those who are cognisant of the circumstances under which thousands of infants come into this world. The whole proceeding, from the birth of the child to its burial, is left entirely to the good taste and kind feeling of the parties immediately concerned, who may be—and, alas! how often are—a mother anxious to conceal her shame; a drunken old hag yclept "midwife" or "handywoman"; and lastly, a by no means intelligent or unscrupulous parish clerk or sexton. The slight check which the visit of an undertaker might place upon foul play is wanting, as it is quite the exception for newly-born infants to be interred in coffins; most usually it is a candle-box or soap-box, and when the child is small a cigar-box. It is simply appalling to try to realise the full effects of such a system.

Of course I am fully aware that such a change as is proposed will be productive of considerable expense, will necessitate some changes, and may possibly here and there require some reorganisation of the present arrangements. Nor should I suggest such, nor advocate the registration of stillborn infants merely as an interesting and valuable addition to our obstetric knowledge (though this, it must be admitted, would of itself be almost a justification). What I contend for is, that this measure is urgently required as a protection against abortion, fœticide, child-murder, and the like. I might perhaps proceed to point out how this matter is somewhat intimately connected with the baby-farming of which we have heard so much lately; but I think I have stated quite sufficient to prove my case. I have already introduced this subject before the Obstetrical Society, in the hope that its president and fellows may, in their official capacity as members of a society to whom such statistics would be of great value, urge, in their turn, upon the President of the Local Government Board that the registration of stillbirths may be so arranged as to be serviceable obstetrically. But for the present I prefer to consider the subject in its medico-legal aspect.

Many will no doubt say—"Surely there is some arrangement to supply this deficiency? Surely the persons in charge of cemeteries and burial-grounds have some regulations to prevent children that have been born alive from being buried as stillborn? Surely a medical certificate of stillbirth is requir d

or some satisfactory proof that the child was stillborn?" I have already partly answered these questions, but I will now give the result of my inquiries at different cemeteries and burial-grounds. I shall confine myself as much as possible to facts, and if anything I may state appears sensational it is because the facts are sensational. With one exception I avoid names:—

1. *J.*—This is an intra-mural cemetery for members of the Established Church, and interments are still permitted. The fee for a stillborn infant is 2s. 6d., for one that has lived 10s. About ninety interments of bodies as stillbirths occur annually. The statements the clerk in charge (a most intelligent man) made to me were as follows:—"In my opinion the present arrangements are very bad: coffins are brought here two or three feet long, and very heavy, with a certificate of stillbirth accompanying them. I verily believe that many children are interred here as stillborn when they have lived some time; but if I refuse any they simply go and get the body interred at another cemetery. Half of the stillbirths interred here are certified to by midwives. This, in my opinion, is objectionable, and what I would suggest is, that whenever a medical certificate was not forthcoming the body should be detained here until it had been inspected by a medical man. Often people remain until the interment is complete and the earth filled in, and I often witness the greatest reluctance to leave the coffin or box when this speedy interment cannot take place. I do not believe that these cases of false certificates are necessarily cases of foul play, but that this mode of interment is preferred in cases where the child is illegitimate for better concealment than would be possible were the birth and death registered as usual. Moreover, the sum saved, though small, is an additional inducement, and with some a very strong one. But of course any regulations which may be made for the future must apply equally to all cemeteries. I do not preserve the certificates of stillbirths, nor do I enter them in the book of burials. I used to keep records of them, but as inquiries were never made I ceased to do so, and now enter them periodically thus: 'Stillborn infants, fifteen at 2s. 6d. each, £1 17s. 6d.'"

2. *M.*—Between seventy and eighty interments of infants as stillbirths occur annually in this, which is an intra-mural cemetery for Nonconformists. The fees are 3s. for a stillbirth, 7s. 6d. for an infant that has lived. The arrangements for the interment of the former are entirely in the hands of the sexton, who would not show me his books, but gave me every information. He is of opinion that cases of fraud do not occur here, as he accepts no certificates except those of a medical man or midwife whom he knows well. He refuses interment to many annually, and has referred many cases to the registrar. Some cases, however, of false certificates have occurred, and in one an exhumation and inquest took place. This was some years ago, and made him very particular in consequence.

3. *C.*—This is partly intra-, partly extra-mural. The cemetery is extra-mural, being four miles distant from Liverpool; but bodies are taken to a mortuary situated within a chapel-yard in one of the leading thoroughfares of the town, and remain till the next day, when they are removed to the cemetery. This cemetery is for members of a certain religious sect only, and about 150 bodies are annually interred as those of stillborn infants. The fees are 3s. and 6s. respectively for stillbirths and infants which have survived birth. Certificates are accepted from midwives without special inquiry, though refusal has now and then been made. The fees are respectively 6d. and 2s. higher than for the parochial cemetery, which probably reduces the number. As a delay of nearly twenty-four hours (sometimes longer) takes place when the bodies remain in the mortuary, it would be very easy to arrange for inquiries to be made and for an inspection to take place. No interment of stillbirth is allowed without a certificate either from a medical practitioner or midwife. The clerk in charge admits the defects of the present system, and would be willing that some check should be made provided it were universal.

4. *N.*—This is an intra-mural cemetery, and for Nonconformists. Some few members of the Established Church are, however, interred. The fees are 3s. for stillbirths; for other infants, 10s. Certificates are always required, and some were shown me, two being those of a midwife whom I knew well as a most disreputable woman, and one who certainly would not stick at such a comparative trifle as a false certificate. The interments average 120 annually, and the clerk in charge gave me interesting and valuable information. He keeps a careful record of all interments, including stillbirths. His statement was somewhat as follows:—"I have no doubt that scores of children who have met with unfair play have been buried here. A very bad case came to my knowledge, where a medical man had given a false certificate of stillbirth. The case, however, was not inquired into, as some months had expired before my knowledge of the case." The sexton, whom I also saw, added—"Very large and heavy coffins, stated to contain stillborn infants, are brought, but what can we do? If we were to open them and see what was in them we should be no wiser." (This is strictly true.) Some years ago a rule was made at the request of the coroner's officer that a medical certificate should always be demanded; but as it was not extended to other burial-grounds, and was found to be productive of great inconvenience and a source of loss to the cemetery, it was discontinued.

An amusing occurrence took place shortly after my visit to the above. I attended a patient in the immediate vicinity in an abortion at about the fourth month. I was asked for a certificate, "as they had been very particular at that cemetery lately," and gave it, though I had some difficulty in determining the sex. Nothing was more painfully significant than to see the flutter which these inquiries of mine caused among the officials, and how palpably bad the present loose system was.

5. *S.*—This is an extra-mural cemetery, and the number of stillbirths interred here averages from 250 to 300 weekly. The fees are 2s. 6d. and 7s. 6d. The registrar always requires a certificate and makes some inquiries himself, the result being that he has frequently refused burial, and sent the parties away, in order that the birth and death of a child which it had been attempted to enter as a stillbirth might be duly registered. He considered that such a responsibility as this ought not to be left to the authorities at cemeteries, but that before interring the bodies of stillborn infants a burial order from some competent authority ought to be produced.

I was unable to obtain details respecting Jewish cemeteries. I am informed, however, that even stillborn infants are interred with some funeral rites, though of course different to those used for infants that have lived. The cemeteries are not for profit, but simply and solely for the accommodation of members of that race, and every precaution against fraud is taken.

The Parish Cemetery.—This is partly intra-, partly extra-mural, being situated at Walton, about two miles north of Liverpool, with a mortuary in Vauxhall-road, one of the leading thoroughfares in the north of the town, and conveniently situated amongst a dense population of the very poorest class. What is now used as a resting-place for the bodies of stillborn infants and others was formerly used as a chapel for the old parish cemetery, now disused, and situated closely adjacent. The present coroner's officer, Mr. James Blake, a most intelligent man, made many years ago a curious discovery here—viz., that the man in charge of this cemetery received a higher fee for the interment of a stillbirth than of a child which had lived. It was consequently to his interest so to inter and record them, and the parties were in many cases only too ready to pay the extra fee to conceal circumstances which it might have been very unpleasant to reveal. However, one case, the subject of an inquest, brought the whole system into daylight, and from that time to the present it has been the invariable rule for the coroner's officer to be informed by the person in charge of every case of a body left for interment. None are received without a certificate and the fee (viz., 2s. 6d. for a stillbirth, 4s. for a child which has lived). All are kept at the mortuary for a few days until removed by the parochial authorities to the cemetery at Walton. During this interval they are always subjected to an inspection by the coroner's officer, whose twenty years' experience has given him a great insight into these cases; and his description of what he has seen and brought to light would furnish a most interesting chapter to any work on forensic medicine, especially as regards the subject of infanticide. Scores and scores of cases have been stopped by him—cases of two infants in a box, with a certificate for only one, and that, too, often a false one; cases of reported stillbirth, where, in fact, the child has lived till the *funis* has disappeared; cases where the child has met with unfair play, sometimes by commission, more frequently by omission. In short, the result has fully justified this inquisitorial proceeding, and the question is forced upon us—What would be the result if every cemetery were the subject of a similar inquiry?

The following is the reply of the official in charge of a cemetery not a hundred miles from the office of the *Medical Times and Gazette*:—"We have always received a medical certificate as long as I can remember, but I am given to understand that a certificate from a respectable and well-known midwife would suffice for a stillborn child; and as the undertakers who bury in our cemetery are well known to us, we should have no difficulty in obtaining the requisite informa-

tion. Our charge for interring a stillborn child is 5s.; for an unbaptised child who has lived even for a few minutes, 5s." In other words, this gentleman knows nothing about it; he has evidently been obliged to make inquiries which ought to have been quite unnecessary; and what is the result? The officials leave it to the undertakers, and they in their turn leave it to the midwives; to whom these respectable and well-known women leave it we are not informed.

Let us now consider in what manner stillbirths may be easily and conveniently registered. Many hundreds occur annually in the obstetrical practice of practitioners in town and country, who are asked to give a certificate, and for whom no form (such as for death) is provided. The following is what I would suggest as a convenient form for such :—

To the Registrar of (the sub-district in which the stillbirth occurs.)

I hereby certify that I attended in childbirth .... wife [or widow](a) of ....., residing at ....., and delivered her of a stillborn .....child, and that the cause of stillbirth was .....

Professional title .....

Date .....

For midwives a different form of certificate should be used, and only distributed to those who had received a proper training, and passed a satisfactory examination.

Stillbirths should be entered in a separate book, lettered "Register of Stillbirths." I have been at some pains to ascertain how full particulars may be registered without any very great difficulty, and I trust I have succeeded. It will be obvious that in the case we are considering the difficulty is that a stillbirth is neither a birth nor death, but a mixture of both, and that in registering it one or other must predominate. I find that the entry must resemble that of a birth rather than a death. The form I have sketched out will be seen below :—

One great difficulty has often been pointed out as insuperable—viz., the period of utero-gestation, which should require registration. My answer to this is—"Let everything requiring burial, whether fœtus or abortion, be registered." People take fœtus of the third or fourth month for burial, and there can be no more objection to registering these than to registering an ordinary birth or death. I believe, myself, that this difficulty, like many others, would, when fairly met, shrink into insignificance, if it did not vanish altogether. In every case where there was neither a medical practitioner nor certificated midwife I would have the case referred to the coroner, who should be required to hold an inquest in all doubtful cases, and furnish the necessary information to the registrar.

No.	When and where born.	Sex.	Name and surname of father.	Name and surname of mother.	Whether delivered by medical practitioner or midwife.	Cause of stillbirth, and whether certified or not.	Signature, description, and residence of informant.	When registered.	Signature of registrar.

I fear that the foregoing remarks may be considered as prolix, and that I may appear as attaching undue importance to this measure, and also that it comes more within the province of legislators, cemetery officials, etc., than of members of the medical profession. To this I answer that most measures involving in any way the good order and wellbeing of the community must originate, if they be not altogether carried out, by members of our profession, and I would here quote in illustration the exertions of one of our brethren (Geo. A. Walker, Esq.) in behalf of extra-mural interment. The horrible and revolting practices attendant on burial in London graveyards were but little known, and might have continued unchecked for years had they not been dragged into the light and kept there by him. I cannot claim that my efforts on behalf of the infants who are often buried as stillborn when they were not so, but born alive, and of others who though really stillborn ought not and would not have been so were stillbirths made the subject of the same searching scrutiny that births and deaths are, I cannot, I fear, claim so great and such beneficial results. But I may perhaps be permitted to enumerate a few of the results so far as they concern the medical jurist and the statistician :—

1. A barrier placed in the way of child-murder, fœticide, abortion-procuring, concealment of birth, etc., etc.

2. Statistics of stillbirth in this country for comparison with those of foreign States, and also the proportionate ratio in differents parts of this country.

3. The relative proportion of stillbirths in the practice of medical practitioners and midwives.

4. How far stillbirth is due to premature labour; difficult, preternatural, or complex labour; syphilis; maternal impressions, fright, etc.

5. To what extent stillbirth may be considered as preventible.

As for the extent of the information which would be forthcoming and useful to obstetric practitioners, it would be difficult to give even an idea of it; but it cannot be doubted that, if properly arranged, it might influence our practice very considerably. We have had the satisfaction of seeing how greatly the mortality of child-bearing women has been reduced; and it would be a matter of only secondary interest to see what effect modern obstetric practice is having on infantile mortality. That it must be seriously affected by the treatment of the second stage of labour in some cases, by the induction or not of premature labour in others, by early obstetric interference in one class of cases and waiting a reasonable time in another, cannot be doubted for a moment. But the statistics at present available to obstetric practitioners are not sufficiently uniform or symmetrical to be of the value we could wish. And for these and many other grave reasons it is much to be hoped that the registration of stillbirths may not be longer delayed, but become an integral and essential part of our present registration system.

(a) Should the mother be a single woman this should be erased.

ON THE PATHOLOGY AND TREATMENT OF SMALL-POX.

By ROBERT H. BAKEWELL, M.D.,
Late Medical Officer of Health for the Colony of Trinidad,
President of the Medical Board, and Medical Attendant of the Small-pox Hospital of Port of Spain, etc.

(*Concluded from page* 625.)

I NOW pass to the subject of prophylaxis. This will not detain us long. I shall not attempt to give any additional proof of the value of good vaccination as a modifier, and indeed, in some cases, a preventive of small-pox. People who remain unconvinced by the statistics that have been already given, will not be converted by anything I could bring forward. I quite believe in the sincerity of some of these people, but it seems to me utterly useless to argue with them. We have no common point of agreement; they will not admit that two and two make four, so there is an end of all argument.

I take it that we may fairly consider it a settled point that vaccinia is modified variola. In fact, of this there cannot be the smallest doubt, so far as that vaccinia is concerned which is derived from cows inoculated with human small-pox.(a) We have in this vaccinia a modified variola, and with it we inoculate and produce artificially a mild attack of modified small-pox. That this should, to a large extent, protect the system against

(a) I fear that in some instances wholesale vaccinations and revaccinations at the commencement of an epidemic have spread small-pox among those who remained unvaccinated. At least, it happened curiously enough that in the best vaccinated districts in Trinidad there was the most small-pox. One gentleman, Mr. Robert Knaggs, reported that his district of the town was so well vaccinated in the house-to-house vaccination "that an epidemic is impossible." A few weeks afterwards he had to resign that very district, because the number of cases of small-pox was so large that he was unable to attend on them. A very out-of-the-way district in a distant part of the island was entirely free from small-pox until an energetic vaccinator, newly appointed, vaccinated upwards of a hundred in the course of three or four weeks. Small-pox then broke out. Certainly, small-pox spread with amazing rapidity in Port of Spain after the house-to-house vaccination had been a short time in operation. It seems clear to me that if you vaccinate five or six people in a small hut in five or six places each, you will have at the end of a fortnight a number of scabs equal to a mild attack of discrete small-pox, and that an unprotected person living in such a house will be liable to contract small-pox from these cases.

the unmodified variola is only what we should expect. That it should fail to do so in many instances we should likewise expect, when we consider what an exceedingly mild form of the disease vaccinia is. That it should be less protective against a second attack of variola than the mildest form of natural small-pox, we should readily infer, when we consider that vaccinia has been artificially reproduced through hundreds and thousands of generations of vesicle, from one infant's arm to another, and must have become gradually weakened by this artificial reproduction. For as vaccination has become all but universal in Europe, we find that the lymph has become more and more feeble. It has been taken often from children who were not in good health; it must have been taken sometimes from those who would never have taken natural small-pox unless they had been inoculated with it,—and so the lymph has, until of late years, been progressively getting weaker. For just as plants when cultivated lose the pungency and force they had in their wild state, so does the vaccine virus. I apprehend that if the inoculators of the days before Jenner had continually inoculated from inoculated vesicles, the resulting disease would long ago have been as mild as cow-pox.

It is very doubtful whether the lymph in Jenner's time was very much more protective than it is now, although, no doubt, it was so to some degree. For his experiments of inoculating persons with small-pox after vaccination, though they prove the efficacy of his vaccine, do not prove that it would stand the test to which it is subjected now. Did Jenner ever vaccinate an infant at three months old and then inoculate it unsuccessfully twenty or thirty years after? Vaccination of adults will, we may fairly suppose, prove much more likely to protect them for life than vaccination of infants. Whatever the mysterious substance is which forms the necessary pabulum of the small-pox germ, it will be much less likely to be renewed, when once destroyed or exhausted, in the adult than in the infant. Hence it was that, as far as I could discover by inquiries, the only persons who escaped the epidemic in the Port of Spain were persons quite recently vaccinated (and not all of them), persons revaccinated, persons vaccinated successfully for the first time as adults, and persons who had had small-pox before. Everybody else seemed to catch the disease. This is not to be wondered at, when it is remembered that we had some cases of persons having it twice within four months. Revaccination should be cautiously advised in epidemic times. Very serious results have occurred, to my knowledge, from incautious vaccinations. I always give my patients a good dose of aperient the day before the operation, with blue pill or calomel if the patient is a free liver, and order abstinence from all stimulants during the eight or nine days after the operation. To some I give also a daily dose of saline aperient—to all about the time when the vesicles begin to cause feverishness. I see no use in frequent revaccinations—I would much rather have a mild attack of small-pox like the one I had after revaccination than be revaccinated again.

As regards disinfection, I can only say that while I think the use of the ordinary disinfectants good as deodorisers, I have no faith whatever in their protective power. After the examination I have made of the dust of small-pox wards, in which quantities of minute scabs were always found, I cannot believe that any atmosphere that can be breathed by a human being can destroy the small-pox germ. I do not dispute that it may be destroyed by sulphurous acid, though I should be sorry to trust to that without heat or moisture as well; but I feel certain that it cannot be destroyed by any quantity of it in which we could breathe. The same may be said of the other disinfectants. In fact, I believe the best use of disinfectants in small-pox wards or rooms is to make such a stink that the place must be ventilated. For this reason I prefer those that have the most unbearable smell. First comes sulphurous acid, then chlorine, then the black carbolic acid—and I defy anyone to stand a combination of carbolic acid and small-pox smell without abundant ventilation. Condy's fluid is perfectly useless as a disinfectant of the atmosphere, though very good for bathing the varioles with. I used to carry a little bottle of iodine with me to smell at when there was any very bad case to examine closely. I don't think it was of much use, but it was more agreeable than confluent small-pox.

The best way to disinfect clothes and bedding used by small-pox patients is to burn them. This is the safest plan. If this cannot be done, they should either be baked or boiled—it does not much matter which, so long as either is done effectually. I do not think any small-pox germ will survive a temperature of 212° for half an hour.

For disinfecting rooms, fumigation (with all apertures closed) with burning sulphur should be done first. The room must then be stripped of its paper, if papered; the floor well scrubbed, and washed over with solution of chloride of lime or of zinc; walls and ceiling thoroughly lime-washed; and then the doors and windows thrown open for a couple of days and nights, if possible.

When persons who have never had small-pox, whether revaccinated or not, are exposed to contagion, the danger of infection is at its minimum if (1) the person be only for a short time in the poisoned atmosphere; if (2) he be in good health, and of temperate habits; if (3) he have no fear of the disease; and if (4) the atmosphere be that of one ease only, and (5) if he be living under good sanitary conditions. If, on the other hand, such person be in constant contact with the patient,—as, for example, a nurse is,—or be of intemperate habits, or of a plethoric constitution, or in an overcrowded room or ward, he will almost certainly contract the disease. If, by chance, in addition to all this, he should be very much afraid of catching small-pox, he will be sure to get it, and in a bad form too. Even when these conditions are all absent, constant expesure to the infection will in some cases overpower any amount of revaccination. No one could have been more revaccinated than two or three of my patients, who had been in the French navy, and yet they had contracted the disease. Case 180 had been revaccinated three times—all successful; Case 192 had been revaccinated successfully; Case 190 also. All these were French sailors. Case 154, a coolie, had been vaccinated three times, and it took each time. There were several other such cases. The above were all discrete. Similarly, I succumbed at last, although I have been revaccinated five or six times, always so far successfully as to produce pustules. I met with an American captain, who showed me a series of four sets of vaccination scars, all good ones, and well pitted. The first was the product of primary vaccination when a baby; the second, when he was about 20; the third when about 40 (thirteen months before I saw him), and the fourth about five weeks old. All had taken perfectly. His son, a lad of 14, had been revaccinated twice, each time successfully.

It is unfortunate that until the late epidemic taught us a lesson, we were in the habit of trusting exclusively to vaccination, and neglecting those other prophylactic measures which are just as needful in this as in the other infectious fevers. We have looked too much to the scars on the arm, and thought too little of the previous habits, mode of life, and immediate surroundings of the patient. It must not be forgotten that in all European countries the unvaccinated are taken, with hardly an exception, from the poorest and most neglected classes of the community, and may fairly be expected to be bad subjects for any disease like variola. This should always be borne in mind in estimating the mortality of vaccinated and unvaccinated. All the precautions necessary in other kinds of fevers are doubly necessary in small-pox. Therefore the drainage and sewerage of dwellings should be carefully attended to; disinfectants used to every privy and water-closet daily, and thrown down the drains; all filth removed from the neighbourhood of houses; and all such measures taken as may improve the sanitary condition of the place the small-pox has appeared in. Attention to these matters is of the very first importance. Besides these things, the public should be especially cautioned against intemperance, or any approach to it.

Fortunately the best prophylactics against variola are the best aids to its successful treatment. Vaccination undoubtedly modifies the disease more than anything else we know of, and after that comes pure air. It was both astonishing and most gratifying to see the marked improvement that took place in many of my hospital cases when they were removed from the foul dens they had been inhabiting in Port of Spain, crowded up with other patients, into the thoroughly ventilated huts of the small-pox hospital, situated outside the town, and swept through by the fresh breezes. To this and this only I attribute the fact that I saved 16 per cent. of the hæmorrhagic cases. It is impossible to attach too much importance to the dilution and dispersion of the small-pox poison by free ventilation, both as a prophylactic for those who have never had the disease, and as a means of improving the condition of those attacked. We have only to look at the neighbourhood of large towns in England during the recent epidemic to see how little danger there is of the spread of small-pox in a well-vaccinated country like this, if the patients are not placed in crowded houses, and if their other sanitary surroundings are good. In the town in which I am writing (Leicester), with a population more than four times that of Port of Spain, the epidemic of small-pox has not been nearly so severe as it was in the latter place, and, what is more, it has not to any notable extent spread to the villages round Leicester. I went down to one

of these villages and saw the surgeon, and he told me that in all his neighbourhood there had only been a few cases, and these had come from Leicester, and the disease had not spread. It would have been surprising to me if it had spread, for a healthier-looking village I never saw. In another village, where there had been in all some thirty cases among about 2000 people, I found that there were several courtyards surrounded by cottages, just as if it had been a town. It was mainly in these courtyards that small-pox had spread.

I have now to speak of treatment. In cases of simple discrete, or of mild semi-confluent small-pox, there is no necessity for any treatment at all. We may leave the patients to nature, and they will get well.

When the disease is more severe, however, something must be done. In the stage of primary fever, if we are fortunate enough to see the cases in this stage, if the patient is robust and the temperature 104° or 105°, we may give much relief to the head by local blood-letting. A dozen leeches to the temples will do no harm, and may lessen or prevent delirium. I tried venesection in two cases, but though there was immediate relief to some urgent symptoms, both the patients died—not, I believe, from the bleeding; but as it did not seem to have modified the disease, I did not feel inclined to try it again. Diaphoresis should be promoted; the skin is always, as far as I have observed, hot and dry; packing in the wet sheet two or three times a day will be found most beneficial. The effects of this plan of treatment in Trinidad were astonishing. I have no personal experience of it, as it was adopted when the epidemic was over in the Port of Spain, in a country district, and by a gentleman who is not a member of the profession. But the statistics were published in the papers; the initials, age, sex, and residence of the patients were given, and there was no attempt made to contradict the statements published. The treatment was commenced in a district (Arima) where there is no resident medical man, and it spread among the creoles solely by its own merits, although opposed to their most cherished prejudices, and to all their traditional modes of treatment. The latest statistics I have of it show the following results:—Out of 170 cases 166 recovered, and 4 died! By the negro or creole treatment in the same district, out of 258 cases 183 recovered, and 75 died. The mortality under the district medical officer, who, however, lived many miles off, and who could only be called in to the worst cases, was about 45 per cent. I give these statistics as they were published in the newspapers of the island. The gentleman who first introduced the wet sheet was resident stipendiary magistrate, and had no pecuniary object. He took no fees, and never attempted to practise for gain; in fact, he had at first no idea of doing more for his neighbours than he did for his own family. I know him personally, and am certain that he is a most honourable and upright man, and that his statements may be relied on as given in perfect good faith.

Certainly they are very startling, but there is nothing absolutely incredible in them. My own investigations had led me to the conclusion that the great point in the treatment of small-pox is to get hold of the cases in the stage of primary fever, and treat that. I gave diaphoretics, but found great difficulty in getting them to act. Now, I believe that there is no better diaphoretic than wet sheet packing, if we can only persuade our patients to adopt it. After the eruption appeared the same treatment was continued; and here again it tallies with what experience has proved to be the most successful mode of treatment. Nothing relieves the pain and fever caused by the eruption so much as assiduous warm water fomentations and warm baths. They soften the skin, promote perspiration, and lessen the tension. Poultices to the face and other parts, when the eruption is confluent, frequently renewed, are of great service. As soon as the varioles begin to be prominent they should be pricked with a needle, and bathed. A nurse cannot be more usefully employed on the fourth and fifth days of the eruption than in pricking all the varioles. If it is desired to prevent pitting, the face should be kept constantly poulticed.(b) A charcoal poultice is best, as it prevents any offensive smell from the exuding matter. In very severe cases, with delirium, a poultice cannot be kept on, and in such cases we have something of more importance to attend to than pitting. The soles of the feet and palms of the hands should always be carefully looked to in severe cases, especially among working people, in whom the skin may be thick and hard, and incisions made to let out the variolous matter early. If this is not attended to, much fever may be caused.

During the primary fever, and until the eruption is freely developed (in cases of variola simplex), the diet should consist wholly of slops. Beef-tea may always be given; but as a rule no alcoholic stimulants. Only in the cases mentioned of depression from panic did I find it desirable to give alcohol. But fluid nourishment should be given frequently in such quantities as the stomach can retain and digest. Milk, when it can be digested, is the best of all foods, and to it, or to the beef-tea, may be added a little arrowroot. Lemonade or orange-juice is useful and grateful. Unfortunately, the prejudice in Trinidad against the use of any acids in small-pox was so strong that they could never be given to the patients there, even in hæmorrhagic cases. When I tried sulphurous acid I was accused of murdering the patients. Not finding that it produced any appreciable effect I discontinued its use.

After trying chloral and bromide of potassium to produce sleep and allay delirium, without any good effect, opium in the form of Battley's liq. opii sedativus was employed, and being found to answer, was adopted as the sedative draught of the hospital. A supply was left in each ward, and the night nurses had orders to give a dose to each patient who was restless or delirious; if this did not quiet them, in two hours another dose was to be given, and if this failed they had orders to call me. It is of the utmost importance to get the patients sleep. I think there is hardly sufficient stress laid on this point in systematic works. In all febrile diseases there is an enormous waste of tissue going on, very little food is assimilated, nervous power is rapidly exhausted, and if the patient gets no sleep at night the process of exhaustion goes on with fearful rapidity. I never, therefore, stop at any dose of an opiate necessary to induce sleep; if one grain of opium is not enough I give two or three, or, in fact, whatever may be necessary. Nor have I ever seen any evil effects from this, provided the bowels have been kept open. As they are generally constipated in confluent small-pox, it was usual to give a good dose of blue pill or calomel and black draught on admission, and then the opiate at night, if required. I am sure that even when a fatal result is inevitable, life is prolonged by this use of opiates.

About the fourth or fifth day of the eruption (in confluent cases, whether simple or hæmorrhagic) the bark and opium mixture was given. This mixture was composed as follows:—R. Quiniæ sulph. ℈j.; tinct. cinchonæ comp. f. ℥j.; spiritûs chloroformi f. ℥ss.; tinct. opii ℥j. ɱxl.; aquæ ad ℥x.—M. Sum. f. ℥j. 3tiâ vel 4tâ quâque horâ.

The opium in this case was given with the view of soothing the patient's restlessness, easing the pain of the eruption, and also as an economiser of the vital force. The last member of the sentence is vague, but it is the only way I know of to express that power which we all know opium has of enabling the body to live when nervous and muscular tissues are wasting more rapidly than the waste can be supplied. Opium in these cases seems to delay the waste. It was pushed until the patient felt "comfortable." This is the only rule I can give for its administration.(c) As I am not writing for students, I need not specify the precautions that must be taken in employing a powerful agent like this; of course it is not to be given indiscriminately. It would be absurd to give it when there are any comatose symptoms, or even where, with high fever and petechiæ, there is a scanty, ill-formed eruption.

When the varioles began to fill with corpuscles, and the state of their contents showed that they had nearly exhausted all that element (whatever it may be) in the patient's blood which forms their peculiar pabulum, stimulants were generally required. The temperature would begin to fall, the pulse to get shaky and intermittent. At this time the careful and judicious employment of alcohol was often of great service. Good stout was what I had most faith in, and from a bottle to a bottle and a

(b) In Dr. Aitken's "Science and Practice of Medicine," vol. i. p. 268, 5th ed., the statement is made that "When the eruption is severe it is almost impossible to prevent the formation of pits, because the depression results from the expulsion of a small slough." I should have great hesitation in placing myself in opposition to Dr. Aitken on a pathological question, but his article on small-pox is so evidently a compilation, and not the result of his own experience, that this opinion is probably not his own. There is no slough forms in the ordinary course of the eruption; the pitted scar of small-pox is as different as possible from the smooth scar left after a sloughing surface has healed. The pitting is caused by the pressure of the scabs remaining on too long, and many very slight cases of discrete small-pox are severely pitted from this cause. I have been obliged to poultice the scabs off five weeks after the appearance of the eruption. Among all the severe cases at Trinidad, some of the worst that recovered had no permanent pitting, because their faces were assiduously bathed and the vesicles regularly punctured, as part of the treatment, and not to prevent pitting. I have never seen sloughing on the face, pyæmia, or phlebitis in any case under my care.

(c) Opium eaters require an unlimited quantity. It is best to let them take the quantity they require. Any attempt to diminish this is sure to interfere with their recovery.

half a day was the usual allowance. Sometimes egg-flip was given as well. Very little wine was used, as it was generally found that if porter did not suffice brandy was required.

In variola hæmorrhagica and aquosa, quinine and bark should be given from the first. Under this treatment, I have seen cases in which the eruption was noted as "ill-formed, irregular, or with black spot in centre (189)," or "eruption small, and badly formed, petechial on legs; pulse 76, very much depressed,"(d) change their character; the eruption developed became full and rounded, and the patients recovered. In Cases 145, 159, 68, and 160, the same thing occurred. Latterly I used to give these cases half a pint to a pint of porter a day, with very good effect. Now, I have never seen a hæmorrhagic case recover, in which the eruption did not change its character. Every case, when the eruption remained flat and irregular, died.

Among other matters of detail, to many of which it is not needful to allude, there is one that should be carefully attended to, especially in male children, and that is the state of the urinary apparatus. It is very common for boys, and sometimes for men with long prepuces, to have retention of urine from phymosis. The prepuce will sometimes swell enormously. The nurse should always be asked daily as to the state of the genital organs of females, and if the report is unfavourable, an examination should be made. If care is not taken, and great cleanliness observed, there may be sloughing of the mucous membrane of the vulva. This had taken place, before admission, in two or three cases at the Small-pox Hospital.

It is hardly needful to add, in conclusion, that no patient should be discharged from a small-pox hospital, or allowed to go out of his house, if a private patient, until every vestige of scab has disappeared, nor until every article of his clothes and bedding has been thoroughly disinfected.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. PETER'S HOSPITAL.

STONE IN THE BLADDER—LITHOTRITY—CURE.

(Under the care of Mr. TEEVAN.)

G. O., A CARPENTER, aged 26, residing at Windsor, was admitted into the Hospital on June 24, 1872.

History.—Six years ago began to suffer pain when micturating, followed by twitchings at the end of the penis. Two years ago commenced to pass a clot of blood occasionally. For some time past has had to make water every half-hour. Has never seen any gravel in urine. No history of stone in family. Patient and his parents are natives of Middlesex.

Present Condition.—The young man is pale and thin, but not in bad health. Has been at work up to time of admission, though attended with great discomfort and pain to himself. The act of micturition is very frequent and painful, accompanied with the passage of a drop or two of blood and much shooting pain down the inside of each thigh. Complains much of the pain in the perineum, which is very persistent.

Mr. Teevan on the same day passed a lithotrite scoop, and, finding the stone to be about the size of a walnut, and apparently phosphatic, attempted to crush it. The male blade of the instrument passed through a thin phosphatic coating down to an oxalate of lime calculus. Not wishing to crush so hard a stone with the scoop, he tried to eject it from the lithotrite, but was unable to do so, and with great difficulty succeeded in splitting the calculus—with so loud a crack that he thought the blade was broken. When the instrument was withdrawn it was found to be perfect, though slightly strained. The *débris* in the scoop consisted of oxalate of lime and phosphates. At 9 p.m. the same evening the patient had an attack of rigors, followed by vomiting.

June 25.—Patient has passed a feverish night, and has had another attack of rigors this morning. Tongue moist, but coated with a thick fur. Perspiring freely. Two days later the patient was in his usual health, and out of bed.

July 2.—No pieces have come away since operation. To-day a large fragment, which was apparently one of the halves of the stone, was broken up. The next day some *débris* came away.

8th.—The last operation was not attended with any unpleasant symptoms, and the patient has taken a walk each day since. Lithotrity again to-day. Pieces of stone kept passing for two days after this crushing.

15th.—Patient says he feels much better than when he came into the Hospital. Can walk about without much pain, which entirely disappears at times. Two fragments were crushed to-day, and some pieces came away the following day.

18th.—This morning a large fragment, which had been lodged in the urethra since yesterday, passed with some difficulty.

21st.—For two days after last operation *débris* kept passing, and to-day a piece came away after being impacted in the urethra for some time. Two large fragments were broken up to-day.

26th.—Patient is very comfortable. Has passed several pieces since last operation. Lithotrity to-day, and again on July 29.

August 3.—The patient, who left the Hospital after the last operation, came up to-day from Windsor. Several fragments were crushed. Suffered scarcely any pain. Not a drop of blood was passed. Two hours after the operation he returned to Windsor as he felt so well.

10th.—Patient came up again to-day, and said that the journey to Windsor, immediately after the last operation, was not followed by the slightest discomfort. Has passed several fragments since the last crushing. States that he now feels quite well.

September 19.—Patient came to the Hospital to-day to report himself. Has been at work ever since he left the Hospital, and is quite well in all respects.

Mr. Teevan remarked that the present case was one of those in which the question of the kind of operation to be performed was open to some doubt. Many surgeons would have preferred to have cut this patient; but he had crushed the stone because there were three very favourable points for lithotrity—the patient was young; there was no evidence of kidney disease; and lastly, the bladder appeared fairly tolerant of the stone, although under very unfavourable circumstances, as the patient was at his work up to the time of admission. The first application of the force required to break such a stone was followed, as might have been expected, by some constitutional disturbance, which, however, only lasted a few hours, and did not occur again. The effects of the last crushing presented a great contrast to those that followed the first, for the patient had resumed his daily work and travelled from Windsor for the operation, returning thence immediately afterwards; and, although several fragments of stone came away, yet not a drop of blood was passed, and the patient experienced no discomfort, thus showing how successful lithotrity had been in his case.

WOLVERHAMPTON AND SOUTH STAFFORDSHIRE GENERAL HOSPITAL.

NOTES OF CASES IN THE WARD FOR DISEASES PECULIAR TO WOMEN.

(Under the care of Dr. MILLINGTON, Dr. TOTHERICK, and Mr. VINCENT JACKSON.)

Polypus of the Uterus.

Case 1.—F. O., admitted under Dr. Totherick on April 30, on account of long-continued and profuse menorrhagia. The patient, a middle-aged woman, is much blanched and weakened by the excessive loss, the cause of which was ascertained to be owing to a fibroid polypus the size of a small pear growing from the anterior uterine lip.

May 2.—Mr. Vincent Jackson removed the polypus by cutting across its pedicle with a curved pair of forceps. No chloroform was given.

27th.—Discharged cured, her general health being much restored.

Case 2.—A. P., aged 46, admitted under Dr. Millington on July 24 for profuse menorrhagia due to an uterine polypus. The existence of the growth had long been known to patient, but she had frightened herself regarding the magnitude of the operation required, and feared coming to the hospital. Upon examination a softish polypus was felt, filling the upper portion of the vagina and concealing the uterus; but by dragging the growth down with forceps it was ascertained to be attached to the anterior lip of that organ.

July 25.—Mr. Vincent Jackson removed a fibro-cellular

(d) In this case it is noted on the fifth day, "vesicles contain red corpuscles;" afterwards, on the seventh day, "varioles now crammed with nucleated corpuscles, having bright nucleoli, and a few red corpuscles. All varioles 'pustular' and round."

polypus with scissors, weighing two ounces and a half. No chloroform given.

September 3.—Discharged cured. Her convalescence, owing to enfeebled health, was tardy.

Case 3.—S. E., aged 45, admitted under Dr. Totherick September 2. The woman is of large size, and although much blanched is not unhealthy-looking. She states that she has long suffered from profuse menstruation, and for several months since the menorrhagia has been constant. On several occasions she has received medical advice, but no vaginal examination has ever been requested or made.

September 5.—Seen by Mr. Vincent Jackson, the patient at her own especial desire being chloroformed to be examined, and if thought proper operated upon. A vaginal examination, made whilst on the back, detected a large growth distending the vagina and reaching down to its external orifice. The whole of the left hand was now inserted slowly into that canal and insinuated between its posterior wall and the tumour until a pedicle was felt, which was with difficulty traced within the uterus, the cervix being hardly distinguishable. All the while Mr. Newnham made steady but powerful traction upon the growth by well-gripping vulsella forceps, the result being that Mr. Jackson was enabled nearly to embrace the pedicle with his fore and middle fingers. A strong pair of closed scissors curved on the flat was now pushed between the polypus and the anterior vaginal wall as far as the fingers, then opened widely, and the blades sufficiently depressed to partly encircle the pedicle; with one cut it was divided. With some difficulty the delivery of the polypus was effected; it weighed nine ounces, and was of fibroid structure. For the purpose of cleanliness the vagina was douched with cold water, and the woman afterwards placed in her bed.

6th.—Very well; no bleeding; no hypogastric pain. Vagina to be washed out with a stream of tepid water night and morning.

7th.—Doing well.

24th.—Discharged cured.

Mr. Jackson stated that this was the largest uterine polypus he had yet removed, and it was a good exemplification of the facile and rapid way these growths, when even of large dimensions, could be safely cut away with scissors. His experience of the removal of polypi of the uterus was now considerable, and in the case of the fibroid variety he had never used any other method than incising the pedicle with scissors. He had never encountered any difficulty—never seen any hæmorrhage; and if such a thing happened, what so easy as to restrain it? and all his patients, both public and private, had made a good recovery. For this operation the only instruments required are a strong pair of scissors, vulsella forceps, and handy fingers. In a very small proportion of the cases operated upon has chloroform been administered.

Laceration of the Perineum, Sphincter Ani, and Recto-Vaginal Partition.

A. S., aged 32, admitted under Mr. Vincent Jackson on August 13. Has been married six years; confined of twins seven months after marriage, and made a good recovery. In thirteen months confined again; labour very tedious, and perineum was lacerated at the birth of a male infant; no instruments used. Has had two children and one miscarriage since. The woman is much out of health, and her life, from inability to retain her fæces, has become quite burdensome.

August 15.—Under chloroform the first half of the operation undertaken; the edges of the divided recto-vaginal partition and sphincter ani were sufficiently pared, and the raw surfaces brought accurately together by four points of interrupted fine silk suture. The legs and thighs were then bound together, and the patient removed after being ordered to be kept lying on the side. The urine to be drawn off night and morning, and the bowels to be medically constipated.

September 5.—The progress of the patient since the last report has been as follows:—For one week she was retained upon one side or the other, the urine being evacuated night and morning by catheter, and the bowels were kept locked. At this period an examination was made, and good union of the posterior vaginal wall was found to have occurred; the sutures, which were almost embedded, were carefully divided and removed. The catheter declined, and a simple enema ordered to be given to unload the bowels. The diet had consisted daily of two pints of strong beef-tea, one pint of milk, and six ounces of sherry. The security of the union was afterwards tested by the daily action of the bowels and the unrestrained recumbent movements of the patient, and it well stood these tests. To-day under chloroform the edges of the lacerated perineum were well pared, and then coapted deeply with the quilled sutures, and superficially with the interrupted suture. The same plan of treatment, both locally and constitutionally, was adopted as before.

10th.—Quilled sutures removed.

12th.—Superficial sutures removed, and catheter dispensed with.

15th.—Bowels opened four times during the night; no separation of union.

October 7.—Union firm and good; has perfect control over bowels. Health restored; patient has gained much flesh since the local distress has been cured.

8th.—Discharged.

Epithelial Disease of the Cervix Uteri—Severe Menorrhagia—Amputation of the whole of the Cervix Uteri.

E. Y., aged 38, admitted July 3 under Dr. Millington Married. Patient reported that she suffered from profuse menorrhagia, and had done so for a lengthened period. There is no emaciation, but marked anæmia. Upon examination a large epithelial growth was connected with and surrounding the os and cervix uteri; the uterus was of normal size, and quite free. No cancerous history. To keep in bed. Nourishment of easy digestion and wine ordered.

July 27.—Under chloroform Mr. Vincent Jackson amputated the whole of the cervix uteri, severing its connexion with the uterus by means of the curved bistoury. The vagina was douched out with a stream of cold water, a plug of oiled lint being afterwards inserted.

30th.—Since last report Condy's fluid has been used night and morning as an injection. The discharge is slightly purulent.

October 15.—Discharged. Patient is now recovered in her health, and the local mischief has not returned.

TERMS OF SUBSCRIPTION.

(*Free by post.*)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

The Medical Times and Gazette *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, DECEMBER 21, 1872.

A LESSON FROM THE POTTERIES.

We have before us two reports by Dr. Ballard on the hygienic conditions of the Stafford Potteries, which at the present juncture, apart from their intrinsic value as models of the sanitary State paper, afford lessons of great and pressing import. The Local Government Board is now in process of appointing throughout the country a force of Medical Officers of Health, to whom the great interests bound up in the health of the population are to be entrusted. These appointments very

wisely and rightly, as we maintain,—supposing that certain conditions are fulfilled—have been placed within the reach of the general practitioners of the districts, and especially of the Poor-law Medical Officers. The conditions are that those gentlemen who are already, by local knowledge, partly fitted for the office, should render themselves, by due preparation, specially capable of fulfilling its duties; and, on the other hand that they should be adequately remunerated for discharging the same. Of course these conditions are simply those which common sense would suggest; but the story Dr. Ballard has to tell of the Staffordshire Potteries furnishes only too clear a proof that they are the conditions which will be most easily avoided where parsimony and inertness are the motives which rule the local authorities.

We have not space to quote Dr. Ballard's description of the filth, the cesspools, the untrapped drains, the pigsties, the overcrowding, which, together with close workshops and dust for inhalation, combine to make the death-rate of the Staffordshire Potteries exceptionally high. It will suffice to say that typhoid and pulmonary affections, scarlatina, and diarrhœal diseases are specially favoured in these pleasant districts, and that the sanitary conditions under which the inhabitants exist are sufficiently gross to account for all their unenviable notoriety. It will be said at once that all these conditions might be cured by the appointment of Medical Officers of Health, Sanitary Inspectors, and the institution of local sanitary authorities. Not at all. This, in several of these filthy, uncleansed, pestiferous hives, has been done already; but in what manner? Dr. Ballard's report furnishes the explanation. In one important sub-district the Medical Officer of Health is said to be the senior practitioner. The only functions which he performs "consist in the periodical writing of very meagre reports, occasionally advising the Inspector of Nuisances, or giving an opinion on bad meat, and now and then certifying for the closure of an unwholesome house." These functions, however, meagre as they seem, may be considered proportionately large for the salary he receives, which is £25 per annum. In another sub-district the Medical Officer of Health "is not aware that any particular functions devolve upon him by statute." He furnishes a "meagre" annual report, which is printed. "His office has hitherto been one rather of record than of action." Twenty pounds per annum rewards this gentleman for his exertions. In the sub-district of Kidsgrove the Medical Officer gives his services gratuitously, and has the privilege of paying out of his own pocket for the monthly list of persons who die in his district. Dr. Ballard writes of this gentleman's position—"His duties are not defined, and he has no very clear idea of what they should consist in." This, we think, is not to be wondered at, considering the estimation of the Local Board of what the performance of the duties is worth. In another sub-district the Medical Officer of Health is paid £36 per annum, out of which he pays £6 to the registrars for the returns of mortality. Concerning this gentleman Dr. Ballard writes—"He has access, when he wishes for it, to the medical relief books of the union surgeons, and *occasionally* private practitioners *have not declined* to supply information. He tabulates the mortality returns regularly and systematically, and makes a monthly report to the Nuisance Committee,"—a large amount of work for his munificent pay! The Fenton Board of Health last May appointed a Medical Officer of Health, and after entering on their minutes an olaborate account of the duties he ought to perform, voted him £12 12s. per annum. This gentleman, for his guinea a month, furnishes a monthly summary of deaths, and throws an occasional inspection of houses into the bargain. In the sub-district of Longton the Medical Officer of Health is paid £25 per annum, and there is no definition of his duties. This gentleman, for this handsome stipend, makes a monthly report to the Sanitary Committee, and "occasionally" condemns houses and meat.

For ourselves we are only surprised that anything at all is done for these miserable doles—given, it would seem, for the express purpose of inducing the Medical Officer of Health to leave things alone. Dr. Ballard's report undoubtedly reveals the most disgraceful conditions in these Pottery districts; and in those cases in which Medical Officers of Health are elected, an implied or expressed rebuke is evidently conveyed. But we may well ask on whom the rebuke ought to fall—on the Health Officer or on his employers? No sanitary board which expected to have anything done for its money would pay its Medical Officer of Health at the rate of a farm labourer. If any blame rests upon the district practitioners it is that of accepting an office the duties of which they know they are not intended to fulfil.

We trust that the lessons conveyed by this report will not be lost on Mr. Stansfeld. If he be in earnest in this matter of hygienic reform, and is really anxious that death-rates should be reduced and epidemic disease warded off, he must first take care that the salary of the Medical Officer of Health is such that he can perform his duties at least without actual loss. This report furnishes no argument against the appointment of Poor-law Medical Officers to be Medical Officers of Health,—for some of the Health Officers of the Potteries do not hold Poor-law appointments—but it yields this lesson: that the control of the central authority must be authoritatively exercised, not only in providing for these appointments fit and skilled officers, and in defining their duties and demanding their fulfilment, but in combatting the parsimony of the local authorities, experience of which is after all the main reason why many local practitioners look askance at the office and position of Medical Officer of Health offered to them by the recent Act.

GRATUITOUS MEDICAL ADVICE.

We have always contended that if proper supervision were made and care taken the system of gratuitous medical advice, at the present time so much abused, would be not only modified but considerably abated. Some short time since we announced that the applications to the parochial surgeons of Shoreditch had increased to such an extent that some check was necessary to be imposed upon them. The Board of Guardians, therefore, determined that in all cases where practicable the applicants for medical relief should appear before the Board *in formâ pauperis*. The experiment has been attended with a remarkable result—no less than a diminution of 40 per cent. on the number of applications. There should be some test, some stringent inquiry made in all cases, whether at hospitals or dispensaries, or other charitable institutions where gratuitous medical aid is to be obtained, into the actual condition of the applicant. Cases such as that recorded in the *Times* the other day, in which a well-dressed man, gold-chained and gold-ringed, endeavoured to steal an opinion from a hospital surgeon at his hospital, are far more numerous than could be supposed by those unacquainted with the subject. The meanness and duplicity of even what are called "respectable" people, with respect to imposing upon medical practitioners in this particular, is astounding. Dr. Wardrop was in the habit for many years of giving advice to "poor people" at his house in Charles-street, St. James's-square, and was induced to discontinue the practice from the following circumstances:—He had been called out one morning early to a patient in the neighbouring square. On returning home he saw alighting from a coroneted carriage a somewhat shabby old man, whom he recognised as one of his gratuitous morning patients. He made a detour, and returning inquired of the footman the name of his master, whom he ascertained to be the Earl of ——. When his turn came the pauper patient was ushered into the consulting-room of the great surgeon. Wardrop, in his blunt and decisive style, addressed the impostor by his name. The surprise of the latter may be conceived.

Wardrop, who kept notes of all his cases, ascertained that he had been defrauded of somewhat about twenty guineas. This sum he demanded under a threat of exposure of the culprit; and was successful in obtaining it. We have heard Wardrop relate this anecdote, and describe in his graphic manner the miserable appearance that the old rogue presented. The circumstances detailed took so strong an effect upon Wardrop that he determined to discontinue a vicious system. Frauds of this description are so frequent since the establishment of proprietary special hospitals and dispensaries that surgeons in general practice, particularly in the metropolis, are robbed of a large portion of their income. It is high time that this system of robbery should be put a stop to, and we trust that the efforts of the Charity Organisation Society will be, to some extent at least, effectual in suppressing it. To the young and struggling general practitioner, anxious to earn an honourable livelihood by the practice of his profession, it is impossible to over-estimate the injury which he sustains by indiscriminate gratuitous advice. This, added to the present fierce competition which prevails by the reception of small fees by some young "consultants," and to the prevalence of counter practice by mere vendors of drugs, makes it all but impossible for the most industrious, well-informed, and honest general surgeon to obtain even a livelihood, much more a fair and just remuneration for the services which he renders. Who can wonder, then, that what is called our "noble" Profession should be as "poor" as it is "honourable"!

THE PROGRESS OF EVENTS IN EDINBURGH.

Last week we had occasion to refer to a decision of the Court of Session, determining that firms and "composite" voters were entitled to a voice in the election of Managers of the Edinburgh Royal Infirmary. This decision appeared to us to have an important bearing on the interests of the Edinburgh Medical School. The votes of firms were challenged after the last annual meeting, inasmuch as the result of the voting seemed to open up the way for the admission of female students into the Edinburgh Infirmary. After the legal decision in favour of the representatives of "female emancipation," it was not to be wondered at that the managers whom the Court of Session had declared to be duly elected should endeavour to take possession of the official position from which they have been so long excluded. Consequently we find that, immediately after the decision of the Edinburgh Court of Session, a party representing the interdicted managers endeavoured to take their places at the Infirmary Board. Though their welcome was so cordial as to suggest that their opponents had reconciled themselves to their defeat, yet a technical matter stood in the way of their participation in the management of the affairs of the Infirmary. A reference to the Infirmary minutes showed that the managers whose appointment had given rise to so much dispute had never been declared elected by the meeting of contributors. It was arranged by both sides that on the succeeding Monday a special meeting of contributors should be requested to perform this necessary though simple duty. Accordingly, such a step has been taken, and the representatives of the female medical party will now have an opportunity of displaying that executive ability which for the last twelve months has been kept in the background.

Other events show that, so far as Edinburgh is concerned, the long-debated question of female medical education is working towards a climax. For a considerable time the Court of Session has been entrusted with the settlement of the legal points in dispute between the lady students and the Edinburgh University. The Lord Ordinary has already decided in favour of the ladies, and the judgment of the Inner House is anxiously waited for, especially as it is understood that the interest and difficulty of the subject under consideration have led the Court to regard it as one requiring the attention of the whole concerted body of judges—a divergence from the ordinary method of procedure by which, we understand, one or other division of the Inner House settles appeals from the Lords Ordinary.

Another sign that this vexed question is being thrust forward with a view to immediate if not amicable settlement, is that the Committee of Infirmary Managers, who were entrusted with the task of preparing a report regarding the admission of female students to the Infirmary, have found that the question is one upon which not even a committee can agree. The managers expected that by one report from a select body they would be directed to a wise decision. But when a second and a third report emanated from so small a committee, the managers can only fall back upon their own united judgment, after an additional proof that, as feelings on both sides are strong and opinions immutable, a conservative neutrality would constitute the wisest policy. One of the reports upon which the managers intend to deliberate on Monday, first recommends that admission should be given to ladies on the condition of their making their own arrangements with teachers, subject to the supervision of the managers; a second report advises that they should be unconditionally excluded; while a third, bearing the signatures of Sir Robert Christison and Dr. Gillespie, proposes that ladies already entered as students should be admitted on the understanding that the privilege should be extended to none others. This last report may perhaps be regarded as the avowal of a desire on the part of the University to free Edinburgh from female medical agitation, by permitting the present agitators to pass through its curriculum on the condition that they shall be the first and the last to do so.

The question is evidently drifting towards a settlement of some sort, and we can only hope that the result will be the removal from the Edinburgh School of a social fungus which has already rendered it unfavourably conspicuous, and which might in future diminish that vitality which it has of late so prominently manifested.

THE WEEK.

TOPICS OF THE DAY.

The Branch General Medical Council for England met on Wednesday. There was no very important business to transact, and the sitting was chiefly occupied with a preliminary inquiry into the facts of a charge of disgraceful conduct against a registered practitioner, which will probably come before the General Council at its next meeting. We believe that the time most suitable for holding this meeting was the subject of conversation amongst the members present, but that nothing very definite was agreed on.

The Pharmaceutical Society, aroused doubtless by certain expressions which fell from the lips of Mr. Stansfeld on the occasion of receiving the Kent and Surrey branch of the British Medical Association, has sent a deputation, headed by their President, to the President of the Local Government Board, requesting from him an authoritative statement on the part of the Government that Members of the Pharmaceutical Society are not excluded from the office of public analyst by the wording of the Adulteration of Food Act. The deputation stated that a case had been laid before the Solicitor-General and Attorney-General, and that they had been advised that qualified persons, other than medical practitioners, might hold the office of analyst under the Act. They also affirmed that the examination given by the Pharmaceutical Society in chemistry and materia medica was quite equivalent to the examinations in the same subjects which are instituted by certain of the medical examining bodies previous to admission to the Medical Register; and further than this, they declared that there are upon the Register of Pharmaceutical Chemists

and Druggists persons possessing competent medical, chemical, and microscopical knowledge for the office of analyst within the meaning of the Act of Parliament. We were not aware that the chemist and druggist was supposed to possess any medical knowledge at all, in the ordinary sense of the term. He is doubtless expected to have some acquaintance with the ordinary properties of drugs, but this cannot be termed medical knowledge, as he is utterly ignorant of the diseases for which they are prescribed. It is difficult to see how a pharmaceutical chemist, who knows nothing practically of anatomy, physiology, pathology, or physiological or pathological chemistry, could be entrusted by the Government with the investigations in cases of poisoning and accident which will certainly be submitted to the district analyst. We do not for one moment argue that every medical man, merely because he is a registered practitioner, is suitable for the post of chemical analyst; but we maintain that, supposing he possesses the necessary chemical knowledge and laboratory practice, he will, in virtue of his medical education, be a much more appropriate person to fill the office than any pharmaceutical chemist can be. We say this in full cognisance of, and with great respect for, the work that the Pharmaceutical Society has done by its examinations for chemists and druggists.

On Tuesday there was a meeting of the Committees of the Royal Colleges of Physicians and Surgeons on the subject of the "Conjoint Examination Scheme." It is clear, however, that in the present attitude of the Scottish Branch Council and of the University of Edinburgh, and in face of the difficulties which any scheme for conjoint action will meet with in Ireland —to say nothing of the legal obstacles which have prevented the University of London and the Apothecaries' Society from taking their share in the movement—it would be premature and ill-advised to press on a partial combination which may probably have the effect (even supposing it can be legally carried out) of diminishing the revenues and prestige, and of affecting the trusts of the Royal College of Surgeons. The good to be got by an incomplete combination is problematical. The one-portal system would be practically as far off as ever.

Professor Huxley has been elected by a considerable majority over his opponent, the Marquis of Huntly, to the Lord Rectorship of the University of Aberdeen. The University is divided into four nations. In one—the Moray nation—the votes were equal; of the other three nations, Professor Huxley had a majority in two. The total number of votes on each side was—For Professor Huxley, 274; for the Marquis of Huntly, 221.

The paper read by Dr. Mouat at the last meeting of the Epidemiological Society on the subject of cholera in Russia advocated the view that Asiatic cholera has become endemic in St. Petersburg. He believes that no fresh importation of poison is necessary to explain the frequent recrudescences of the disease there. The sanitary condition of St. Petersburg is very disgraceful to an advanced civilisation like the Russian. A soil so saturated with sewage that Dr. Mouat described the city as almost floating upon a bed of sewage; the excrementitious matters from houses discharged into porous cesspits, whence the liquid portions permeate the surrounding earth, and find a way into the canals which intersect the city; the canals so full of filth that the authorities are afraid of disturbing it and raising a pestilence; and no system of drainage or of pure water supply,—these things make St. Petersburg an excellent bed for the naturalisation of the Asiatic plague. The worst of it is that Russia will not suffer from these conditions alone. Cholera is more likely to reach the cities of Western Europe from St. Petersburg than from the banks of the Ganges.

Charles Watson, described as holding an American degree, on Tuesday pleaded guilty at the Old Bailey to the charge of uttering and publishing obscene libels. He was discharged on entering into his own recognisances of £1000 to come up for judgment when required. The libels in question were obscene pamphlets on medical subjects, which Watson had circulated largely. Proceedings have also been taken against the proprietor of Kahn's Museum. The case stands over.

ROYAL COLLEGE OF SURGEONS.

The following is an abstract of the unconfirmed proceedings of the last meeting of the Council:—

A letter was read from the President and Secretaries of the Metropolitan Counties Branch of the British Medical Association, with respect to the proposed meeting of the Association in London in July or August next, when it was resolved that the letters in question be referred to the Committee for General Purposes to consider the same and report thereon to the Council.

Letters were read from Mrs. Metcalfe and the Rev. F. C. Skey, respectively thanking the Council for its resolution of condolence in reference to their late father.

A communication was read from the Royal Academy, requesting the loan, for the Exhibition of the Works of the Old Masters in January, of some of the pictures, and of a bust belonging to the College; when the President stated that, in the absence of any meeting of the Council, he had, with the concurrence of the Vice-Presidents, consented to the loan of the pictures and bust in question.

A letter from Mr. John Adams was read, resigning his seat as an examiner in consequence of ill-health; whereupon it was resolved unanaimously—

"That the President be requested to communicate to Mr. Adams the expression of the regret of the Council that ill-health should have compelled him to retire from the Court of Examiners."

The President stated that a special meeting of the Council would be summoned for Thursday, January 2, 1873, for the election of a member of the Court of Examiners in such vacancy.

The case of John Fletcher Fletcher's expulsion from the College appeared in last week's *Medical Times and Gazette*.

The Council then proceeded to consider the propriety of removing, under clause 2, section xvii., Mr. Harry Lobb from being a Member of the College in consequence of his unprofessional advertisements, when it was resolved—

"That Mr. Lobb be directed to inform the Council if the column of advertisements in the *Times* of November 5 (since repeated) was published by his authority, and that his answer, with the matter, would be taken into consideration at a special meeting of the Council on January 2, 1873."

Mr. Charles Hawkins gave notice of the following motion, to be taken into consideration at the next meeting of the Council:

"That the practice of frequently advertising medical works in the non-medical press is, in the opinion of the Council of the Royal College of Surgeons of England, not conducive to the honour or dignity of the medical profession."

The Secretary laid before the Council a return of the number of candidates who presented themselves for examination in chemistry at the preliminary examinations for the Membership and Fellowship in December, 1871, and June, 1872, showing the number who passed and were rejected in those examinations, and the results in chemistry, when Mr. Henry Lee gave notice of the following motion:—

"That the Court of Examiners be requested to call, through the Dean of the College of Preceptors, the attention of the examiners in chemistry to the number of rejections that occurred in the preliminary general examination in June last."

UNIVERSITY OF DUBLIN.

It is not unlikely that a visitation will shortly take place in connexion with the recent election of a Professor of Comparative Anatomy. It will be remembered that this new chair was intended to be partly endowed out of the fees hitherto given exclusively to the Professor of Anatomy. A very high

law opinion adverse to the legality of this and of other proceedings relative to the matter has been obtained, and the question (as we have said) may be brought before the Visitors of Trinity College—the Archbishop of Dublin and the Chancellor or (in his absence) the Vice-Chancellor of the University.

WHERE IS THE RESPONSIBILITY?

GOVERNMENT in India, whether it relates to finance or to health, is one of the most difficult subjects on which to form an opinion. We have enough in the mother country to confound us by the prevalence of the red-tape system. In our great Indian Empire, however, it is all but impossible to fix responsibility on anyone. Our contemporary the *United Service Gazette* has rendered important service on many occasions with respect to the health and well-being of our English brethren in the great Indian Peninsula. We have much pleasure in extracting from its pages the following practical remarks. Our contemporary has the sagacity and the courage to estimate the real grievances of the residents in India from the glitter which surrounds them:—

"The ill-construction of the Indian barracks may be thrown upon dead engineer colonels and their subordinates, but there are other matters connected with them respecting which the Indian Government can in no way get rid of its responsibility. In the majority of cases the sites of these barracks have been selected in unhealthy localities, and no heed has been taken as to whether or not there was a sufficient supply of pure water, it being now an established fact that impure water is the main, if not the only, cause of that worst of all epidemics, Asiatic cholera. What follows from this? A very trifling matter—nothing sufficient to arrest Lord Northbrook's gracious hand when investing the Begum of Bhopal with the insignia of the Star of India. Only a loss of 5000 English soldiers annually, from causes entirely preventive by proper selection of living places, and the most ordinary sanitary precautions! What happened at Saugor has happened and is happening in almost every case of the erection of an Indian barrack. The site has been badly chosen, the necessity for good water has been overlooked, and the buildings have tumbled down on the heads of the first regiment that was quartered in them. An independent member of Parliament raises an alarm, the Indian and military newspapers echo his cry of horror and surprise, a Government Commission is appointed to inquire, and the result is that the whole of the blame is laid upon the office of a dead man, the Indian Government meanwhile diverting public attention from it—indeed by getting up raree-shows of barbaric splendour in which the English Viceroy is the principal performer."

ETHER *versus* CHLOROFORM.

A VERY animated debate on this subject took place at the last meeting of the Surgical Society of Ireland, on Friday, the 13th inst. At the previous meeting of the Society Dr. Morgan had introduced the subject in an elaborate paper, and the discussion on his communication had been postponed. Among the speakers on the present occasion were Dr. R. McDonnell, Mr. H. Wilson, Dr. Jacob, Dr. Kidd, Dr. Atthill, Dr. B. F. McDowell, Dr. Macnamara, Dr. H. Kennedy, Dr. Grimshaw, Dr. Darby, Mr. Fleming, and Dr. Stokes. A considerable diversity of opinion prevailed as to the relative merits of the two anæsthetics in question, the balance, perhaps, tending rather in favour of ether. In the end, a provisional committee was appointed for the purpose of organising a Representative Hospital Committee, to collect statistics, and to lay a report on the subject before the Society within a year.

TRANSFUSION.

A COMMITTEE of the Obstetrical Society has been formed for the purpose of inquiring into the best method of performing the operation of transfusion. The whole subject of transfusion is one upon which more information is very desirable. The members of the committee intend to meet frequently at the Society's Library, 291, Regent-street, and will gladly receive any communications detailing the results of experiments, or giving an account of any cases in which the operation was performed, and a description of the apparatus used for the purpose.

FROM ABROAD. — NEW SUBVENTIONS TO THE ACADÉMIE AND FACULTÉS DE MÉDECINE—M. DEMARQUAY ON ASPIRATION IN STRANGULATED HERNIA.

WHILE commenting last week upon the pedantic letter which M. Jules Simon, the Minister of Public Instruction, had addressed to the new Faculty of Medicine at Nancy, we were not aware of some of the practical benefits which he had also conferred on medical science, and which will remain even if the "Right" succeeds in its somewhat violent attempts at ejecting him from the Ministry. The Académie de Médecine has much profited by his good offices, having received an augmentation of its budget from 45,000 fr. to 75,000 fr. The fact of the additional sum having been voted unanimously by the Assembly has naturally led to regret that it was not asked for long since; but in the days of the Empire the money was wanted for more showy purposes, and the desire of emulating Germany was not so powerful an incentive as it proves at present. One most pressing need on the part of the Academy is the provision of a suitable locality for its library, which is stated to be a very excellent one, passing into ruin from damp and other causes. It is now almost certain, too, that the invaluable one left by Professor Daremberg will be presented to the Academy by M. Simon, who has made an offer for it which it is said will be accepted. This will indeed be a worthy destination of so unique a collection, and one that does great honour to the Minister's courage and appreciation. He has also succeeded in obtaining votes of 24,000 fr. for the Faculty of Medicine of Paris, and of 12,000 fr. each for those of Nancy and Montpellier, with the object of enlarging and furnishing their laboratories, so that they may have a fair field for the scientific struggle with Germany. Indeed, as has been well observed, this will only be the revival of a class of studies in which France had acquired great fame before the researches of the German *savants* had been set on foot; and we have only to recall the names of Denis, Lecanu, Andral, and Gavarret, Becquerel and Rodier, Robin and Verdeil, Piorry and L'Heritier, etc., to prove the justice of the remark. The French cliniques, which are represented to be crowded by students, somewhat to the neglect of the theoretical lectures, are well supplied with all instrumental appliances, and there can be no doubt that they will maintain their old renown, which to equal on the part of Germany will require a facility of exposition not yet exhibited by her professors.

At a recent meeting of the Paris Société de Chirurgie, M. Demarquay read a report (founded on a case communicated by Dr. Bailly, of Chambly) "On the Aspiration of the Liquids and Gases contained within a Strangulated Hernia." M. Bailly was called at ten o'clock on the night of September 7 to a lady 58 years of age who had laboured under a femoral hernia of the left side during the last forty years, and which had been strangulated since the morning. He remained two hours with the patient, and, having employed the taxis without success, resolved to operate the next morning. Accordingly, after additional attempts made under chloroform, the hernial sac was laid bare, and it was determined to try how far aspiration would facilitate its reduction. Pravaz's syringe was employed three times, but, as reduction was found still to be impossible, the sac was laid open and two new applications of the syringe were made to the intestine itself. The distension of the intestine having by this means been diminished, the taxis was again gently applied, and the intestine returned. The patient did well.

M. Demarquay is of opinion that the procedure of which the above case is an example is well deserving of attention, and should be encouraged and recommended within certain

limits. 1. It should be encouraged because it is an innocent procedure. Everyone is aware that punctures of the small or large intestine have long since been practised both in man and animals without giving rise to any serious accident. M. Demarquay has often made such punctures without having had to reproach himself with having aggravated the condition of the patient. M. Cloquet's numerous applications of acupuncture prove that all the tissues may be traversed by needles without any accident in general resulting; and M. Dolbeau has shown that a noose of intestine penetrated by a fine trocar does not allow of a drop of fluid or a bubble of gas passing out, in spite of pressure being exerted on the intestine.

2. It is not enough, however, to demonstrate the innocence of an operation, for we must also show that it is useful and rational. Clinical experience demonstrates this; for of the twenty-three cases in which the practice has been resorted to, and which have been collected by M. Gérard, it has in thirteen instances incontestably favoured the return of the hernia. Among the ten cases in which it has failed to do so, in some it was not performed with sufficient precision. Even supposing these were examples of failure, they cannot be adduced against the procedure, inasmuch as they nowise aggravated the condition of the patient. That the practice is rational is seen from what happens in successful taxis, the gurgling sound made by the displacement of the liquids and gas being a certain sign of the return of the intestine. The distension of the intestine is to a certain extent a cause of the persistence of the strangulation. It is true that other causes of irreducibility may exist, over which aspiration exerts no influence; but such causes have not prevented its success in thirteen out of twenty-three cases. As to aspiration applied through the integuments in aid of the taxis, this of course ceases to be available when the taxis itself is contraindicated; and for those who with M. Demarquay are averse to forced or prolonged taxis, its employment in this way must be very limited. The taxis itself is indeed a serious operation, which for its successful execution requires a practised hand; and most of the patients upon whom M. Demarquay is called to operate after prolonged taxis die.

Aspiration applied to the reduction of hernia, when properly executed, is not attended with the same dangers as prolonged taxis, removes a foreign body (the gases), and facilitates reduction. It is not correct to compare aspiration in strangulated hernia with aspiration for the removal of the liquid of a hydrarthrosis; for while in the former case we remove a foreign body which impedes the intestinal functions, in the case of a diseased joint we merely act upon a symptom of the disease, leaving the general cause which has produced the disease and the disease itself in operation, which indeed may be aggravated by the puncture.

Admitting that the aspiration of liquids and gases may and ought to be employed in the treatment of hernia, as a means of rendering the taxis more easy, the question arises, "When should it be resorted to?" To this it may be replied, "As soon as possible after the surgeon has ascertained that the taxis, preceded by chloroformisation, is powerless for the reduction of the hernia." Aspiration having been employed, he again tries to reduce the hernia, and often succeeds. If he fail he should at once resort to kelotomy. Aspiration through the integuments, then, is indicated, together with the taxis, and ceases to be so when this is inapplicable. In the case which has been related, M. Bailly varied the practice by performing aspiration first through the exposed sac, and then through the intestinal wall itself; and the question is, Which of these practices is the best? Upon this M. Demarquay has no doubt. The intestine should be exposed so that the cause and seat of its strangulation, and the changes undergone by the strangulated parts, may be ascertained. That done, aspiration should be performed with great care. This may enable the intestine to be reduced without any *débridement*; but reduction should never be practised without first drawing a small portion out, so as to be sure that no section or gangrene of the intestine contra-indicates it. If aspiration do not prove completely successful, it still may render *débridement*, whether of the neck of the sac or of the ring, more easy of execution; for this stage of the operation may be rendered difficult, both by the intensity of the strangulation and the distension of the intestine. The extremity of the index-finger, and even its nail, sometimes penetrates with difficulty between the intestine and the part which strangulates it, the distended intestine so surrounding the finger that the surgeon is in danger of wounding it and the mesentery also. In those cases in which aspiration proves insufficient, and the hernia remains irreducible, kelotomy must then be at once had recourse to, since the fact that aspiration has proved inefficacious shows that there are adhesions or anatomical conditions which oppose reduction; and the more promptly these are attended to the better.

DRUITT TESTIMONIAL FUND.

Mr. Haynes Walton, the Treasurer, begs to acknowledge the receipt of the following subscriptions since Wednesday, December 11:—

	£	s.	d.
Mr. T. Mayo (Winchester)	10	10	0
Dr. Churchill	10	10	0
Mrs. E. E. Day (Essex) ...	5	5	0
Mrs. Lionel Beale	5	5	0
Mons. Laussot (Paris) ...	5	0	0
Mr. Robt. Drummond ...	5	0	0
Sir Robt. Phillimore ...	4	0	0
Mr. Richard Quain ...	3	3	0
Dr. Kelly (Tintara Vineyard, Adelaide, S.A.) ...	2	2	0
Mr. G. Johnson	2	2	0
Dr. Armitage	2	0	0
Mr. Wm. Martin	2	0	0
Dr. Ruttledge	1	1	0
Dr. Bull (Hereford) ...	1	1	0
Dr. W. S. Smith (Weymouth)	1	1	0
Mr. J. Wright Baker (Derby)	1	1	0
Mr. John Merriman ...	1	1	0
Dr. Allbutt (Leeds) ...	1	1	0
Dr. Andrew...	1	1	0
Lady Phillimore	1	1	0

Mr. Octavius Cooper of last week should have been Mr. Octavius *Coope*.

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. T. Norton, 6, Wimpole-street; or be placed to the account of the Druitt Testimonial Fund, Union Bank, Argyle-place, Regent-street, W.

Amounts received will be acknowledged in one or more of the medical journals.

DISEASE AND MORTALITY AT HOME AND ABROAD.

Scarlet fever is fatally prevalent at Oldham. In consequence it has been resolved to close the public schools for a month, in order to prevent the spread of infection amongst the children.

Small-pox still continues to rage both at St. Petersburg and in Finland, the mortality in Viborg especially being very great.

The sanitary condition of Berlin is reported to be deplorable. The attendance at the schools is falling off from the illness of the pupils. Leading doctors are worn out by their hard work. People who pay £300 a year for a flat of five rooms have to send for water to a common pump, whence the water is so impure that "every drop intended for consumption must be boiled," and the atmosphere at certain times "would make a healthy rhinoceros sick."

Small-pox continues to rage at Altofts. There were upwards of twenty cases in the village last week.

Eight deaths from small-pox occurred in the Hackney district in the last fortnight.

In the metropolis last week 1199 deaths were registered, being 523 below the average.

Dr. Corfield stated in his report for November that no disease in an epidemic form prevailed in Islington then. The deaths were below the average; and he adds, "There can be no doubt that the parish, and indeed London generally, is in an exceptionally healthy condition."

Portsmouth was the healthiest of the large towns in Great Britain last week, the death-rate being only 15 per 1000. The other towns stood in the following order:—London, 19; Nottingham, 22; Bristol and Wolverhampton, 23; Liverpool and Sunderland, 24; Leeds and Birmingham, 25; Sheffield, 26; Bradford and Salford, 27; Newcastle, 28; Hull, 29; Oldham, 30; Leicester, 31; Norwich, 32; and Manchester, 34.

At Upton-on-Severn, out of a population of 2657, which includes many persons whese ages are between 80 and 90, not a single death, either of an adult or child, has occurred in the town or parish for the last nine weeks.

During the month of November, 1872, there were registered in the eight principal towns of Scotland the deaths of 2322 persons, of whom 1174 were males and 1148 females. Allowance being made for increase of population, this number is 327 below the November average of the last ten years; and this is the first occasion since the Registration Act came into operation in which the mortality for November has been below that of the previous month. A comparison of the deaths recorded in the eight towns shows that during November the annual rate of mortality was 20 deaths per 1000 persons in Aberdeen and in Leith, 23 in Edinburgh, 25 in Perth, 27 in Glasgow and in Paisley, 29 in Dundee, and 31 in Greenock.

REVIEWS.

The Practice of Surgery: a Manual. By THOMAS BRYANT, F.R.C.S., Surgeon to Guy's Hospital. With 507 illustrations. London: J. and A. Churchill, New Burlington-street. 1872. Pp. 1088.

A NEW text-book on Surgery which professedly includes every subject with which the general surgeon has to deal, strongly claims from a critic a serious and impartial review—serious, because by the judgment of the reviewer a great many will be influenced in their adoption or otherwise of the work as their standard; and impartial, because it is but right to an author who has accomplished a long and laborious task that a deliberate and unbiassed verdict should be passed upon the result of his toil. It is an easy thing, and one for which no great amount of skill or patience is requisite, to make an analysis of the grammatical structure of a few sentences, to point out the obscurity of meaning of a chance phrase, and to remark upon a word once or twice misprinted; but this is not reviewing in its proper sense; nor is it possible to obtain any idea of the value of a work on a special subject from such a superficial point of view.

It has been from a wish to avoid expressing a hasty opinion of the work, and not because we did not feel that it claimed our early attention, that we have deferred the notice of Mr. Bryant's book on "The Practice of Surgery" till now. In reading through the pages of this manual it cannot be denied that two faults strike us. The first is the want of finish of many of the sentences, which sometimes amounts almost to unintelligibleness; but much as this is to be regretted in an author who is so well able to speak with authority upon any of the topics with which he deals, criticism with respect to it is entirely disarmed by the acknowledgment that "the manner of the execution of the work is faulty."

This confession, we feel sure, must have reference also to the second of the two faults we have alluded to—viz., the arrangement of the work. After a short introductory chapter, at the end of which are some excellent outline directions to the student as to what to observe in examining or reporting a surgical case, there follow four chapters on "repair and inflammation"; "traumatic fever, septicæmia, and pyæmia"; "trismus and tetanus"; and "delirium tremens." Then, through nearly half the volume, the chapters are grouped into sections upon what may perhaps be called a physiological system. Thus we have chapters from 5 to 19, inclusive, on the "surgery of the nervous system"; from 20 to 22 on the "surgery of the respiratory system"; from 23 to 27 on the "circulatory system"; from 28 to 35 on the "digestive system"; from 36 to 45 on "injuries and diseases of the integuments and cellular tissue"; chapters on the different varieties of gangrene, and on erysipelas and erythema, are included in this section, and by a somewhat extraordinary grouping the "diseases of the lymphatics and their glands" are likewise classed under this heading, though "elephantiasis," which might have been brought under this section, is described much further on, and is coupled with "tumours of the umbilicus." The section containing chapters from 46 to 56, inclusive, is on "diseases of the urinary organs." This, however, is the last of the sections, and throughout the rest of the book no attempt is made to group the separate chapters.

It is very easy, of course, to take exception to this arrangement, and yet, at the same time, want of arrangement; and as to some of its details, we are puzzled to know why a chapter on "feigned and hysterical disease" should appear between one on "gunshot injuries" and one on "affections of muscles and tendons."

Nor is it consistent to include under "orthopædic" surgery such deformities as wry-neck, knock-knee, and contractions of the fingers. No doubt, by the mode of spelling adopted, the author considers he may rightly apply the term not only to deformities of the foot but to those of the whole body, as well of adults as of children; but if so, all deformities should be included under this heading. Nevertheless, others, such as curvature of the spine, are described under other headings.

In the chapter on "traumatic fever, septicæmia, and pyæmia," Mr. Bryant tells us—"In inflammatory and surgical fever the poison is probably derived from disintegrated tissues, and generated from within the body. In septicæmia, ichoræmia, puerperal fever, and pyæmia, the absorption of putrid inflammatory products, whether from a wound or otherwise, of pus or pus-forming material, or of some other poison, is the undoubted cause. The poison under these circumstances is taken into the body, either by the veins or by the absorbents, from without, traumatic fever passing into septicæmia, and this into pyæmia—the first being the mildest form of blood-poisoning, the last the most severe; the one generally ending in recovery, the other by the formation of secondary abscesses, either within or without the body, and death." According to this statement of the relation of septicæmia to pyæmia, the former is simply a stage in the intensity of blood-poisoning between traumatic fever and pyæmia, and does not differ from the latter as to its cause or origin, nor in its symptoms except as regards their severity. This view is not universally held.

In answer to the question "What are the pathological conditions found after death in a case of blood-poisoning or pyæmia? using this word in a general sense," Mr. Bryant gives in a tabulated form an analysis of 203 cases collected from the records of Guy's Hospital. From this analysis it will be seen that pyæmia follows most frequently amputations after compound fracture (38 cases); next frequently after inflammation and suppurations of soft parts (33 cases); next after amputation for disease (29); and after diseases of bones and joints (28). Mr. Bryant draws especial attention to the exceptional occurrence of phlebitis in pyæmia, and he concurs in the opinion expressed by Mr. Savory, that in those cases in which both exist phlebitis is a local and pyæmia a general effect of the same cause. Further analyses are given, by which it is seen that pyæmia is the cause of death three times more frequently after amputations for compound fracture than after amputations for disease.

The whole subject of injuries to the cranium and its contents is fully gone into, and some important general principles relative to these precede the detailed account of them. The author is evidently concerned with the necessity of impressing these "practical facts" upon the memory of the reader; for thirty pages further on he again states them, together with others, though in a somewhat different form.

Discussing the operation of trephining, Mr. Bryant thinks it may be distinctly stated that the operation gains more support from cases in which it has been employed "to prevent, check, or relieve irritation of the brain or its membranes from depressed and comminuted bone, from inflamed bone (whether the result of accident or disease), or from compression of the brain from the presence of pus between the bone and dura mater," than from those cases in which it was used "to relieve compression of the brain from depressed bone or from extravasation of blood." The author, however, is not able to add anything which will assist us in determining the difficult question as to when the symptoms of compression are due to the existence of pus within the cranium.

In lateral curvature of the spine mechanical contrivances are condemned as curative agents, as "they tend to cause atrophy of the muscles that support the back, instead of strengthening them, and thus to make the deformity a permanent one." Instruments are only of value when the deformity is confirmed, and support is necessary for the patient to be able to get about.

In angular curvature an apparatus should in most cases be worn, by which the weight of the trunk is thrown upon the hips.

The surgery of the respiratory system is well dealt with. In describing the treatment of polypi nasi, the use of tannin as a snuff in causing the sloughing off of the gelatiniform and fibro-cellular forms is highly spoken of, and a diagram of an instrument for the application of the tannin is given. It is a bent glass tube, with a small receptacle in the upper half, modified from a plan suggested by a patient of the author.

The section on foreign bodies in the windpipe is clear

and instructive. The surgeon is never to permit a foreign body to remain in the air-passages, and must not be misled by the mildness of symptoms or the knowledge that bodies have remained for years unexpelled. The means here recommended for diagnosing whether difficulty of breathing is due to a foreign body in the œsophagus or in the windpipe are only applicable in those less urgent cases in which death from suffocation is not impending. With all proper deference to Mr. Bryant's experience, we cannot help differing from him when he directs that in all urgent cases tracheotomy should be performed, and, if subsequently the larynx be found the seat of impaction, a catheter should be introduced from the wound below. From a practical as well as from a theoretical point of view, it is our opinion that the larynx, and not the trachea, should be opened. A foreign body is most likely to lodge in the larynx, because here the calibre of the air-passage is smallest, and in this case the operation for the relief of the impending suffocation suffices also for the removal of the exciting cause. Again, it has appeared to us, from some few cases we have seen, in which the trachea has first been opened and the body afterwards discovered in the larynx, to be wasting the strength, if not actually jeopardising the life, of the patient to attempt to force upwards the impacted body by a catheter passed through the tracheal opening, as recommended by the author. In each case which has come before us the thyroid cartilage had subsequently to be divided, and the foreign body removed through the second opening.

For the evacuation of pus from the pleural cavity, Mr. Bryant, while speaking favourably of the method of De Morgan, does not adopt it, as he has been well satisfied with a free opening made with a scalpel or large trochar and canula, and then simply introducing a drainage-tube or catheter. In some few cases he has daily washed out the cavity, and with a good result.

The circulatory system receives a due share of attention. Bell's tragic account of dying by hæmorrhage is given *in extenso;* it presents a vivid picture, easily realised by the reader, and the intelligent student will feel grateful to Mr. Bryant for introducing him to such a description by such a writer. Torsion, as might have been expected from Mr. Bryant's employment of it, is highly spoken of. He has tried, too, Dr. Fleet Spiers' "artery constrictor," and thinks it may prove useful for obstructing arteries in continuity. An instrument made after the fashion of the one used by Dr. Spiers (as delineated in the *New York Medical Mirror*) has failed, however, in its object in our own hands. Aneurism and nævus of course are fully gone into, and the chapter on these subjects is very beautifully illustrated by numerous drawings from preparations in the museum of Guy's Hospital.

The chapter on ligature of arteries will be hailed with delight by students and practitioners alike; the directions for the performance of the operations are concise, and the diagrams, from being coloured after the manner of Clognet's work, are understood at once.

In the chapter on injuries and diseases of veins an illustration is introduced to show the remarkable degree of distension and hypertrophy of the veins of the abdominal and chest-walls which took place in a woman whose inferior vena cava was completely obstructed by cancer, but who never had the slightest œdema of the lower extremities.

The surgery of harelip is succinctly but fully described and is illustrated by several well-selected diagrams; so, also, are the affections of the palate and jaw. The chapter on injuries of the abdomen is good; but perhaps the most complete of all the chapters on the "surgery of the digestive system" are those on hernia. This subject is thoroughly worked out, and is rendered very intelligible to the student by a series of nine diagrams of the forms of hernia, and some of its complications, such as reduction *en masse*. The question of opening or not opening the sac in herniotomy is judicially discussed, and statistics drawn from the last eight years' practice at Guy's Hospital are given in favour of the minor operation. Cases of displaced herniæ which have lately occurred are referred to for the elucidation of this subject, and Mr. Birkett's paper in the Medico-Chirurgical Society's *Transactions* is quoted. From no manual will the reader be able to obtain a better account of hernia than from the pages of this book.

Much, however, of what is here written on hernia has recently appeared in these pages in a series of lectures delivered by the author at Guy's Hospital; so, too, have the remarks on intestinal obstruction, tapping the intestine, and colotomy.

Further on in the book Mr. Bryant strongly recommends colotomy for vesico-intestinal fistula.

In speaking of the connexion between fistula and phthisis, Mr. Bryant refers to his inquiries when Surgical Registrar at Guy's: he only found three cases out of 193 in which either hæmoptysis or any marked symptom of phthisis had been present, and he confesses to a doubt as to the fact that fistula and phthisis are at all connected as cause and effect. He accords with the general opinion that an opening into the bowel nearly always exists, and he quotes M. Ribes, who wrote in 1819 to the effect that in nearly all the internal opening was just within the sphincter, "but in no instance was it higher than half an inch." We allude to this because we have lately seen it stated by a well-known surgeon that he holds this view contrary to the generally received opinion of surgeons, and that he finds difficulty in persuading others as to its truth.

On skin-grafting the author writes—"In the management of ulcers it is a great boon, and in the treatment of large granulating surfaces, so common after extensive burns, its value cannot be over-estimated; as an adjunct to many plastic operations, more particularly on the face, and in the case of deformities, it is invaluable." As to the mode of action of the "grafts," Mr. Bryant says there can be no doubt that they are direct stimulants to the sore, and more particularly to the margins of the sore; that the engrafted portions grow "by proliferation of their own cells" is proved, he considers, by the extension of portions of black skin when implanted on the ulcer of a white man. The risk run in transplanting skin from one subject to another is too great, he thinks, to allow of the practice being considered justifiable.

In reply to the question if a surgeon is warranted in cutting down upon a suppurating kidney in order to give free exit to pus, or to remove a stone, the author unhesitatingly expresses his belief that he is justified. He then describes the operation of nephrotomy, which he says "is not one of difficulty, nor is it one of danger; in both these points it is probably on a par with lumbar colotomy, and it is probable that in a few years it will be as recognised an operation."

A rare but real affection, chiefly of young middle age, is tubercular disease of the bladder. Mr. Key once suggested the propriety of laying open the bladder, as in lithotomy, when this disease is attended with ulceration.

Mr. Bryant sounds no uncertain note as to which mode of performing lateral lithotomy he prefers. His statistics and his remarks advocate Key's operation with the straight staff. Aston Key's authority is not unfrequently cited, and the practice of this surgeon, as formerly witnessed by the author, evidently holds a high place in the estimation of the latter.

Mr. Cock's views on the treatment of cases of retention of urine, in which a catheter cannot be passed and urethrotomy is not requisite, by puncturing the bladder, are thoroughly endorsed; the objections raised against the operation are considered by Mr. Bryant to be theoretical and not practical.

The chapters on diseases of the spermatic cord and testicles are very complete. To these subjects the author is known to have given a great deal of attention. A general summary of the means for diagnosing scrotal tumours, and a "table of diagnosis of chronic diseases of the testicles," will be found very useful to the student preparing for examinations. In speaking of "extirpation of the uterus" for fibro-cystic disease and for fibrous tumours filling the abdominal cavity, Mr. Bryant augurs that the operation will become more frequent as time progresses. It is, however, he remarks, the gravest which a surgeon can undertake. He has performed it four times. The chain écraseur made by Mayer, of Great Portland-street, is the instrument best adapted for the purpose.

The chapters on dislocations and fractures are far removed from each other, being separated by seven others on the "pathology of joint disease," "diseases of special joints," "tumours of bone," etc.; but this separation must be expected in a book in which surgical injuries are nowhere described apart from surgical diseases. Some of the special dislocations and fractures—as those of the jaw and spine, for example—are not to be found in these chapters, but are given under other headings, and, as we think, much to the want of completeness of the chapters on dislocations and fractures themselves. In the last page but one of dislocations, a printer's error is at first sight somewhat confusing, the heading of the page being "pathology of joint diseases." A diagram of an unusual kind of multiple fracture of the patella is given at page 957. The bone is broken transversely into four segments, and each is united by ligament. This diagram is made from a preparation which was added to the Guy's museum by the author's father, and it must have been gratifying to Mr. Bryant to have been able to

improve his book by a great many other drawings copied from preparations from the same source.

In the chapter on "tumours of bone," other structural changes in bone are described—as, *e.g.*, mollities ossium and rickets. These two subjects are briefly treated, and no reference is made to those changes in the cranial bones to which Billroth drew attention, and which have lately been described by Dr. Markoe and Dr. Jacobi, of New York, under the name of "Craniotabes." On amputations Mr. Bryant writes—"The 'mixed method of amputation' has a wider application than to operations about the knee, for it includes the advantages of the circular and the flap without their disadvantages; indeed, I believe it to be by far the best operation in all amputations of the leg and forearm; by it there is rarely, if ever, any necessity to sacrifice more of the extremity than is absolutely required. . . . . In amputation of the forearm the mixed form is *the* operation, the skin-flaps being made from the anterior and posterior aspects of the part. It is far superior to the flap made by transfixion, the tendons of the part always rendering this method a very unsatisfactory one in this region. In amputation at the wrist-joint and elbow-joint nothing can be better."

The method of performing amputation at the hip-joint advocated by Mr. Bryant differs from that generally recommended. He considers *external* and *internal* flaps the best. "The surgeon should make the external skin flap by means of a semicircular incision, starting from the tuberosity of the ischium downwards and outwards, one hand's breadth below the great trochanter, and then upwards and forwards to the centre of the groin on the outer side of the femoral vessels, and this should then be reflected upwards above the trochanter so as to expose it and allow the joint to be opened and disarticulation to be completed, the limb being forcibly adducted by an assistant to facilitate this step. In doing this no vessel of any importance is opened while the most difficult part of the operation is completed." The inner flap is made by transfixion, "in doing which all the pelvic muscles are separated at one clean sweep from the thigh-bone, and a few touches of the knife complete the amputation." It will be observed, however, that the *external* is really an *externo-anterior* flap. And this is necessary; for were it not so it would be quite impossible to disarticulate before the inner flap also was made.

We must not dwell further on this or the remaining chapters, as our space will not permit us to add more to this already long review. Suffice it to say that while we have not been able to avoid speaking freely on some few of the features of the work, we have formed a very high estimate of the merits it undoubtedly possesses; and we cordially agree with an opinion we have heard expressed by an examiner in Surgery, that the manual may be safely recommended to students as the text-book for their guidance. To make it complete in this respect, however, there are required chapters on ophthalmic, aural, and dental surgery. It is not necessary that these subjects should be described minutely, but we would strongly advise that some notice should be taken of them in future editions. By the practical surgeon the work will be highly esteemed, and we doubt not that all old Guy's men will be glad to possess a volume which has been built up so largely from materials contained within its walls by a member of the surgical staff of the Hospital.

The author, we are sure, will consider it desirable in future editions to rearrange the valuable material that is here collected; and though we anticipate that only a short time will elapse before a second edition is called for, it may be time enough for him to improve the plan and order of the work. We hope, too, that the shape and size of the volume will be more comely than the present. The reader has, however, to thank the publishers for following the American fashion of saving him the trouble of cutting the leaves of the volume, and to thank the author for the marginal notes, and the large type employed for the three or four words commencing important paragraphs. So much for the construction of the book. In following the author in his treatment of the separate parts of the work the impression is forced upon one that he is an experienced and painstaking observer—one who is in the habit of looking at the clinical aspect of his patients, well knowing the pathological significance of their symptoms, and with the intention of pushing the remedial measures at his disposal to their ultimate legitimate extremities. The whole handling of his subject is original and independent, and bespeaks a man who knows what he is writing about, and who has a mind unquestionably of a practical turn, but well adapted for the contemplation of the experiences stored up in it, and for the production of well-digested views and judicial opinions. No pains, however, have been spared in searching for information from every trustworthy source, and great credit is due to Mr. Bryant for the manner in which he introduces, in their own garb, the authors from whom he quotes. Thus he does full justice to the authority he introduces, and the authority itself is more thoroughly impressed upon the reader.

The Physicians' and Surgeons' Visiting List for 1873. Upon a plan furnished to the publishers by Francis Seymour Haden, Esq. Twenty-seventh year. John Smith and Co.

The excellence of Smith's visiting list, and its great use in assisting to arrange and systematise the daily work of the medical practitioner, have been so frequently pointed out in our columns that we need only say that the present volume possesses all the manifold excellences of its predecessors. We recommend the busy practitioner who has not yet tried its use to begin with the new year; and we are certain that he will find his time saved, his punctuality stimulated, and his labours lightened by its use. To the young man who is making a practice we can assure him its use will greatly facilitate the process and do much to insure success, by helping him to cultivate those habits of careful attention to individual patients which are absolutely necessary to attain it.

FOREIGN AND COLONIAL CORRESPONDENCE.

FRANCE.

Paris, December 2.

The Cliniques of Béhier and Sée—The Value of Experiments in Medicine—Treatment of Heart Disease—Death of Drs. Voisin and Cabal—Illness of Raspail.

In my last I announced the opening of the School of Medicine for the winter, but the clinical lectures had not then begun. These have since been resumed, and I shall endeavour, as briefly as possible, to entertain your readers with what I have seen and heard at the different hospitals. In Medicine, the clinique of M. Béhier at the Hôtel-Dieu, and that of M. Sée at the Charité are certainly the best attended—that is, as far as numbers are concerned. In Surgery, the clinique of Professor Richet, of the former hospital, and that of Professor Gosselin, of the Charité, equally attract the largest number. In following the different lectures I was struck with the great divergence of opinions, and sometimes even of doctrinal points, in the science and art of Medicine as enunciated by the different professors; and, by a strange coincidence, while Professor Sée, in his opening lecture, expatiated on the advantages of experimental physiology in demonstrating to a certain extent the pathogeny of morbid processes in the animal economy, Professor Béhier, on the other hand, declared that while he would not deny the utility of such experiments for the elucidation of the effects of certain poisons or medicaments on the system, he could not see what analogy there could be between these and the more complicated processes of disease. It is at the bedside alone, and at autopsies, he added, that these processes could be studied with any degree of profit, and he considered it presumptuous on the part of the would-be *fabricants de maladies* (manufacturers of diseases) to suppose that they could produce in a minute what it takes Nature days and even years to effect. M. Béhier, who is a thorough clinician, then concluded his remarks by admitting that great light had been thrown on the physiological action of certain drugs, such as the component parts of opium, digitalis, and belladonna, yet he has failed to observe any marked difference in their therapeutic application. They are employed to fulfil the same indications, and are used exactly in the same cases, now, as in the earliest times of the practice of Medicine.

Professor Sée maintained that experimental physiology constituted the basis of Medicine, and that its application to pathology, aided by proper diagnosis, was the only means of insuring anything like sound therapeutics. It was, he added, to the Paris School and to the practitioners of the first half of the present century that belonged the honour of improving the art of diagnosis, and it is the privilege of the present generation to enlighten by experimental medicine the conservatives or non-progressists as to the proper interpretation of certain morbid phenomena that take place in disease, these morbid phenomena

being nothing more nor less than physiological conditions variously modified.

After these preliminary remarks M. Sée announced that his programme for the present session will consist principally of diseases of the heart, including the diagnosis (where practicable at the bedside itself) and the treatment to be adopted in particular cases. The therapeutics of heart disease, he said, were extremely limited, and this was owing to the attention being too exclusively directed to the seat of the lesions without taking into account the relations of the organ with the other parts of the body. This may indeed be applied to all the organs; but as the heart is the centre, as it were, of animal life, and as the latter cannot in any way be deranged without affecting the other parts of the system, it necessarily follows that the therapeuties of diseases of the heart should receive a more extended application. Bleeding and digitalis were considered the panacea of all the diseases of the heart, whatsoever their nature, but the most recent researches have shown the fallacy and danger of this practice; and as the heart is a complex organ, the treatment of its diseases is not only complex, but, as it has been demonstrated by actual experiment that the different constituent parts of the heart are influenced by certain medicaments, these should be employed according to the nature of the lesion, and to the tissue affected. These M. Sée designates "les agents modificateurs du cœur," and divides them into six groups. The first comprehends those substances which act on the motor nerves in general, and on those of the heart in particular, by paralysing them; such are curara, Calabar bean, hemlock, and aconite. The second group are agents which moderate the irritability of the muscular tissue; these are veratria, the salts of potash, particularly nitre, which latter moderates the action of the heart, and at the same time lowers the temperature of the body, and hence called "temperants" by the ancients, but more properly termed "muscular agents." The third group comprises the bromide of potassium, the ergot of rye, nicotine, and belladonna, and are styled "vascular remedies." The fourth group are the so-called "cardiaques" *par excellence*, at the head of which he places digitalis. The fifth are remedies which act primarily on the spinal marrow, and thence by reflex action on the heart itself; such are opium and its alkaloids, and strychnine. The sixth group comprises the anæsthetic agents. In my next I shall continue Professor Sée's general remarks on heart disease, which occupied his second leeture.

The death is announced of Dr. Félix Voisin, which took place at Vanves on November 23, in the 78th year of his age. He was formerly principal physician to the Bicêtre asylum, a most distinguished alienist, and author of several works on mental diseases, the most remarkable of which is "Le Traitement intelligent de la Folie," published in 1847. He leaves two sons, both eminent in their way. One who bears the same Christian name is a Member of the National Assembly; and the other, Dr. Auguste Voisin, who has adopted the specialty of his father, is Physician to the Salpétrière. The deceased took his degree in 1819.

Dr. Cabal, recently appointed to the Veterinary School at Alfort, has come by his death in a most melancholy manner. His house, which is situated on the banks of the Seine, was inundated a few days ago, and he was obliged in consequence to leave it and take shelter elsewhere. Being desirous, however, to save some important papers he had left behind (among which was one on animal magnetism, which he intended to read before the next meeting of the Academy of Sciences), he returned in a boat to fetch them, taking with him his son, a lad of 17, and a boatman. The current was so strong that they were unable to pull against it, and when about the middle of the river the boat upset. The Doctor disappeared almost immediately, and the son, who was a good swimmer, struggled for some time and then went down. The boatman, however, finding that any effort on his part to save his drowning companions would be of no avail, held on to the boat, which was soon driven to the shore. This has caused a great sensation at Alfort, and his death is looked upon as a great loss to the Veterinary School, and to the scientific world at large.

It is reported that M. Raspail, who has won a certain notoriety as a revolutionist, but who is more popularly known as the "Camphor Doctor," is lying seriously ill, and little hope is entertained of his recovery. He is an old *pharmacien*, about 80 years of age, and won the *soubriquet* of "Camphor Doctor" from his having vulgarised this substance as a panacea for all diseases. His son, who is only an "officier de santé" (a species of undergraduate), has a *clientèle* that many doctors would be proud of, owing to the prestige of his father and to his carrying out faithfully the "Système Raspail." Those who have visited the Père Lachaise will remember the tomb of Madame Raspail, mother of the latter, who is there represented climbing up, or rather being drawn up, the wall of the prison in which her husband was incarcerated for rebellion in 1848, and where, a short time before her death, she went to take her last adieu through the little window near the roof.

The prefect of police has ordered that tables containing elementary rules of popular medicine are to be hung up at all the police-stations in Paris, so that in cases of emergency one can afford preliminary aid before the arrival of a medical man.

GENERAL CORRESPONDENCE.

MR. STANSFELD AND THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

LETTER FROM MR. J. WICKHAM BARNES AND DR. MONTAGUE THOMAS.

[To the Editor of the Medical Times and Gazette.]

SIR,—We beg to hand you the copy of a letter we have received from Mr. Stansfeld, acknowledging the receipt of a copy of the resolutions of the Council of the Poor-law Medical Officers' Association; and as it may be interesting to Poor-law Medical Officers generally, we ask you to be good enough to give it a place in your next issue. We are, &c.,

J. WICKHAM BARNES, } Hon.
MONTAGUE THOMAS, } Secs.

Medical Club, Spring-gardens, December 16.

"Local Government Board, Whitehall, S.W.,
December 12, 1872.

"Gentlemen,—I am directed by the President of the Local Government Board to acknowledge the receipt of your letter, enclosing a copy of the resolutions of the Council of the Poor-law Medical Officers' Association, relative to the appointment of Poor-law Medical Officers as Medical Officers of Health, under the Public Health Act, 1872. The President directs me to thank you for your communication, and to state that it is very satisfactory to him to find that the Council concurs in the views which he has recently expressed with regard to such appointments. He sees no reason to doubt that Poor-law Medical Officers, selected because of their fitness for the office to be Medical Officers of Health, will discharge their duties in a manner to reflect credit upon the service to which they belong.

"I am, Gentlemen, your obedient servant,
"H. FLEMING, Secretary.

"To J. Wickham Barnes, Esq., and Montague Thomas, M.D., Hon. Secretaries, Poor-law Medical Officers' Association, Medical Club, Spring-gardens."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 10.

Mr. T. B. CURLING, F.R.S., President, in the Chair.

DR. GEORGE JOHNSON read a paper "On the Pathology of Chronic Bright's Disease, with Contracted Kidney, with especial reference to the Theory of 'Arterio-capillary Fibrosis.'" The author began by referring to his discovery of hypertrophy of the muscular walls of the minute arteries in cases of chronic Bright's disease, published in the fifty-first volume of the Medico-Chirurgical *Transactions*. This result of a quarter of a century's careful observation is now called in question by Sir William Gull and Dr. Sutton, who, in the recently issued volume of the *Transactions*, propound doctrines of great novelty relating to the pathology of Bright's disease. They give a brief summary of their conclusions at pages 295-96. Dr. Johnson now proposed to inquire whether these conclusions are in accordance with pathological facts and with physiological principles. To prove that hypertrophy of the heart is a consequence of "arterio-capillary fibrosis," and not of degeneration of the kidney, they refer to six cases in which it is said that the cardio-vascular changes were present, while the kidneys were healthy or but little altered in structure. In each of these cases Dr. Johnson main-

tains that the hypertrophy of the heart was due, not to changes in the minute bloodvessels, but to other obvious causes. In one case (No. 7), aged 42, there was emphysema of the lung and bronchitis; in one (Case 10), aged 69, there was senile gangrene, and, of course, degeneration of the larger arteries; in one (Case 20), there was disease of the aortic valves; one patient, who was 63 years of age (Case 2), probably had senile degeneration of the arteries, and her kidneys weighed fifteen ounces; another (Case 3), was 77 years of age; while in a sixth case (No. 19), aged 62, there was atheroma of the cerebral and probably of other arteries, his lungs were very emphysematous, and his kidneys weighed only eight ounces. It is assumed by Sir William Gull and Dr. Sutton that kidneys weighing as much as fifteen ounces and as little as eight ounces were alike free from disease. Although it is maintained (pp. 289-90) that there is a constant relation between the "hyalin-fibroid" change in the vessels and hypertrophy of the heart, it is stated (p. 292) that in a few cases this change was seen in the vessels of the pia mater, unassociated with hypertrophy of the heart. The "hyalin-fibroid" change is supposed to lessen the elasticity of the walls of the minute arteries, so to impede the circulation, and to cause hypertrophy of the left ventricle (p. 290). Dr. Johnson maintains that in this explanation the elasticity of the larger arteries, which acts in aid of the heart as a propelling force, is confounded with the muscularity of the smaller arteries, which antagonises the heart. Degeneration of the muscular walls of the arterioles would involve, not an increase, but a decrease of resistance, and therefore would not explain the cardiac hypertrophy. It is stated by Gull and Sutton (p. 295) that thickening of the arterial walls is always associated with atrophy of the adjacent tissues. Yet they state (p. 287) that these arteries are thickened in the walls of the *hypertrophied* heart, and they are also thickened in the large white kidney. Going on to discuss the nature of the "hyalin-fibroid" change, Dr. Johnson maintains that it is not an ante-mortem pathological change, but a post-mortem physical result of the distension of the fibrous tunic of the arteries by the mixture of glycerine and camphor-water, in which all the specimens had been mounted before they were examined by the authors of this theory. He maintains that the appearance in question is never seen in vessels examined minutely after their removal from the body, or preserved in dilute spirit, or in a solution of salt of specific gravity 1030, while it is frequently, but not constantly, observed in specimens mounted in glycerine. Normal arteries from the pia mater, mounted in these different fluids, present a striking contrast; those in dilute spirit or in salt and water appearing quite normal, while those in glycerine are constantly thickened and hyaline. The "hyalin-fibroid" appearance thus produced may be seen in vessels from subjects at the two extremes of infancy and old age, where death has resulted from diseases having no relation to Bright's disease, and quite unconnected with hypertrophy of the heart. Specimens are preserved from the pia mater of a woman, aged 40, who died of diabetes, and whose heart weighed only six ounces and three-quarters; from another woman, aged 40, who had cancer of the ovary, the heart weighing eight ounces; from an infant, aged 11 months, who died from spasm of the glottis, the kidneys, heart, and all the viscera being quite healthy; and from a boy, aged 15, who died from typhoid fever, having been in good health until the attack of fever. There was no post-mortem evidence of disease except such as resulted from the fever. Arteries from the pia mater are preserved in three different fluids. Those in weak spirit and in salt and water (specific gravity 1030) appear quite normal, while those in glycerine and camphor-water have their fibrous tunic much distended and extremely "hyaline." The imbibition of fluid by the arterial tunics is a result of physical conditions. A fluid slightly acidulated rapidly passes in, and distends the fibrous tunic, rendering it "hyaline"; then the neutralisation of the fluid by ammonia occasions a rapid shrinking of the tunica adventitia, which again assumes its normal fibrous appearance. The physical conditions which favour the imbibition of the simple unacidulated mixture of glycerine and camphor-water would be influenced by various circumstances, such as the mode of death, and the period after death at which the examination is made. It is incumbent on those who maintain that the appearances in question are the result of pathological processes to demonstrate them in vessels which have been unchanged by artificial agents. The glycerine renders the muscular structure in some vessels indistinct; and this has been described as atrophy of the muscular elements. In other vessels it separates the inner from the muscular coat; and this has been mistaken for thickening of the internal tunic of the artery. (See Plate v., Figs. 3 and 4, in the last volume of the *Transactions*.) The author denies that the capillaries are thickened, and maintains that arterioles in the pia mater distended by glycerine have been mistaken for capillaries. With regard to the changes in the kidney, their "hyalin-fibroid" character is denied by Dr. Johnson; and reference is made to a paper by Mr. Simon, and another by Dr. Johnson, in the thirtieth volume of the *Transactions*. Referring to Fig. 7, Plate vi., in the paper by Gull and Sutton, Johnson declares that they ignore the fact that in the renal arteries there is an inner longitudinal, and an outer circular, layer of muscular fibres; and in a transverse section of such an artery they mistake the outer circular layer for the analogue, in position and structure, of the "hyalin-fibroid" condition of the fibrous tissue of the arteries of the pia mater. They deny the existence of muscular hypertrophy; yet some of their own specimens and drawings exhibited at the *conversazione* of the Society in June were good examples of hypertrophy of the muscular walls of the arteries. Reference is made to a footnote at p. 277 of their paper, in which a doubt is expressed as to the possibility of casts escaping from the convoluted tubules of the cortex.(a) Dr. Johnson maintained that in the microscopic appearances of some forms of tube-casts we have abundant evidence of their origin in, and their escape from, the convoluted tubes. The more frequent occurrence of hypertrophy of the heart in connexion with the contracted than with the large white kidney he explains partly by the more watery blood in the latter cases exciting less contraction of the arterioles, and partly by the occurrence of waxy or lardaceous degeneration of the minute arteries, which thereby have their contractile and resisting power impaired. To doubt the causative connexion between contracted kidney and hypertrophy of the heart because they are not constantly associated would be as unreasonable as to deny that a large white kidney is a cause of dropsy because dropsy is sometimes absent. The author disputes the statement that the morbid changes in cases of contracted kidney "are the result of causes not yet ascertained." The most common causes are excess of food and of stimulants, with or without decided gouty symptoms, but he has seen many cases in which the disease has been a result of chronic dyspepsia in persons of strictly temperate habits. The proximate cause of the renal degeneration is the excretion of abnormal products by the gland-cells. This applies to all forms of Bright's disease, whether acute or chronic. The term "arterio-capillary fibrosis" is a misnomer, for the capillaries, except the Malpighian capillaries, are unchanged, and there is no "fibrosis" of the arteries. The author concludes by thanking Sir William Gull and Dr. Sutton for having so forcibly directed attention to the cardio-vascular changes in chronic Bright's disease. Differing entirely in their pathology, they agree in thinking the subject one of great interest and importance.

Dr. Sutton said that he had been requested to state Sir William Gull deeply regretted that he was unable to be present at the meeting of the Society. Dr. Sutton next remarked that "Dr. George Johnson in the first part of his communication refers to three cases recorded in our paper in which the kidneys were healthy, the left ventricle of the heart hypertrophied, and the vessels thickened by fibroid changes; and he states that, in his opinion, the cardiac hypertrophy in these cases was not due to the vascular change, as considered by us, but to other obvious causes—viz., to vesicular emphysema and to senile degeneration. We are well aware experience has shown that not only is the right ventricle dilated and hypertrophied in cases of vesicular emphysema, but the left also; and it has been difficult to explain why the left ventricle in such cases is hypertrophied. It is evident that it is not due to the atrophy or stenosis in the lungs only, for the lungs are sometimes greatly wasted or contracted by fibroid change, and the left ventricle is free from hypertrophy. We offer the explanation that it is due to the morbid changes in the arterio-capillary system. Dr. Johnson says senile degeneration will account for the hypertrophy of the left ventricle; but Dr. Johnson, in using the term senile degeneration, does not define what histological changes have taken place to necessitate such hypertrophy. We submit that the fibroid formation described by us is one form of senile degeneration. I may here be permitted to state we do not say that the thickening of the arterial walls is always associated with atrophy of the adjacent tissues; it frequently is, no doubt, but we have purposely avoided using the word 'always,' in order that we may make further inves-

(a) In the note referred to, the word *tubercles* is, without doubt, a misprint for *tubules*.

tigations. Dr. Johnson next maintains that the microscopic appearances seen in the vessels and described by us are not ante-mortem but post-mortem changes. We are glad to find that Dr. Johnson admits the appearances, and there can be little doubt that fibrous or fibroid tissue is better seen in glycerine and water than in salt or spirit and water, for both the salt and the alcohol appear to act on these tissues, rendering them less translucent and sometimes causing them to shrivel; and for that reason histologists usually mount fibrous tissues in glycerine. We here desire to state that we have examined specimens mounted in salt and water, in spirits and water, in iodised serum, and in albumen and water, and found the outer coats of the vessels thickened by fibroid changes. Dr. Johnson states that these appearances are not always seen in the vessels of the pia mater of persons who have died of chronic Bright's disease with contracted kidney, which is in accordance with our experience, and we have already said that such is the case; but whilst the vessels of the pia mater were healthy, in the same cases the vessels of other parts of the body were thickened by fibroid-hyalin or homogeneous matters. It is stated by Dr. Johnson that glycerine causes the muscular tissue of the vessels to contract and become indistinct. We were not before aware of this, and it seems difficult to understand how glycerine and water can cause fibrous tissues to swell and enlarge, and at the same time cause muscular tissue to shrink. It is also stated that glycerine separates the inner from the middle coat of the vessel. This, also, we have some difficulty in understanding. We are well aware that pressure may cause this separation, as in the vessel represented by drawing No. 4 of our paper, in which the appearance of the inner coat is admittedly artificial. Dr. Johnson denies that the capillaries are thickened. We can only re-affirm that we have found them thickened in the manner stated by us, and we take this opportunity of further stating that our later investigations lead us to think that the capillaries are in some cases thickened where the morbid changes are little marked in the arterioles; and the capillaries of the retina have been found thickened by other observers. Dr. Johnson denies also that there are hyalin-fibroid changes in these contracted kidneys. We have no doubt that the morbid change is due to fibroid material, and we are supported in this opinion by the antecedent investigations of Dr. Dickinson, Dr. Grainger Stewart, and others. Dr. Johnson also objects to our statement that granular contracted kidney is 'the result of causes not yet ascertained,' and he seems to feel satisfied that he knows the causes. We can only envy Dr. Johnson's confidence, and candidly admit that we are ignorant as to the causation. The term 'arterio-capillary fibrosis' Dr. Johnson states is a misnomer. That may or may not be so; but we venture to hope that the profession will hereafter pronounce it to be appropriate, because it is founded on a pathological basis."

Dr. Dickinson observed first upon the effects of reagents and modes of preparation upon bloodvessels. The effect of glycerine in making tissues transparent was well known, but could not explain the difference between healthy and diseased vessels, since both were treated in the same way. The thickening of the tunica adventitia, as observed by Sir W. Gull and Dr. Sutton, was, in his opinion, undoubtedly the result of disease, not of post-mortem action of any kind. It was seen exceedingly well in vessels which had never been touched with glycerine, but had been hardened in chromic acid and preserved in Canada balsam or some similar material. Putting aside, therefore, post-mortem change as beside the question, he proceeded to state what in his opinion was the nature of the arterial thickening. The smaller arteries were greatly thickened, and their channel narrowed. The thickening involved both the muscular and the adventitious coats. The muscular coat was greatly thickened, and at the same time altered in structure, so that the change could not be regarded as a simple hypertrophy. The muscular nuclei became attenuated or extinct, while the striæ, both circular and longitudinal, were exaggerated. The altered muscular coat was almost unaffected by carmine, while the corresponding part of a healthy artery absorbed it abundantly. The thickened muscular coat was generally spotted, sometimes closely, with oil, and often gave evidence of calcareous change, these degenerations causing the liability to rupture present in the circumstances. The outer or adventitious coat also became thickened, sometimes more and sometimes less than the muscular. Sometimes it was increased so as to form the chief bulk of the arterial wall; in other instances the increase in this coat was less conspicuous than that of the muscular. The thickening was not only hyaline, but generally delicately fibroid. These being the visible changes in the vessels, the next question was as to their pathological association. Dr. Dickinson considered that Sir W. Gull's and Dr. Sutton's paper had been read too recently to allow of the testing by experience of some of their views. The hypertrophy of the heart was satisfactorily accounted for by the narrowing and obstruction in the diseased arteries. The arterial change appeared to be almost constantly present when the kidneys were granular, but he was disposed at present to keep to the old view, that the arterial change was consequent upon the renal, rather than to adopt the new one, that the renal and vascular change were common results of a general fibrosis. A boy under his care died at the age of 14 of granular degeneration of the kidney, which appeared to have resulted from a stone which had been crushed eleven years before. The pelves were dilated, and one kidney atrophied, as if from calculous obstruction. The heart was much hypertrophied, and the arteries marked examples of the change in question. Considering the youth of the patient, it was exceedingly improbable that the vascular change could have arisen otherwise than as the consequence of the renal. As to Dr. Johnson's assertion that all diseases of the kidney originate with disturbance of its secreting function and in the epithelium, Dr. Dickinson protested against this view. Disease was too complex to be thus limited in its origin to disturbance of function, though of course disturbance of function played its part. In the kidney he referred to changes originating in the intertubular and perivascular tissues, the existence of which he supposed that no member of the Society except Dr. Johnson would at the present day dispute. Fibroid thickening and granulation might take their rise in congestion, the result of heart disease, the kidney showing the change with other organs, the alteration being quite apart from any special demand upon the function of the organ. Similarly the kidney might, in common with other organs, become the seat of lardaceous infiltration, the result of a blood-change common to the whole body, the result of an exhausting drain from some remote part. Here the change began about the blood-vessels quite independently of any change in the epithelium or tubes, or of any secreting effort on the part of the gland.

Dr. Anstie questioned the origin of kidney casts in the convoluted tubes. He thought it impossible for them ever to escape from such a situation without complete alteration, especially of their shape.

Dr. Bastian said Dr. Johnson had thrown doubts on the existence of fibroid change in the vessels in various parts of the body, nor did he seem disposed to accept hyaline thickening of the walls of these vessels. Lately he had seen such an alteration of the vessels very marked in a case of locomotor ataxy. There was also a similar hyaline change in the vessels in sclerosis of the cord. The vessels of the pia mater and brain were peculiar in having their adventitia loose and separated from the vessels forming the so-called perivascular sheath. This rendered it difficult to say when there was change just outside the vessel, and Drs. Gull and Sutton had not taken sufficient account of this, for some of their plates would seem to show this sheath in a fibroid state as an abnormal condition of the vessel itself.

Dr. Sibson said one part of the question was whether hypertrophy of the heart was due to a fibrous affection of the arteries and obstruction to the onflow of blood. In this disease the vessels are abnormally distended and in a state of high tension. This was shown in various ways, as by altered valve-sounds, hypertrophy of the heart, and a double first sound, best heard near the ventricular septum. The first sound was short and barely audible, the second followed on it prompt and ringing. The left side took longer to empty itself than the right. He hoped the whole matter would be carefully considered, and suggested that a regular committee be appointed for that purpose.

Dr. Broadbent could verify what Dr. Sibson said. The peculiar condition of the circulation, moreover, disappeared under the influence of pyrexia, which it would not if due to passive obstruction. This he thought showed that the obstruction existed in the muscular coat. Moreover, this could be relaxed by amyl, which showed the same thing.

Dr. Green spoke as to the relation which exists between the heart and kidney. It was quite possible to find in children a large ventricle with a kidney nearly normal.

Dr. Payne said there were different explanations of the muscular hypertrophy. In all there was abnormal tension of the arteries, and the hypertrophy might be due to that, as their fibres undergo hypertrophy when they have much work to do. Calcification was also observed, and it, too, might be due to undue tension.

Dr. Sankey said that in brain diseases we do meet with a

true hypertrophy of the small arteries, but also with a hyaline appearance, owing to the perivascular sheath. This was described long ago by Wedl.

Dr. QUAIN said that he came to the meeting rather as a listener than with the intention of speaking; but the discussion during the evening, and his previous examination into the subject, led him to think that he could see the origin of the difference of opinion which existed; it recalled to his mind the old story of the two travellers coming to an inn by different roads, each asserting that the other was wrong in his description of the object painted on the signboard. No one who had seen Dr. Johnson's beautiful preparations could doubt that there did exist muscular hypertrophy of the small vessels; whilst, on the other hand, admitting that a good deal of what had been described by Sir William Gull and Dr. Sutton in their preparation was due to the action of camphor-water and glycerine, there was yet sufficient evidence, as stated even in the discussion to show that the external wall or sheath of the small vessels was liable to this fibrous or hyaloid-fibrous thickening. No doubt, then, the objects described were different. The error seemed to him to lie in the attempt—call it partiality or prejudice—which leads each of us to regard the subject of our investigation according to our own particular views, and to bring everything within this limit. This was just such a question as should be examined by an independent committee, and he had therefore great pleasure in seconding Dr. Sibson's proposal.

Dr. JOHNSON said that Dr. Sutton had evidently lost confidence in his own specimens, for in one sentence he had virtually conceded the whole question as to the nature of the so-called "hyalin-fibroid" change in the arteries. Dr. Sutton admitted that the *hyaline* change might be the result of glycerine, but denied that the *fibroid* appearance could be thus explained. Now, the fact is, that the external tunic of the arteries is fibrous, and has a wavy fibrous outline. When fully distended by glycerine, it quite loses its fibrous character, and appears transparent or hyaline. On the other hand, when partially distended, or when, after complete distension, it has again partially shrunk, it has a semi-fibrous, semi-hyaline appearance: in other words, it assumes the "hyalin-fibroid" character; and the specimens on the table show that the appearance in question may occur in perfectly normal vessels when mounted in glycerine. Dr. Johnson repeated that the appearances in question did not occur in the capillaries. He believed that Sir W. Gull and Dr. Sutton had mistaken small arteries for capillaries. He did not deny that, in certain pathological states of brain, there was sclerosis of arteries and capillaries. Some of the speakers appeared to have overlooked the fact that the subject under discussion was, not the state of the minute vessels in cases of locomotor ataxia or of insanity, but the condition of the vessels in connexion with chronic Bright's disease. As to the existence of genuine hypertrophy of the muscular walls of the arteries, it surely could not be denied, in the face of evidence such as that afforded by the specimens on the table; and it had been admitted by some of the most competent microscopists in London. Dr. Sutton could not understand how glycerine could at the same time distend the fibrous tunic and (as he said) "contract" the muscular coat. Surely it was not difficult to see that a fluid accumulating between the two coats of the artery would push one outwards, and the other, the muscular coat, inwards towards the canal of the vessel; which may be seen in some specimens to be irregularly narrowed by the mechanical pushing inwards of the muscular wall. It was useless to attempt to decide the question of the minute structural changes in the contracted kidney by mere argument. The appeal must be to specimens, by the aid of which it was easy to demonstrate the whole series of changes. He would only remark that Dr. Dickinson and others, who adopt Virchow's theoretical classification of Bright's disease, and declare that the contracted kidney is the result of essentially intertubular changes, are compelled to ignore those obvious structural changes within the tubes which must catch the eye of even the most superficial observer, and which many years ago formed the subject of a controversy between Mr. Simon and himself. Dr. Sutton appeared almost to pride himself on his confession of ignorance as to the causes of contracted kidney; yet careful clinical observation pointed to such causes as excessive eating and drinking, and to certain forms of dyspepsia, as having much influence in exciting the disease. Dr. Todd called it a "gouty kidney." It is not always gouty, but it is very commonly associated with conditions allied to gout; and it is of practical importance to recognise this association. Nothing in the paper by Sir W. Gull and Dr. Sutton had surprised him more than to find that they had referred to cases of hypertrophy of the heart in very aged persons, to cases of extreme emphysema of the lungs, and even to a case of incompetent valves, as if such cases could throw light upon the cardio-vascular changes in cases of Bright's disease. Dr. Anstie appeared to consider that he had put a very puzzling question in asking how a convoluted cast, as seen in the urine, could have passed, as such, through the straight tubes of the cones. Dr. Johnson supposed that a cast moulded in a convoluted tube, and having a certain amount of elasticity, might be straightened in passing through a straight tube, and resume its convoluted form after its escape. This surely was more probable than the alternative supposition that a tube-cast, originally straight, coiled itself up like a worm after being expelled from the kidney. The speaker cordially supported the proposal for a committee. The more thoroughly competent was the committee, the more entire would be his confidence in submitting his specimens, and the questions raised by them, for their inspection and judgment.

(Dr. Johnson requests us to add that he had intended to say, in reference to Dr. Broadbent's very interesting observation on the effect of nitrite of amyl in reducing the arterial tension in cases of chronic Bright's disease, that, while it is confirmatory of his doctrine that the peripheral resistance is the result of excessive contraction of the hypertrophied muscular arteries, it is quite irreconcilable with the theory that the resistance to the blood-flow is caused by degeneration and consequent rigidity of the minute arteries and capillaries. It is obvious that resistance thus originating would be uninfluenced by the peculiar action of the nitrite of amyl upon the muscular arterioles.)

OBITUARY.

MR. RICHARD STRONG EYLES

Was born in 1789 (?). He was apprenticed to his uncle, Mr. Wells, a surgeon practising at 1, St. Andrew's-court, Holborn-hill, and at the end, or during his apprenticeship, he entered as a student at St. Bartholomew's Hospital, under Abernethy. He became a Member of the Society of Apothecaries in 1812, and subsequently occupied the distinguished position of Master. Mr. Eyles commenced practice in St. Andrew's-court with his uncle, first as assistant, and afterwards as partner, his brother, J. B. Eyles, being associated with them. He remained in this residence until the premises were required for the Holborn-viaduct. The next and only removal he ever made was to the house in which he died—12, Bloomsbury-square. Mr. Eyles fully came up to the standard, and was essentially one of the old school. His medical views were those of common sense, fully matured by a long and successful career. His honourable and kindly conduct and unwearied attention to those who placed themselves under his care rendered him universally respected. With or without pecuniary reward, he was the constant and ever ready medical adviser; and those who were associated with him in his daily life for a long period of years can testify to the love and respect felt towards him. Although of an independent spirit, and a strict disciplinarian, he was genial and considerate towards all. He possessed an iron constitution, which he jealously guarded. Temperate habits were justly considered by him to assist in producing longevity; an opinion supported by his own case. The practice he enjoyed had been large, and composed almost entirely of the middle and upper classes; but towards the latter part of his career, owing to the fact of many of his patients having from various causes been removed, the area of his labours became reduced. Mr. Eyles was a confirmed bachelor, and a Tory in political principles.

Of this gentleman another correspondent writes:—"One of the most amiable and respected general practitioners in the metropolis, Mr. Richard Strong Eyles, deceased at his residence in Bloomsbury-square on November 16, in his 83rd year. He was educated at St. Bartholomew's Hospital at a time when Abernethy was at the height of his reputation as a teacher, and served the office of dresser to Sir Ludford Harvey in 1813. He was a diligent and laborious student, and acquired considerable tact as a practitioner of midwifery, to which he chiefly devoted himself. To him in a great measure is due the introduction of the 'fillet' as a means of expediting labour in lingering cases, not dangerous to the mother, but threatening the child by lung pressure, thus superseding in such cases the forceps. Mr. Eyles was a highly esteemed member of the Court of Assistants of the Society of

Apothecaries, and filled successively the offices of Warden and Master. He belonged emphatically to the 'old school' of practitioners, and from this point of view might possibly be thought to attach undue value to the administration of drugs in the treatment of disease, for in this sense *medicus curat natura sanat morbum*. Still he was a sound and intelligent practitioner; and if the career of such a man cannot be drawn in the characters in which more eventful lives are depicted, there is nevertheless in it a quiet dignity, propriety, and usefulness, not only not devoid of interest, but highly deserving of imitation, and certainly of respect."

W. F. MORGAN, F.R.C.S. Eng.

Our columns last week recorded the death of W. F. Morgan, F.R.C.S. Eng., one of the elders of our Profession. Mr. Morgan was born in 1800, passed the College and Hall in 1823, and was shortly afterwards elected House-Surgeon to the Bristol Royal Infirmary, at which institution he had been a pupil. This appointment he held for several years, and soon after he resigned it to commence private practice. He was elected to the office of Surgeon to the Infirmary, the active duties of which he performed till 1854, when he resigned and became Consulting Surgeon, thus retaining his close connexion with the Infirmary to his death—a period of over fifty years. Mr. Morgan was not a writer, and published little; nor did he take any active part in public, in consequence of an impediment in his speech. Beyond his own neighbourhood, therefore, he was comparatively little known; but his long connexion with the Infirmary, and consequent great experience, his extended knowledge of the literature of his Profession, and his calm judgment, made his opinion to be highly valued and respected by all who knew him. It was well remarked by Sir James Paget, in the eloquent speech with which he lately proposed the health of Sir Thomas Watson, that we are his pupils still, not only in respect to his writings, but "as students of his life. a life of unsurpassed gravity, sincerity, and uprightness." To no one could this latter remark be more aptly or more truly applied than to Mr. Morgan. Essentially simple and unassuming, unselfishly kind and generous, sensitively honourable in all his dealings, he earnestly loved his Profession as a science as well as an art, and led a life of consistent, irreproachable goodness. Such an example must have had its elevating effect, especially upon the many pupils with whom he was necessarily brought into close connexion, whilst it bound his patients to him with loving appreciation, and gained for him such public respect as could not but reflect a dignity upon the Profession whose honour and highest interest it was his delight to sustain. For some years he had retired from active practice, in consequence of extreme irritability of the heart, which necessitated the avoidance of all exertion and excitement, but he still kept up his kindly and affectionate intercourse with the Profession. On Sunday, the 7th, he retired to rest as usual, but in the night was aroused by conditions which he had long anticipated and prepared for, and in an hour was gone. The funeral took place on Tuesday last, when his colleagues at the Infirmary, with many other members of the Profession, met around his grave to testify their loving esteem for him as he lived, and their reverence for his memory.

ROBERT FARRER THOMPSON, M.D., M.R.C.S., etc.

This deservedly esteemed and highly popular practitioner expired suddenly on the 11th instant, at his residence in Jarrow, Newcastle-on-Tyne, at the comparatively early age of 49. Dr. Thompson, who received his professional education at University College, was admitted a Member of the Royal College of Surgeons of England in 1859, and immediately commenced the practice of his profession at Jarrow, where he soon became universally esteemed for his kindly, courteous, and charitable disposition. A few years ago he became a graduate of the University of St. Andrews. He leaves a widow and children and a large circle of friends to deplore his great loss.

LEGAL INTELLIGENCE.

ALLEGED OBTAINING MONEY BY FALSE PRETENCES.

Henry Jackson was charged last Saturday at the Hull Police-court by Mr. J. Richardson, a farmer, of Easington, with obtaining money by false pretences. The prosecutor had sought benefit from the "famous Indian remedy," dealt in by the prisoner, to whom he paid £25 for one box of "medicines," and £3 10s. for another box, the latter worth only a few shillings. One of the bottles was labelled "For the heart." Prisoner styled himself "Professor Jackson, late of the Indian Army, R.C.A.D." The mysterious initials were rendered in Court into "Railway Crossing, Albany-road," near to which the prisoner lived. A great portion of the "medicines" were stated to consist only of coloured water. The total sum paid to the prisoner by the prosecutor was upwards of £200. The prisoner was remanded.

MEDICAL NEWS.

University of Dublin.—At the winter commencements, held in the Examination Hall, Trinity College, on Wednesday, December 19, the following Degrees and Licences in Medicine and Surgery were conferred by the Right Hon. Sir Joseph Napier, Bart., Vice-Chancellor of the University:—

Baccalaurei in Medicinâ.

Brown, Gulielmus Jacobus.
Cooksey, Georgius Borwick.
Drapes, Johannes Benward.
Fitzgerald, Gulielmus Alexander.
Foot, Robertus Herbertus.
Hickson, Albertus Thomas.
Hurford, Cedricus Herbertus.
Mallins, Henricus.
Meredith, Johannes Edvardus.
Minchin, Ricardus Georgius.
Murray, Gulielmus.
Oliver, Johannes Power.
Tuckey, Thomas St. Patrick.

Magistri in Chirurgiâ.

Elliott, Carolus Nelson.
Fullerton, Johannes Campbell.
Goode, Georgius.
Gribbins, Gulielmus Lancelot.
Kennedy, David.
Kerr, Elias Gulielmus.
Kidd, Leonardus.
Maddock, Gulielmus.
Mallins, Henricus.
Tuckey, Thomas St. Patrick.

Doctores in Medicinâ.

Cotter, Samuel Kyle (*in coloniis*).
Davy, Edmundus Gulielmus.
Johnson, Carolus (*in coloniis*).

Licentiatus in Medicinâ.

Browne, Valentinus Edvardus.

Royal College of Physicians of London.—The following gentlemen were admitted Licentiates of the College:—

Baker, George Benson, 42, Grove-road, St. John's-wood.
Bird, Cuthbert Hilton Golding, Guy's Hospital.
Blake, Frederick George, 3, Dowry-square, Clifton.
Davies, George Augustus, Newport, Monmouthshire.
Dixon, John Francis, 14, Percy-circus, King's-cross.
Howse, William, New Swindon.
Moore, John Bartholomew Giles Gidley, Langstone, Throwley, Okehampton.
Philpot, Harvey John, East Dulwich.
Preston, Theodore Julian, General Dispensary, East Grinstead.
Robinson, Mark, Her Majesty's Dockyard, Portsmouth.
Walker, George Edward, 27, Vincent-square.

The following gentleman having passed in Medicine and Midwifery, will receive the College Licence on his obtaining a qualification in Surgery recognised by the College:—

Clague, John, Castletown, Isle of Man.

King and Queen's College of Physicians in Ireland.—At the usual monthly examination-meetings of the College, held on December 10, 11, and 12, the Licence to practise Medicine was granted to—

Allen, John Gower.
Buckley, Daniel Francis.
Clarke, Arthur Champneys.
Luther, Edward Wentworth.

The Diploma in Midwifery was at the same time granted to—

Allen, John Gower.
Luther, Edward Wentworth.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 12, 1872:—

Archer, Edmond Lewis, Junction-road, Kentish-town.
Bromley, John Maddern, Penzance.
Dewar, James, Middleton Cheney, Oxon.
Page, Herbert William, Carlisle.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Brayn, Richard, King's College.
Sheehy, Wm. Henry Patmore, St. Bartholomew's Hospital.
Turle, Arthur, St. Thomas's Hospital.

APPOINTMENTS.

Adams, William, F.R.C.S.—Surgeon to the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury.

Davenport, Charles, M.R.C.P. and M.R.C.S.—Medical Officer for the Workhouse, and Medical Officer and Public Vaccinator for the Bromsgrove District of Bromsgrove Union, Worcestershire.

DONWORTH, JEREMIAH JOSEPH, L.K.Q.C.P., L.R.C.S.I., L.M.—Medical Officer for the Feakle Dispensary District of Scariff Union, co. Clare.

GOWERS, W. R., M.D., M.B., M.R.C.S.—Assistant-Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury.

MACNAMARA, PATRICK JOSEPH, M.D.—Medical Officer, etc., for the Galbally Dispensary District of Mitchelstown Union, co. Cork.

RICHMOND, O. R., M.R.C.S.—House-Physician to the Seamen's Hospital, Greenwich.

BIRTHS.

ARNOTT.—On December 14, at 6, Nottingham-place, W., the wife of Henry Arnott, F.R.C.S. Eng., of a son.

BRABAZON.—On December 16, at St. Austin's, Warrington, the wife of William Philip Brabazon, M.D., of Lymm, Cheshire, of a son stillborn.

EPPS.—On December 16, at 89, Great Russell-street, W.C., the wife of Richard Epps, M.R.C.S. Eng., of a daughter.

LICHTENBERG.—On December 14, at 47, Finsbury-square, E.C., the wife of George Lichtenberg, M.D., of a son.

LYLE.—On December 10, at 2, Marlborough-terrace, Harrow-road, the wife of William Vacy Lyle, M.D., of a son.

PHILPOT.—On December 13, at East Dulwich, Peckham Rye, the wife of Harvey T. Philpot, L.R.C.P. Lond., M.R.C.S., of a son.

SUTCLIFF.—On December 16, at 14, High-street, Wandsworth, S.W., the wife of Edward Sutcliff, M.D., L.R.C.P., M.R.C.S., of a son.

WOOD.—On December 17, at Great Bardfield, Essex, the wife of John Hurd Wood, M.D., of a son.

MARRIAGES.

DICKINSON—SEATON.—On December 12, at the parish church, Sunbury, Thomas Bradley Dickinson, Esq., only son of Robert Dickinson, Esq., of Shotley House, county of Durham, to Ellen, second daughter of Joseph Seaton, M.D., of Halliford House, Middlesex.

HOLMAN—PARKER.—On December 11, at Isleworth Church, Middlesex, William Holman, M.R.C.S., eldest son of the late Captain Holman, R.N., to Sarah Ann Parker, stepdaughter of the late Thomas Debenham, Esq.

OWEN—MULVILLE.—On December 4, at St. Peter's, Dublin, Robert Edward Owen, Esq., of Beaumaris, son of the Rev. James R. Owen, to Jane Eliza, youngest daughter of the late William Mulville, M.A., F.R.C.S., Gort, co. Galway.

RABY—BENNETT.—On December 14, at the parish church, Brighton, John Raby, L.R.C.P., M.R.C.S., L.M., Indian Army, to Grace Julia, of St. Michael's-place, Brighton, second daughter of the late Richard Foulkes Bennett, Esq., of Edgbaston, Warwickshire.

WHITE—SEATON.—On December 12, at the parish church, Sunbury, Charles White, Esq., Assistant-Surgeon Royal Horse Artillery, to Edith Letitia, youngest daughter of Joseph Seaton, M.D., of Halliford House, Middlesex.

DEATHS.

EVANS, ERNEST THOMSON RAIMBACH, M.R.C.S., L.S.A., fifth son of George Edward Evans, Esq., solicitor, Jersey, at the residence of his father, on December 10, aged 28.

HICKS, ROBERT DENBIGH, Surgeon, at Toddington, Bedfordshire, on November 20, in his 80th year.

JONES, LOTTE SCHMAECK, second surviving daughter of the late J. D. Jones, M.D., of Dalston, E., at 6, Kidbrooke-park-place, Blackheath, on December 15, aged 21.

MILLIGAN, MARGARET WADE, younger daughter of the late James Milligan, M.D., R.N., at East-hill-place, Guildford, on December 14.

PEREGRINE, ELIZA, elder daughter of the late John Pryor Peregrine, M.D., formerly of Half-Moon-street, Piccadilly, and Jersey, at Curzon-street, Mayfair, W., on December 16.

SIBLEY, LIONEL SEPTIMUS, son of Septimus W. Sibley, F.R.C.S. Eng., at 12, New Burlington-street, on December 15, aged 6 days.

SMITH, EMILY READ, younger daughter of the late Dr. Southwood Smith, at Florence, on December 8.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, PARK-PLACE, CHEETHAM-HILL-ROAD, MANCHESTER.—House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Medical Board, on or before December 28.

COVENTRY AND WARWICKSHIRE HOSPITAL, COVENTRY.—House-Surgeon. Candidates must possess both medical and surgical qualifications. Applications, with testimonials, to the Secretary, on or before Dec. 21.

DERBYSHIRE GENERAL INFIRMARY.—Assistant House-Surgeon. Candidates must possess a medical or surgical qualification from one of the recognised licensing bodies of the United Kingdom. Applications, with testimonials, to Mr. S. Whitaker, 4, Victoria-street, Derby, on or before December 21.

DORSET LUNATIC ASYLUMS, NEAR DORCHESTER.—Assistant Medical Officer for Forston Asylum. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee of Visitors (under cover to Mr. J. Brown, Dorchester, Clerk to the Visitors), on or before January 6, 1873.

GERMAN HOSPITAL, DALSTON.—Honorary Assistant-Physician. Candidates must be natives of Germany or prove themselves thoroughly conversant with the German Language, and possess a Diploma from a foreign or British University. Applications, with testimonials, to A. Walbaum, D.D., Honorary Secretary, on or before January 6, 1873.

HOWDEN UNION.—Medical Officer for the Newport District. Candidates must be duly qualified. Applications, with testimonials, to George Green, Clerk, on or before December 26.

KILDALTON, ISLAY.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen, Islay.

LEXDEN AND WINSTREE UNION.—Medical Officer for the Ninth District. Candidates must be duly qualified. Applications, with testimonials, to W. Howard, Clerk to the Board, on or before December 31.

METROPOLITAN FREE HOSPITAL, DEVONSHIRE-SQUARE, CITY.—Honorary Assistant-Physician. Candidates must be Members of the Royal College of Physicians of London, or pledged to become such within twelve months if elected. Applications, with testimonials, to Committee of Management, on or before January 6, 1873.

NEWPORT ODDFELLOWS' MEDICAL AID ASSOCIATION.—Assistant-Surgeon. Applications, with testimonials, to Mr. R. H. Hudson, Loughton House, Newport, Monmouthshire, on or before January 1, 1873.

OLDHAM, BOROUGH OF.—Medical Officer of Health. Candidates must be duly qualified. Applications, with testimonials, to John Ponsonby, Town Clerk, Town Hall, Oldham, on or before December 31.

ROYAL PORTSMOUTH HOSPITAL.—Superintendent of the Lock Wards. Applications, with testimonials, to E. Madeley, Esq., House-Surgeon and Secretary, on or before January 2.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Candidates must be legally qualified and duly registered. Applications, with testimonials, to the Assistant-Secretary, on or before January 6, 1873.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, LOWER SEYMOUR-STREET, PORTMAN-SQUARE.—Physician and a Surgeon for the Out-patient Department. Candidates must be duly qualified. Applications, with testimonials, to the Secretary, on or before December 23.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Belford Union.—Mr. Wm. Magiel has resigned the East District; area 12,704; population 2869; salary £25 per annum.

Carnarvon Union.—Mr. Wm. Maugham has resigned the Llanrug District; area 26,928; population 10,283; salary £60 per annum. Also the Workhouse; salary £45 per annum.

Plomesgate Union.—Dr. W. Andrew has resigned the Earlsoham District; area 9614; population 2629; salary £60 per annum.

APPOINTMENTS.

Clitheroe Union.—Wm. P. Counsellor, L.K. & Q.C.P.I., to the Whalley District.

Hartley Wintney Union.—Charles J. Denny, M.R.C.S. Eng., L.K. & Q.C.P.I., to the Farnborough District.

Leeds Union.—Wm. Pogson, M.R.C.S. Eng., L.R.C.P. Edin., to the Seacroft District.

Newton Abbot Union.—Nathaniel T. J. Haydon, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., to the Fourth District and the Workhouse.

Wincanton Union.—James B. Colthurst, M.R.C.S. Eng., L.S.A., to the West District.

A THIRD Medical Inspector of Emigrants is to be appointed at Liverpool.

THE St. Olave's Board of Guardians have resolved to erect a new infirmary at Rotherhithe.

DR. BRIDGES, the Government Commissioner, has been taking evidence in Blackburn in reference to the sanitary state of factories, and also to the proposal for limiting factory hours to fifty-four per week.

THE Haverfordwest Board of Guardians, as the rural sanitary authority, have appointed the Union Medical Officers Medical Officers of Health.

THE Bradford Town Council has resolved to accept the grant offered by the Local Government Board in aid of the remuneration of the Medical Officer of Health and the Inspector of Nuisances for the borough.

DEATH OF M. POUCHET.—This distinguished Rouen zoologist, Corresponding Member of the Académie des Sciences for the section of Zoology, died on the 6th inst., in the 74th year of his age.

ACADÉMIE DE MÉDECINE.—M. Moreau has been elected into the chair of Anatomy and Physiology in place of the late Professor Longet.

LORD ROSEBERY, in a speech delivered last week in Edinburgh, stated that, on the authority of the Census return, there were forty-six families in Edinburgh living in single rooms without a window of any sort, and 15,000 families—a third of the population—dwelling in single rooms with windows. That is enjoying about one third the accommodation decency requires.

THE *South Australian Register* of October 8 states that it is proposed to establish in Adelaide a university "to furnish instruction in all and every of the liberal arts and sciences, and to confer degrees in arts, law, and physic." Mr. Hughes, a resident, has announced his willingness to give £20,000 towards the establishment of the university.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The next meeting will be held on Saturday, December 21, 1872, at 7.30 p.m. A paper was to have been read by Professor Ansted, but is unexpectedly postponed. The meeting will be devoted to a discussion on some points in connexion with the Adulteration of Food, Drugs, etc., Act, to be introduced by the President, and on other subjects.

SIR PATRICK DUN'S HOSPITAL, DUBLIN.—On Saturday, December 7th, the Board of Trinity College adopted a resolution conveying the thanks of the Board to Dr. Thomas Evelyn Little for his services during a lengthened period of temporary duty as Surgeon to the Hospital.

THE MEDICAL CLUB.—The monthly dinner of this excellent Club took place on the 17th inst., under the chairmanship of Professor Erasmus Wilson, F.R.S., when about forty members and their friends sat down to a sumptuous entertainment. Amongst the guests were Mr. Hancock, the President of the Royal College of Surgeons, Major Bruce, Drs. Andrew Clark, Liveing, Fayrer, Jonson, Rugg, and Messrs. Henry Smith, Mason, Hird, Dunn, Jackson, Trimmer, Stone, Captain Valpy, &c.

ANALYST APPOINTMENTS.—Dr. Lankester has been appointed Public Analyst for St. James's parish at a salary of £50 a year.——Dr. Rodgers has been appointed for the Limehouse district.——The Bethnal-green Vestry have appointed for six months their Medical Officers of Health in each parish or district.——In St. George's, Hanover-square, Chelsea, Poplar, St. Luke's, and St. George's-in-the-East, the Medical Officers of Health of these parishes have been appointed Analysts.——Dr. Alfred Hill has been appointed Borough Analyst and Medical Officer of Health for Birmingham at a salary of £650 a year.

PRESENTATION.—On December 4 a handsome testimonial, of more than £300 in value, and consisting of a large silver salver, an épergne, two waiters, two fruit-stands, a cake-basket, and a set of dessert knives and forks, all of elegant design, together with a gold repeater, was presented to T. J. Starling, M.R.C.S.E., etc., of Higham Ferrers, Northamptonshire, whose skill has long been widely appreciated in that locality, and whose universal kindness and attention in the discharge of the arduous duties of his profession have won for him the highest esteem of a large circle of patients, both rich and poor. The principal piece of plate bears the following inscription:—"Presented to T. J. Starling, Esq., in grateful recognition of his uniform kindness and attention, during a period of forty years and upwards, by a large number of the inhabitants of all classes of Higham Ferrers and fifteen of the surrounding villages; December, 1872." On the watch is engraved: "Presented to T. J. Starling, Esq., by 1782 subscribers of all classes of Higham Ferrers and fifteen surrounding villages, as a mark of their esteem and gratitude; December, 1872." It must be gratifying to the neighbouring members of the medical profession who have been brought in contact with Mr. Starling, that he, who has always displayed towards them the most unselfish and honourable feeling, should receive at the hands of his patients such a handsome token of their approval.

MEDICAL MICROSCOPICAL SOCIETY.—At the second general meeting of the Medical Microscopical Society, held at St. Bartholomew's Hospital on Friday, December 6 (Mr. D. Morrant Baker in the chair), the minutes of the previous meeting were read and confirmed; Mr. Jabez Hogg gave some account of what had been done by the provisional committee, of which he was chairman; and the secretary (Mr. J. W. Groves) read a code of rules, which it was proposed to adopt, all of which were passed with but few amendments. The following gentlemen were elected as officers:—*President:* Mr. Jabez Hogg. *Vice-Presidents:* Dr. H. Lawson, Dr. F. Payne. *Treasurer:* Mr. T. C. White. *Hon. Secretaries:* Mr. C. H. Golding Bird, Mr. J. W. Groves. *Committee:* St. Bartholomew's, Mr. H. E. Symons; Charing-cross, Dr. M. Bruce; St. George's, Mr. E. C. Baber; Guy's, Mr. A. E. Durham; King's College, Dr. U. Pritchard; London, Mr. J. Needham; St. Mary's, Mr. Giles; Middlesex, Mr. B. T. Lowne; University College, Mr. E. A. Schäfer; Westminster, Mr. Geo. Cowell. *Cabinet and Exchange Committee:* Dr. U. Pritchard, Mr. E. C. Baber, Mr. J. Needham, Mr. F. H. Ward. The place of meeting was not decided upon, but the meetings will take place on the third Friday of each month, from October to July inclusive, and the subscription will be 10s. per annum, without any entrance-fee. Intending members are requested to send their names, qualifications, or hospital, and addresses to Mr. T. C. White, 32, Belgrave-road, Pimlico, S.W., or to Mr. J. W. Groves, St. Bartholomew's Hospital, Smithfield, E.C. The next meeting, of which due notice will be given, will take place on the third Friday in January—*i.e.*, January 17, 1873.

MALINGERING AT THE ST. LOUIS.—M. Lailler, relating the case of a girl who surreptitiously kept up a vesicular eruption by the use of cantharides powder, for the purpose of prolonging her stay in the hospital, added that about one-tenth of the cases of diseases of the skin in the St. Louis are intentionally prolonged, either by the application of irritants or by the non-execution of the prescribed treatment.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

*** In reference to the election of an Examiner at the Royal College of Surgeons, we are reminded by a correspondent that Mr. Simon was the Member of the Council next in rotation for election to the Court of Examiners. Mr. Simon, however, has declined to allow himself to be put in nomination. We believe Mr. Simon is opposed to the election of Members of the Council as Examiners.

Electrician.—Consult a respectable medical man; have nothing to do with the apparatus in question.

A. D. H.—1. No. 2. We believe not.

A Candidate.—The result will not be known until some time in January, when the Secretary will send you notice.

A Student, Guy's.—Dr. Thomas Cawley, formerly of Guy's, now practising at Adelaide, South Australia, is a *Fellow* of the Royal College of Surgeons of Edinburgh, and a Member of the London College of Surgeons.

A Poor-law Guardian.—The provisions of the Act are peremptory. When a board of guardians refuses to appoint a medical officer of health and an analyst, the Local Board can move for a mandamus in the Court of Queen's Bench to compel them to do so. It is probable that a recalcitrant board of guardians might be each or collectively liable for the cost of such an appeal. Our correspondent is quite right in his resistance to the resolution which his brother guardians have carried. By an appeal to the Court of Chancery he would unquestionably be exempt from bearing his quota of the charges incurred.

C. S. O.—We believe a society under the title of the "National Health Society" has been formed.

Nemo.—No.

J. N. Q.—"Medical Essays," by Dr. J. Brown, page 38.

Bombay.—The Report to the Medical Board at Bombay for 1817 and 1818 states that of 1294 cases of cholera which received no medical assistance, every individual perished; and it is added that it was not ascertained that any case had recovered in which medicine had not been administered.

Inquirer.—Joseph Constantine Carpue in 1816 published an account of two successful operations of restoring a lost nose from the integuments of the forchead performed by himself.

A Subscriber.—The *London Society* for December. "The Romance of Medicine," by Frederick Arnold.

A. T. W.—The National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury, was established twelve years ago. The Hospital now (including the Convalescent Branch at Finchley) contains ninety beds.

A Fellow.—The gentlemen who had undergone the examination for this distinction were admitted on Thursday last, and at the same meeting of the Council there was an election of Fellows. Both lists appear in another column of the *Medical Times and Gazette.* The gentleman named is a Fellow of his College and M.A. Cantab., who gives you the following enigma:—

> "To be called by my name you would highly disdain,
> Though with titles of honour I rank in the list;
> By law and by custom I single remain,
> Though unless I am double I cannot exist."

Answer: *A Fellow.*

"*Universally beloved and deeply regretted.*"—The Rev. R. H. Barham, the author of the "Ingoldsby Legends," gives the following illustration of the dry humour of Dr. Hume, Physician to the Forces, who was an Irishman:—They walked one morning into a newspaper office, and there the Doctor silently placed upon the counter an announcement of the death of some friend, together with five shillings, the usual charge for the insertion of such advertisements. The clerk glanced at the paper, tossed it on one side, and said gruffly, "Seven-and-six." "I have frequently," replied Dr. Hume, "had occasion to publish these simple notices, and I have never before been charged more than five shillings." "Simple!" replied the clerk without looking up; "he's universally beloved and deeply regretted! Seven-and-six." Hume produced the additional half-crown and laid it deliberately by the others, observing as he did so, with the same solemnity of tone he had used throughout, "Congratulate yourself, sir, that this is an expense which *your* executors will never be put to."

Quack.— "Hold thy hand! health's dear maintainer;
Life perchance may burn the stronger:
Having substance to maintain her,
She untouch'd may last the longer.
When the artist goes about
To redress her flame, I doubt
Oftentimes he snuffs it out."—*Quarles.*

PNEUMONIA AND PHTHISIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On reading Dr. Sansom's cases, I was struck with their close resemblance to those which clinical clerks at Guy's Hospital used to diagnose as cases of pulmonary phthisis, but which Dr. Gull more correctly (as the results proved) diagnosed as cases of pneumonia and broncho-pneumonia of the apices and upper parts of the lung, that would certainly recover, and *did* recover. I am, &c., D. HOOPER, M.B.,
Physician to the Surrey Dispensary.

7, Trinity-square, Borough, December 16.

COMMUNICATIONS have been received from—

Dr. BURMAN; Mr. T. ALFORD; Dr. PHILLIPS; Mr. C. H. ROBINSON; Dr. H. A. MARTIN; Mr. J. W. GROVES; Mr. BRITTAN; Mr. FELDMANN; Dr. D. HOOPER; Mr. W. G. HAYWARD; Dr. VINEN; Dr. STEVENSON; Mr. CREW; Mr. T. BAKER; Mr. J. W. BARNES; Mr. N. THOMAS; Dr. BRAKENRIDGE; Dr. MACCORMACK; Mr. D. BATHAM; Mr. J. CHATTO; Mr. J. HUTCHINSON; Dr. EDGAR SHEPPARD; Mr. BEVAN LEWIS; Mr. COOPER FORSTER; Mr. BESWICK-PERRIN.

BOOKS RECEIVED—

Aveling's English Midwives—Langstaff's Hospital Hygiene—Letter to the Governors and other Subscribers to St. George's Hospital, by One of their number—Twelve Months' Experience in the A B C Process of Purifying Sewage, a Letter addressed to a Shareholder in the Native Guano Company, by William Crookes, F.R.S.—Maunder's Operative Surgery, second edition—Allingham's Diseases of the Rectum, second edition—Handy-book of Medical Information and Advice, by a Physician—How to Play Billiards and Pool, by Colonel B———.

PERIODICALS AND NEWSPAPERS RECEIVED—

Pharmaceutical Journal—New York Medical Journal—The Antiquary—Bradford Observer—Medical Archives, No. 9, vol. 8—Chemist and Druggist—Philadelphia Medical Times, November 23 and 30—Hereford Journal.

APPOINTMENTS FOR THE WEEK.

December 21. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Discussion on some points in connexion with the "Adulteration of Food, Drugs, etc., Act," to be introduced by the President; and on other subjects.

23. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Casual Communications by Dr. Berkart and Dr. Brunton. Dr. Braine, "A New Ether Inhaler." Dr. Crombie, "An Apparatus for the Self-Administration of Chloroform." Professor Erasmus Wilson, "A Case with Observations on the Nervous Relations of the Hair." Mr. William Adams, "Two Cases illustrating the Advantages of Galvanism in the Early Stages of Infantile Paralysis."

24. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

25. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

27. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

CLINICAL SOCIETY, 8½ p.m. Dr. Lockhart Clarke, "On a Case of Cysts in the Cerebellum." Dr. Edis, "On a Case of Right Hemiplegia occurring during Pregnancy, with Rapid Convalescence after Parturition." Dr. Nieden, "A Case of Lesion of the Upper Dorsal Portion of the Spinal Cord, with excessive Lowering of Temperature and Pulse." Dr. Ogle, "On Acute Rheumatic Fever; Pericarditis, with Effusion; Expected Necessity for Tapping the Pericardium; Recovery.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 14, 1872.

BIRTHS.

Births of Boys, 1142; Girls, 1083; Total, 2225.
Average of 10 corresponding weeks, 1862-71, 2104·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	636	563	1199
Average of the ten years 1862-71	794·3	771·0	1565·3
Average corrected to increased population	...	...	1722
Deaths of people aged 80 and upwards.	...	...	42

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	2	...	5	...	3	1	1
North ...	751668	...	1	3	1	11	...	8	4	3
Central ...	333887	...	...	1	...	2	...	1	...	2
East	638928	4	3	5	2	8	1	3	...	2
South... ...	966132	1	6	6	...	12	...	6	1	5
Total	3251804	5	11	17	3	38	1	21	6	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·279 in.
Mean temperature	38·6°
Highest point of thermometer	49·3°
Lowest point of thermometer	27·1°
Mean dew-point temperature	35·3°
General direction of wind	W.S.W.&S.W.
Whole amount of rain in the week	0·74 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 14, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Dec. 14.	Deaths Registered during the week ending Dec. 14.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311298	42·4	2225	1199	49·3	27·1	38·6	3·66	0·74	1·88
Portsmouth ...	115455	12·1	61	34	51·2	25·2	39·6	4·22	0·74	1·88
Norwich	81105	10·9	59	50	47·0	27·5	36·4	2·44	1·22	3·10
Bristol	186428	39·8	112	82	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	54	31	46·4	25·7	36·5	2·50	0·73	1·85
Birmingham ...	350164	44·7	249	165	48·2	27·0	37·1	2·84	0·62	1·57
Leicester	99143	31·0	91	59	45·7	25·5	35·3	1·84	0·90	2·29
Nottingham ...	88225	44·2	43	38	46·8	24·9	35·3	1·84	0·91	2·31
Liverpool	499897	97·9	334	234	46·8	30·1	37·4	3·00	0·89	2·26
Manchester ...	352759	78·6	289	233	45·0	28·0	36·3	2·39	0·91	2·31
Salford	127923	24·7	99	67	46·1	25·0	36·1	2·28	1·03	2·62
Oldham	84004	20·2	63	48	49·0	...	...	...	0·64	1·63
Bradford	151720	23·0	122	78	46·6	28·7	36·9	2·72	0·80	2·03
Leeds	266564	12·4	170	126	46·0	28·0	37·4	3·00	0·83	2·11
Sheffield	247847	10·9	202	124	46·0	27·5	35·9	2·17	1·24	3·15
Hull	124976	35·1	92	70	43·0	23·0	34·3	1·28	0·89	2·26
Sunderland ...	100665	30·4	76	47	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	91	71	40·0	27·0	35·3	1·84	1·12	2·84
Edinburgh	205146	46·3	147	84	45·0	25·7	35·5	1·95	0·00	0·00
Glasgow	489136	94·8	393	293	41·5	24·4	34·4	1·33	0·15	0·38
Dublin	310565	31·9	183	176	44·0	26·5	36·1	2·28	1·00	2·54
Total of 21 Towns in United Kingd'm	7393052	34·0	5155	3309	51·2	23·0	36·4	2·44	0·81	2·06

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·28 in. The highest was 29·84 in. on Thursday at noon, and the lowest 28·60 in. on Tuesday evening.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

TAMAR INDIEN,

a laxative, refreshing, and medicated Fruit Lozenge, very agreeable to take, and never causing irritation. Its physiological action assures the immediate relief and effectual cure of

CONSTIPATION,

CEREBRAL CONGESTION, HEADACHE, INDIGESTION, BILE HÆMORRHOIDS, &c., &c., by augmenting the peristaltic movement of the intestines without producing undue secretion of the liquids. Unlike pills and the usual purgatives, it does not predispose to intestinal sluggishness, and the same dose always produces the same effect—that is to say, never needs increasing. These properties render "Tamar" invaluable to the weak and debilitated, and especially to ladies previous and subsequent to their accouchement. It is recommended by the most eminent Physicians of Paris—notably Drs. BELIN and TARDIEU, who prescribe it constantly for the above complaints, and with most marked success. Prepared by E. GRILLON, Pharmacien de rère classe. Depôt, 122, London-wall, E.C.; also to be had of Messrs. Barclay and Sons, Farringdon-street, London, and all respectable Chemists.

Price 2s. 6d. per box, by post 2s. 8d.

HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

Messrs. Baiss Brothers & Co.	Messrs. Geo. Curling & Co.	Messrs. Hearon, Squire, & Francis.	Messrs. Southall, Son, & Dymond.
,, Barron, Harveys, & Co.	,, Drew, Barron, & Co.	,, Herrings & Co.	Mr. James Woolley.
,, Battley & Watts.	,, Evans, Lescher, & Evans.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Langtons, Scott, & Edden.	,, Wyleys & Co.
,, Cox, Gould, & Co.	,, Samuel Foulger & Son.	,, Preston & Sons.	Glasgow Apothecaries' Co.

NOTICE.—EUCALYPTUS GLOBULUS.

As several kinds of Eucalyptus are now introduced, such as Eucalyptus Amagdalina, Odorata, &c., Messrs. Savory & Moore beg to direct attention to the fact that EUCALYPTUS GLOBULUS is the only variety which has been found successful in the treatment of Intermittents, Ague, &c., and is referred to in the reports and papers recently published in the Medical Journals, viz.:—

THE LANCET, March 9, April 20, and Nov. 2, 1872.	*BRITISH MEDICAL JOURNAL*, Aug. 11, 1872.
MEDICAL TIMES AND GAZETTE, Nov. 11, 1871.	*MEDICAL PRESS AND CIRCULAR*, Oct. 16, Nov. 8, 1872.
THE PRACTITIONER, November, 1871.	*PHARMACEUTICAL JOURNAL* (3rd series), vol. i., p. 156.

In consequence of the increased demand for EUCALYPTUS GLOBULUS and its preparations, Messrs. Savory & Moore are enabled to supply the following at lower rates than formerly, viz.:—

The Tincture, Fluid and Solid Extracts, Powder, Essential Oil, Spirit, Leaves and Bark.

OIL of CASHEL NUT for Leprosy.

Supplied by SAVORY & MOORE in any quantities, and at a reduced price.

GUARANA,

introduced to the Profession by Dr. WILKS in a paper on HEADACHE.

The Guarana Powder is sold in bulk, or in bottles with a measure for the dose.

SAVORY & MOORE, 143, NEW BOND-STREET, LONDON.

CHLORODYNE.

IMPORTANT CAUTION.

The published statement that Chlorodyne having obtained such universal celebrity it can NOW SCARCELY be considered a specialty is calculated to mislead the public.

J. T. DAVENPORT therefore begs to state that Chlorodyne has baffled all attempts at analysis, the published formulæ differing widely; hence the statement that the composition of Chlorodyne is known is contrary to fact.

The universal celebrity of Chlorodyne is the greater reason that the Public should be supplied with the Genuine, not a justification for the sale of a spurious compound.

The word "Chlorodyne" is a fanciful name applied by Dr. J. Collis Browne to his discovery, and the formula confided to J. T. Davenport only.

From Dr. J. WILSON, Castleton, Yorkshire.

"I require to use a considerable quantity of Chlorodyne in cases where no other medicine is of the least avail; and my object in wishing a supply from your own establishment is that I am frequently deceived by getting a *Spurious* article from other places, although I never order anything but the genuine Browne's Chlorodyne."

From JAS. ATKIN, M.D., Medical Officer, Fever Hospital, Oldcastle, Co. Meath.

"Having ordered from our Druggists 'Chlorodyne,' I was not only *disappointed in its effects*, but annoyed when I received a spurious compound. I have been in the habit of using your Chlorodyne with great advantage to my patients and satisfaction to myself."

From F. E. BARTON, Esq., Surgeon, Dover.

"I have now used your Chlorodyne in numerous cases, and have much pleasure in adding my testimony to its very great efficacy as an Anti-spasmodic and Anodyne, having found it especially valuable in those cases in which Opium does not agree well with the patient."

VICE-CHANCELLOR SIR W. P. WOOD stated:—Dr. J. Collis Browne "WAS UNDOUBTEDLY THE INVENTOR OF CHLORODYNE." "I believe the whole story of the Defendant Freeman to be as deliberately untrue as the falsehood he has deposed to with reference to the use of his Chlorodyne in the Hospitals."

The following eminent Firms stated on Affidavit that Dr. J. Collis Browne was the discoverer of Chlorodyne, and that they always supplied the preparation as the Original Chlorodyne, or when Chlorodyne was asked for:—

THE APOTHECARIES' HALL, LONDON.

Messrs. Allen and Hanbury.	Messrs. Burgoyne and Burbidge.	Messrs. Evans and Lescher.
,, John Bell and Co.	,, Cox and Gould.	,, Morson and Son.
,, Barron and Harvey.	,, Corbyn and Co.	,, Savory and Moore.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

Sole Manufacturer, J. T. DAVENPORT, Pharmaceutist,

33, GREAT RUSSELL-STREET, BLOOMSBURY-SQUARE, LONDON.

ORIGINAL LECTURES.

LECTURES DELIVERED IN THE

COURSE OF OPHTHALMIC INSTRUCTION AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, F.R.C.S.,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same.

(*Continued from page* 564.)

GRANULAR CONJUNCTIVITIS.

Treatment.—If we can remove any yet existing source or exciting cause of the inflammation, or any influences which may increase or maintain it, we shall place our patient under the most favourable state for his recovery. Then with judicious treatment the vesicular and papillary varieties may be subdued, and the conjunctiva restored to health; and mild, mixed, and diffuse varieties may be so reduced as no longer to cause discomfort, and severe examples of them may be much improved, and any thin corneal opacity may disappear. But in no instance can any of the desirable ends be accomplished quickly. The fullest improvement may not be arrived at for months, or even for some years.

The sthenic cases must be distinguished from the asthenic.

If there be active inflammatory symptoms, they must be subdued by appropriate leeching, cold, and other measures, according to the rules given for the same state arising out of catarrhal or purulent inflammation. The cold should be persevered with so long as there is any morbid heat, and resorted to from time to time if such should return. No decided amendment will ensue while any objective evidence of developing inflammation is present. The swollen conjunctiva should be scarified longitudinally in several places, and the bleeding encouraged by moving the eyelids with the fingers.

If the inflammation be chronic and associated with general debility, as in all probability it will, antiphlogistics, excepting the scarification, are contra-indicated. Fomentations with plain hot water will be beneficial.

Besides the local measures, we must look to the careful management of the system, and everything must be done to restore the health. When tonics are admissible, some preparation of iron will be most generally suitable, and in large doses.

In all cases the eyes should be shaded from bright light. It is as necessary to avoid tainted air, particularly that vitiated with tobacco smoke. Minute work should be sparingly or not at all done.

A change of residence often produces much effect, and a sea voyage works wonders. It is well known that soldiers who are discharged from the army in hot climates with granular conjunctiva often get well during their voyage home, or after they have joined their friends, from hygienic influence only. Where such advantages cannot be obtained, isolation from others who may be similarly affected is desirable.

Local applications to the conjunctiva are serviceable, but they should be used with the utmost caution, and astringents alone are admissible. Even these must be diluted enough not to irritate. I have settled down to the employment of alum or tannic acid, in lotions neatly applied to the conjunctiva with a brush three or four times a day.

The pure granular variety progresses better without any local application, and the same may be said of the low forms of the pure papillary.

When the excretions lessen, and especially when the mucous element preponderates over the purulent, the astringent is not required so frequently. It had better be discontinued altogether as soon as there is decided improvement in any of the prominent symptoms.

When the inflammation has done a certain amount of damage only a certain amount of recovery can ensue. I cannot express these degrees in writing, but I can recognise them. They can be learned by observation and practice, and it is well to know when remedies can do no more.

When there is no longer active hyperæmia, I believe in further advantage from the stimulating effect of blistering the integuments of the eyelids from time to time. I employ a blistering fluid—Bullen's—and while the patient lies down I put it on with a brush. I do not cut the blister, and a sore does not form. The British Pharmacopœia contains a liquor epispastici.

Under these principles of treatment there is the best opportunity afforded for the removal of the inflammation, the casting-off, the absorption, and the shrinking of the morbid products.

Escharotics—by which I mean nitrate of silver in substance or in strong solutions, or caustic potash, or sulphate of copper—augment and prolong the inflammation. I never saw a conjunctiva restored to health, and very rarely to comfort, to which they have been industriously applied. Yet some writers maintain that the conjunctiva must be directly irritated to produce absorption of the granulations.

Patients come to us with the mixed and diffuse varieties so advanced that the conjunctiva is damaged beyond all hope of recovery, being thoroughly altered in structure, and the cornea is fast becoming spoiled, the effect of severe cauterisation. My practice is to destroy the granulations, and this I do with the least damage to the tarsal cartilages and to the cornea by applying the pure liquor potassæ. I evert the eyelid, dab on the liquid, wait for thirty seconds, wash with tepid water and a bit of rag, dry the surface, and apply a little castor oil. I allow an interval of a week before making another application. The process has reached its applicability when the granulations are sufficiently reduced. The bad condition of the cornea improves. The intense pain which is produced is not worse, and is shorter in duration than that which follows the use of the nitrate of silver.

Any very decided pedunculated papillæ (or, more correctly, neoplastic growths) should be snipped off.

It is not my plan to tell of the very many applications which are and have been resorted to by other surgeons, most of which I have tried. There has been nothing new here in the last quarter of a century; it would be difficult to introduce variety. The finely powdered diacetate of lead dusted on the granulations, rubbed in, and the washing afterwards to remove loose portions, and the rubbing in of quinine—both now extolled—are old suggestions.

The removal as far as possible of the granular conjunctiva from the palpebræ by the scissors, the knife, or by actual cautery is now seldom practiced. While a student, I frequently used the curved scissors under the discretion of my teacher, and then rubbed the cut surface with the sulphate of copper. Furious inflammation always ensued, and the vascular cornea got worse.

Pannus is the worst effect of granular conjunctivitis. Inoculation of the conjunctiva with pus from an eye suffering under an attack of acute purulent ophthalmia, whereby sharp purulent inflammation is produced, will afford much benefit. The vessels which traverse the cornea may be so wasted that transparency is almost restored.

It is more than sixty years since Dr. Walker, an army surgeon, then stationed at Glasgow, introducted the practice and published his views. Pininger, of Gratz, and Jäger, of Vienna, adopted the practice very largely, and wrote about it.

The principle for our guidance has been thoroughly worked out half a century ago. The inoculation is alike applicable to all varieties of complete pannus, accompanied or not with inflammation of the conjunctiva. It is inapplicable if any portion of the cornea be not vascular, because that which is not so affected is as much damaged as the vascular portion is benefited. The contra-indications are the existence of xeroma, of any marked dyscrasia, such as struma, gout, rheumatism, syphilis, and such-like. Therefore, if the general health be not tolerably good and above par, the effects can scarcely be satisfactory. It is not a remedy for leucoma.

The inoculating fluid should be fresh, and taken with a small brush from a patient with a mild rather than severe purulent ophthalmia, and applied to the inside of the eyelid. Infantile purulent ophthalmia furnishes the best source. The child should be of healthy parents; scrofula and syphilis should be guarded against. Gonorrhœal matter has been used, but it produces rather too severe an inflammation. Besides the objection which most persons would have to such practice, there is always the chance of transmitting syphilitic virus through a chancre in the urethra.

If the first application should fail, either in not taking effect at all or in producing only partial results, the inoculation may be repeated several times. The usually severe inflammatory effects on the eyeball of purulent ophthalmia are modified by the vascularity of the cornea, whereby it probably resists both ulceration and sloughing; but such results have ensued, although in only a small percentage of cases. Such danger renders the experiment admissible only when the eye is practically useless. Very active symptoms arise. The cornea looks as if it were about to slough, while chemosis overlaps it considerably, and the eyelids are very much swollen. The

rule is, not to adopt any antiphlogistic treatment for such symptoms; they are prolonged on this account. The good effects of the measure may be very apparent in fourteen days, or not till six weeks.

So satisfactorily has the cornea cleared, in cases of pannus complicated with cataract, as well as with closure of the pupil, that operations to remedy these states have been successfully performed. Both eyes should not be inoculated at the same time. When one cornea is sound, or tolerably so, it should be guarded while the other is treated.

ORIGINAL COMMUNICATIONS.

AMPUTATION OF THE LEG.

By J. FAYRER, M.D., C.S.I.

The following is a brief account of the results of amputation of the leg, including that at the ankle-joint, during a period of about twelve years, in my wards of the Medical College Hospital, Calcutta. It is unnecessary to enter into details of each case, as it is the general results only that are of interest. It is apparent that, although the statistics of this operation are better than those of amputation of the thigh, they also represent a very high rate of mortality from causes similar to those which render the thigh amputation so unsuccessful in Calcutta hospitals. I would, however, remark that there has been an amendment within the last few years, coincident with the local and hygienic improvements in the Hospital and its surroundings already referred to.

It appears from the extracts from the register, as furnished by my house-surgeon, that between February, 1860, and November, 1871, 61 cases of amputation of the leg occurred in my wards; that of these, 37 died and 24 recovered.

The site of amputation was—in 44 at the upper third; in 1 at the mid third; and in 16 cases at the lower third of the limb, including those at the ankle-joint.

Death occurred 26 times out of 44 cases in the upper third operation, once in the middle, and 10 times in 16 in the lower third, and was due in 6 instances to exhaustion or shock, in 15 to pyæmia with or without osteo-myelitis (to which category 3 deaths from pulmonary or cardiac embolism may, as another evidence of blood-poisoning or degradation, be referred), in 8 cases to gangrene, in 3 to tetanus, in 1 to phthisis, and in 1 to some cause not recorded, but probably to pyæmia. I would, in regard to osteo-myelitis, be understood to say that, although it has been for some time a most dangerous complication in accidents and operations, I do not consider that it is necessarily, even when a result of imperfect hospital hygiene, to be regarded as a permanent one; indeed, there has been every reason to believe that of late it has greatly diminished, and that although the tendency to pyæmia still obtains, it is less also than formerly. In short, this particular evidence (osteo-myelitis) of blood-poisoning has, like other causes of disease, passed away to a great extent; and it is one of many proofs that the causation of such diseases must be sought for not only in local and hygienic defects, but in influences whether of an aërial or telluric origin, of whose nature we are probably altogether, as yet, ignorant.

It is impossible that too much care or precaution can be exercised in constructing our hospitals and providing for the proper accommodation of the sick; but even when perfect as science and sanitation can make them, antiseptics included, there may be—there are, indeed—waves of disease which may come like osteo-myelitis in the Hôtel-Dieu in former years, or in the Medical College Hospital of Calcutta more recently, and give striking proof that we have still much to learn on the subject of the etiology of disease.

With reference to the mode of operating, I would merely remark that in amputating the leg I most generally have recourse to the modified flap and circular operation described in "Clinical Surgery in India," page 403.

Amputation of the Leg.

		Recovered.	Died.	Total.
Traumatic.	Primary . .	13	22	35
	Secondary . .	1	6	7
Pathological . .		10	9	19
		24	37	61

Causes of Death.—Shock or exhaustion, 6 cases; pyæmia, 10; pyæmia, with osteo-myelitis, 5; pulmonary or cardiac embolism, 3; gangrene, 8; tetanus, 3; others, 2—total deaths, 37.

Remarks.—One case was amputation, during collapse, of both legs in an Englishman—a railway accident; he did well. Another was re-amputated at the thigh, when symptoms of osteo-myelitis appeared; he died.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

A SERIES OF CASES ILLUSTRATIVE OF CEREBRAL PATHOLOGY: CASES OF INTRA-CRANIAL TUMOUR.

(Under the care of Dr. HUGHLINGS-JACKSON.)

(*Continued from page* 626.)

Case 4.—*Epileptiform Seizures, beginning in the Right Hand, and occasionally in the Right Cheek—Double Optic Neuritis, at first with good sight—Syphilitic* (?) *Disease of both Cerebral Hemispheres.*

I reserve the comments I have to make on this case until particulars have been given of other cases of a like kind.

A very healthy-looking, handsome man, 35 years of age, consulted me in the out-patient room March 25, 1867. Four years before he had fallen into a ship's hold. He was much stunned, but was not insensible; he lay down for two hours; he hurt his shoulder most. He had not been well since, and eighteen months ago came to the Hospital for pain in the head. There was no history of syphilis. His wife looked very healthy, and her children were healthy. The patient looked remarkably healthy.

He had had a fit in the night about a year before—on April 1, 1866,—he woke up and found he could not speak; his mouth was "contracted," and so were several fingers of his right hand. It was a right-sided epileptiform seizure, and, according to him, lasted ten minutes. Although speechless he was not unconscious. Next morning he went to work at 6 a.m., feeling quite well.

On May 16, 1866, he was at sea, and, he said, near the Equator. He was "over the side" for some hours up to his middle in water, and the sun was beating on him. When he came on deck, a "pain" took him in the fingers of his right hand, and this hand became convulsed. He attempted to show the manner of it by opening and shutting his hand (a rude imitation of clonic spasm). Next his mouth worked; for about ten minutes he was speechless, but not unconscious—he knew all that was going on. He did not feel any spasm in his leg. After the ten minutes he became insensible, and possibly he was then universally convulsed. He did not bite his tongue.

Ever since he has had fits at irregular intervals, and all began in the same way—in the right hand—with but one exception. One seizure four weeks prior to his admission began in the *left* hand. He had them occasionally after admission. He had also "slight fits," which consisted in twitching of *the right side of his face* for a minute. Sometimes he had "faints"; he could not speak, and lost consciousness for a quarter of an hour.

He said his sight had been bad ever since the severe fit, but I suppose it must have failed occasionally only, as he seemed to see quite well and could read the smallest print. Nevertheless, he had double optic neuritis. The left disc was lost in a patch about three times the diameter of a normal disc; there were on it irregularly shaped blotches of blood, and white patches. The arteries could only be traced here and there. The rest of the fundus was normal. The right eye was in about the same condition. The patient had had very severe headache "through the temples." He had had no vomiting. I took him into the Hospital.

On April 20 he had become worse in general health, and was removed to the attic. He had intense pain in the head, but no sickness. He gradually passed into a semi-comatose condition, lying on his back heedless of everything, and passing urine and motions in bed. His pulse was slow—60 or 54—and occasionally irregular.

On April 29 the *left* side was paralysed—face, arm and leg. He continued in the same half-insensible, half-apathetic condition, got very thin, his belly retracted, and his bowels

were obstinately constipated. He could talk thickly, but there seemed to be a difficulty in moving his tongue—he could not get it as far as his teeth: he swallowed badly; he had a convulsive seizure now and then.

About the second week in June he slowly improved; the left hemiplegia had passed off, and by the 20th he was able to get up and to return to the ordinary ward; but he still spoke thickly, although he swallowed well and had a good appetite. He soon took to bed again, and had again a difficulty in swallowing; he became thinner; his bowels were obstinately constipated. However, he improved once more, and by October he had recovered his flesh and was well, except that he was quite blind. The optic discs were then only ill-margined and atrophied, the appearances of acute neuritis having nearly passed away—not, unfortunately, to a healthy state, as in Case 3.

I saw him several times before his death (in February, 1870); he always looked well, and was rather fat. He remained quite blind. The optic discs became completely atrophied, having only an indistinct edge. He was in the Hospital again in 1869, as he had had many fits and his wife complained much of his mental condition. I got no facts about it, and he seemed rational. In the Hospital he had slight attacks on the right side of the face, and complained of a deadness in the right arm, and spoke with some indistinctness. In all other respects he was quite well. On his discharge he went to the Bancroft-road Workhouse, and died there February, 1870, after a few days' illness, of which difficulty of swallowing was the chief symptom.

I am indebted to Mr. Cæsar for the opportunity of making the autopsy. There was disease of both cerebral hemispheres. On the left side the brain was firmly adherent to the dura mater over convolutions of the surface—viz., the lower part of the ascending frontal and ascending parietal, to a trifling extent to the hinder part of the third frontal, and several of the convolutions of the upper wall of the fissure of Sylvius behind the ascending parietal; but there was no "deposit," such as was seen in the right hemisphere. The grey matter of the convolutions seemed to be destroyed, and to be only partly replaced by a tough, œdematous-looking substance fastened externally to the dura mater. There was a little softening of convolutions near the patch.

In the right hemisphere, on the surface—behind the fissure of Rolando—was a mass about the size of a chesnut, on section of yellowish or grey-green tint. The dura mater was firmly adherent to it; there was very little softening about it. I discovered no other disease in the head. I examined the arteries in the fissures with great care. In each lung were several large patches of "apoplexy," and many smaller ones; there were also several nearly decolorised patches of older apoplexies. There was no tubercle nor any chronic changes in the lungs. There was contraction of the mitral orifice; the valves were lost in a button-hole, of which the surface was smooth and of a yellowish colour. Thinking this specimen a very important one, as possibly being the result of syphilis, I sent it to the London Hospital; the specimen was unfortunately lost. The liver, spleen, and kidneys were healthy.

(To be continued.)

LONDON INTERNATIONAL EXHIBITION, 1873.—The second meeting of the Committee on Surgical Instruments and Appliances was held on December 23, at three o'clock, in the offices, Gore Lodge, South Kensington. Among those present were Mr. Cæsar H. Hawkins, F.R.S., in the chair, Sir William Fergusson, Bart., F.R.S., Dr. P. Allen, Mr. W. Bowman, F.R.S., Mr. R. Brudenell Carter, Mr. W. White Cooper, Dr. W. T. Domville, R.N., Dr. Arthur Farre, F.R.S., Dr. G. T. Gream, Mr. Prescott G. Hewett, Mr. J. Hilton, F.R.S., Mr. J. Hinton, Professor J. Marshall, F.R.S., Mr. T. W. Nunn, Dr. W. S. Playfair, Mr. R. Quain, F.R.S., and Mr. Edwin Saunders. Letters received from the Royal College of Surgeons and the Royal Medico-Chirurgical Society were read, and it was stated that many of the leading surgical instrument makers in London, Dublin, Paris, and other capitals had signified their intention to contribute. It was suggested that the exhibition should be brought before the notice of the British Medical Association at its meeting in August, 1873. The Committee resolved to recommend the Royal Commissioners to invite corresponding members in foreign countries, and, after the transaction of general business, adjourned till Monday, January 20, 1873.

A NEW infirmary has been erected at Wigan at a cost of nearly £30,000.

TERMS OF SUBSCRIPTION.

(Free by post.)

British Islands	*Twelve Months*	£1 8 0
" "	*Six* "	0 14 0
The Colonies and the United States	*Twelve* "	1 10 0
" "	*Six* "	0 15 0
India	*Twelve* "	1 15 0
"	*Six* "	0 17 6
United States, per Kelly, Piet, & Co., Baltimore	12 *dollars currency per annum.*	

Single Copies of the Journal can be obtained of all Booksellers and Newsmen, price Sixpence.

Cheques or Post-office Orders should be made payable to Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

TERMS FOR ADVERTISEMENTS.

Seven lines (60 words)	£0 4 6
Each additional line (10 words)	0 0 6
Half-column, or quarter-page	1 5 0
Whole column, or half-page	2 10 0
Whole page	5 0 0

Births, Marriages, and Deaths are inserted Free of Charge.

THE MEDICAL TIMES AND GAZETTE *is published on Friday morning, Advertisements must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, DECEMBER 28, 1872.

ANNUS MEDICUS 1872.

THE year of grace 1872 will surely be remembered as one of the most unpleasant and, in some respects, most disastrous on record. We say "one of the most unpleasant" only, because if we are to take the meteorological character of the year described by Shakespeare's famous Fool as literally correct and accurate, this year has not been quite so bad, though we have no doubt that a vast number of people—probably quite as good observers as the Fool—have been ready all through the year to declare that "the rain, it raineth every day." While it would severely tax the arithmetical powers of the most showy of national-school show-scholars to calculate how many times this year people have quoted or thought of Tennyson's lines—

> "The day is cold, and dark, and dreary;
> It rains, and the rain is never weary."

At home and from all parts of Europe we have had most sad reports of the physically disastrous effects of the continuous rains. Tourists, chilled and wet, and wearying after a glimpse of the sun, have been soured by the almost perpetual mists; agriculturists have been unable to prepare the ground or to sow the seed for next year's harvest; and floods and storms have caused disasters such as make men gloomily think of the Mosaic Deluge, and ready to worship a rare, dim, and quickly-fleeting rainbow.

And yet, notwithstanding all this,—in England, at least—the year has not been an unhealthy one: that is, judging from the bills of mortality. It is said, indeed, that the general tone of health and vitality has been lowered; but week after week the Registrar-General has reported the deaths, in urban chiefly, but also in rural districts, as much below the average. It will be highly interesting to read months hence his summary of the death-rate of the year, and note the effects the weather has had on the various classes of disease. No doubt one very influential cause of the low death-rate has been the absence of continued or severe cold; but probably the very frequent washing of the air and of the surface-soil by the heavy rains has had something to do with it. But readers of the Registrar-General's weekly reports must have noted with

some surprise of late the prevalence of typhoid fever in London, and its habitats. Typhus has been rare—perhaps again owing partly to absence of cold, and its consequence, overcrowding for the sake of warmth. During the eight weeks ending December 7, the Registrar-General has reported only twenty deaths as caused by that form of fever in London; while during the same period he has recorded 139 deaths from typhoid, and of these twenty-seven occurred in the West and thirteen only in the Central District. We have heard that of the cases of typhoid in the West District not a few have occurred in the superb-looking new houses of the far west, where certainly one would not have expected to meet with that form of disease. In one week four deaths were registered as having taken place in the mansions of South Kensington. The rains must have kept the sewers well and constantly flushed, and it is hardly credible that any overflow or leakage of sewage can be feared or expected in such buildings; so that it seems probable there has been some neglect of due cleanliness, or some defect of domestic sanitary arrangements.

But we have yet something to learn as to the cause, or causes, and still more as to the modes of communication, of typhoid fever; if not, its occurrence, in the homes of our wealthy or well-to-do countrymen at least, is a scandal and a disgrace. When we wrote the Annus Medicus of 1871, the pulse of the nation was still throbbing with anxiety for the medical reports from the sick-chamber of the Prince of Wales, who had long been at death's door from an attack of this plague. Most happily his then-begun convalescence has been complete; but typhoid still carries off its daily tale of victims, though were our knowledge of its cause and mode of communication as complete as some would have us believe, it ought to have been swept away from among us as utterly as the plague of old has been.

Last year Mr. W. E. Forster said that he could not pledge the Government to bring forward this year a Medical Act Amendment Bill, but "it was their wish and anxiety to do so," and we ventured to express our hope and anxiety that Government would find work enough to do without meddling with us as a Profession. That hope has fortunately been fulfilled, and the wisdom of Parliament was not called upon to legislate for us.

An Act for regulating the sale of intoxicating liquors received the Royal Assent and became law at the end of the session. It excited so much dispute, and underwent so many alterations as it dragged its slow length along through Parliament, that we imagine most people, supporters and opponents, alike believed that all the pith had been taken out of it, and that it had been manipulated into a thoroughly weak, timid, and do-nothing measure. But, judging by the outcry and opposition that have since risen against it, and the reports of the effects produced by it, it is really a useful and valuable Act. We believe that, till it passed, the only Act which imposed any penalty on drunkenness was one of the time of James I., which inflicted a fine of five shillings, with the alternative of six hours in the stocks if not paid; and the stocks have disappeared! The new Act provided for—1. The detection and punishment of adulteration. 2. The punishment of aggravated drunkenness without the option of a fine; thus making intemperance disgraceful and perilous. 3. The earlier closing of public-houses, and their optional closing on Sunday. 4. The regulation of the management of public-houses, by rather severe penalties on the permission of drunkenness and the admission of disorderly characters. A short time ago the superintendents of police in some 300 towns reported, by request, on the operation of the Act, and almost without exception they spoke most favourably of the present, and with hope as to the probable future results. It is probably as strong an Act as could have been maintained until the public mind has been more educated in the idea of the suppression of intemperance by law.

Dr. Dalrymple did not succeed in passing his Habitual Drunkards Bill, but he obtained the Select Committee which Government promised him last year, and their report must be considered by him as a great triumph and gain. When he first introduced his Bill, last year, he was complimented on his philanthropy, but was also assured that his scheme was altogether impracticable. And now a Select Committee of the same Parliament have endorsed his views and adopted his suggestions; and he may fairly look forward to seeing his Bill become law before long. His attempts at legislation on the subject have always had our warm support; and it is not credible that England will consent to remain much longer behind other countries in providing for the legal control of those who, from dipsomania as well as from other forms of insanity, are incapable of managing themselves and their affairs, and are bringing ruin on themselves and those connected with them.

Mr. Bright must have felt greatly shocked by the passing of the Act to amend the Law for the Prevention of Adulteration of Food, and Drink, and Drugs. When he was at the Board of Trade, he one day, if we remember rightly, informed a deputation that adulteration was only a form of competition in trade; and that competition is necessary and desirable. His successor, Mr. Chichester Fortescue, is not so "liberal" to competing tradesmen,—perhaps from a want of practical acquaintance with the exigencies of trade and manufacture,—and has allowed himself to think, also, of the consumer. The Act of 1872 is a great improvement on that of 1860. It defines adulteration as the fraudulent admixture of any substance with any article of food or drink, or with any drug, for the purpose of increasing its weight or bulk, unless the admixture is declared before the article is delivered. It does not matter whether the adulteration is, or is not, injurious to health; but the article sold must be what it professes to be. The penalty for the sale of adulterated goods has been raised from £5 to £20 as a maximum, with publication on a second conviction. And the Act provides for the punishment of the people who adulterate goods, as well as of those who sell them; for the manufacture of adulterated goods—that is, for admixing or causing others to admix the adulterating ingredients—the penalty for the first offence may be as much as £50, and for a second the offender will be deemed guilty of a misdemeanour, and imprisoned for a period not exceeding six months. The former Act was a purely permissive law. The new one empowers the Local Government Board to compel the local authorities to appoint analysts; it will be the duty of the inspectors of nuisances, of weights and measures, of markets, etc., to procure samples of articles suspected of being adulterated, and to submit them for examination by the analyst of the district; and on receiving a certificate that articles are adulterated, to summon the seller or adulterator before the magistrate. But, to provide against malicious proceedings or mistakes, the inspector must, before removing the suspected article from the place of sale, give notice of his intention to have it analysed, so that the accused may be able to test the identity of the sample submitted for analysis with that sold or manufactured by himself; and the inspector must retain enough of the sample for a future analysis by an independent person, if that should be thought desirable. Of course, people may proceed against a dealer or manufacturer on their own account if they like; but when once the local authority has taken up the Act, it will be obligatory on the inspectors to send samples of the suspected articles to the appointed analyst, and, on receiving his certificate of adulteration, to prosecute. Many of the most valuable clauses in the Act, including the compulsory clauses, were introduced by Lord Eustace Cecil, and at a meeting of the Association of Medical Officers of Health his lordship gave an interesting and amusing account of how Government and Parliament may be managed. He had been privately informed that unless he withdrew his amendments, which had been agreed to in com-

mittee, the Government would defeat the Bill on the third reading. He withdrew them, and then arranged with his brother, the Marquis of Salisbury, to reintroduce them all in the House of Lords, where they were passed; and when the Bill reappeared in the House of Commons, "at 2.30 a.m., in a house of scarcely more than half a dozen members, at almost the close of the session, the identical amendments were agreed to without scrutiny, and the Government opposition was defeated." We may remind our readers that at page 497 of vol. ii. we published some "Suggestions for the Effective Working of the Adulteration of Food, Drugs, etc., Act," printed and circulated by the Association of the Medical Officers of Health.

The Public Health Act is a still larger and more important measure, and may be expected, when the difficulties of getting it into work have been overcome, to have a great and important influence for good. The Bill as first brought forward contained ninety clauses, but it excited so much opposition and controversy that, to give it any chance of passing, it had to be reduced to some fifty-three by cutting out valuable clauses headed "Nuisances," "Water Supply," "Gas Supply," "Hospitals and Provision for the Sick," and so on; but enough was retained to establish the sanitary authorities, without whom existing laws on the subjects dealt with are useless, to clothe them with the requisite powers, and to enable the Local Government Board to deal with the existing anomalies as to areas. It divides England into two classes of sanitary districts —rural and urban,—and each district will be subject to the jurisdiction of a local sanitary board; in the one class of districts this will be the town council, in the other the board of guardians. And these authorities will have all the powers previously vested in local boards, sewer and nuisance authorities, and authorities under previous Sanitary Acts, such as the Common Lodging-house Act, the Diseases' Prevention Act, the Bakehouse Act, etc. The local authority is to elect a medical officer of health, and will be liable to the visits and supervision of inspectors from the Local Government Board. But we have written so repeatedly and so lately on the Bill, its deficiencies, and its powers for good, that it is quite unnecessary to say much here. The Bill may not be a "great" measure in the Gladstonian sense of the epithet. It makes too much use of existing machinery, and its framers have had too much regard for the force of passive resistance, and too little confidence in their power to cram anything they choose down the nation's throat, for it to deserve that praise. But we are sure that, to use a Johnsonian phrase, it contains a great potentiality for good; and the amount of good that will come out of it depends on the honest sincerity and earnestness with which its powers are used. If we may safely judge of a man's intentions by his own words, Mr. Stansfeld does intend to carry out plainly and honestly his own Bill; and we may thank the deputation of the Kent and Sussex branch of the British Medical Association for the declaration of his view which they called forth. He adopts Lord Derby's proposition, that "the health of the country is not to be secured in the main by any large drainage operations, but that it is to be improved by an administration which shall secure close supervision and a prevention of nuisances"; and he says that "the Health Act creates sanitary authorities in every locality; it imposes upon them the duty of a minute inspection of nuisances, or a minute inspection of premises to prevent nuisances; and there, in my mind, arises its great future work." And this is, in our mind, sound doctrine. Much may be undoubtedly said against his late appointments to inspectorships; but, on the other hand, it must be allowed that there is some weight in the argument that "a board of guardians will be more, not less, likely to attend to an inspector who is urging them to carry out some sanitary improvement if he is a layman appealing to lay minds by reference to lay considerations." The Profession will not thank the deputation from the Kent and West Sussex Branch, etc., for having brought upon them Mr. Stansfeld's remark that "he did not think it fair that the medical profession should make a claim to have the great sanitary work of the country placed in their hands, and then tell him that they had not the courage to perform their duties;" and we are glad that the Council of the Poor-law Medical Officers' Association have, all but unanimously, passed resolutions repudiating the imputation that they are unwilling to undertake the duties of officers of health for fear of offending influential persons who may have a pecuniary interest in the non-removal of nuisances. Mr. Stansfeld, if we understand him rightly, believes in the "competency" of poor-law medical officers to fill these appointments; and, as sanitary districts may be united to pay a medical officer, and the authorities will most likely, in great numbers, yield to the through-the-pocket appeal of the Local Government Board to give it a paramount voice in the appointment of the medical officers and in setting out their duties, in consideration of its paying half their salaries, it is more than probable that the appointments will be fairly paid, and the officers well supported by the central authority. And at any rate we are sure of this: that if the education of the English public in the value of sanitary measures is so meagre and weak that an officer of health will ruin his chances of private practice by attempting to honestly carry out the provisions of the Public Health Act, it may as well be dropped at once, for it will certainly become a dead letter.

These three Acts—that for regulating the sale of intoxicating liquors, the Adulteration of Food, Drugs, etc., Bill, and the Public Health Bill—were the chief domestic and sanitary measures carried; but some other valuable sanitary Acts, as the Infant Life Protection Bill and the Coal Mines Regulation, were also passed.

The General Medical Council met on February 29, and as it happened that neither of the Royal Colleges were able at that time to offer them shelter, they had again to meet in the place they hire from the Dental Hospital, in Soho-square. To the outside world it does appear undignified and strange that this body should neither be able to obtain rooms from the Government nor to possess buildings of their own, but be obliged or content to trust to the possible hospitality of the Colleges, or to lodge in such a place as that they pay the Dental Hospital for the use of. Mr. Bradford was introduced as the new representative of the Apothecaries' Society of London; and the President announced, with fitting expressions of regret, that Dr. Christison was unable from the state of his health to attend the meeting of the Council. And then the President delivered a short address, pointing out that the Council had been called together, in obedience to a resolution passed in the previous session, to receive the proposals of the examining bodies for conjoint examinations, and to consider whether any steps should be taken to carry out the resolutions of the Council in favour of such combinations. It will be remembered that the Council had recommended "that a joint examining board should be formed in each of the three divisions of the kingdom," and had requested "the universities and medical corporations established in each division of the United Kingdom to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong"; and these schemes the Council had resolved to consider early in this year (1872). Hence their meeting. The Council were gathered together; but where were the schemes? There was no scheme from Scotland; there was no scheme from Ireland; and in England the two Colleges of Medicine and Surgery, after several trials, and many months of negotiation and hard labour, had succeeded only in producing a mutilated scheme, wanting two important members. The Royal College of Physicians of London and the Royal College of Surgeons of England had together produced the scheme, and the Universities of Oxford,

Cambridge, and Durham had given in their adhesion to it; but the University of London, which confers qualifications of a very high character, and the Apothecaries' Society of London, which, looking at the number of its licentiates, is by far the most important licensing body after the College of Surgeons, had both been prevented from joining in it by legal difficulties. What could the Council do in such a melancholy state of affairs? It,—(for here we must speak of the Council in the concrete)—it had in its collective wisdom decided that divisional conjoint examining boards were desirable: for some three years it had been trying to get schemes for their formation, and had now met for the express purpose of considering them; and, lo! there was only one scheme, and that an imperfect one. What was to be done? The Council was equal to the occasion. Emulating the heroic audacity of a Nelson bent on victory, it turned a blind eye on the deficiencies of the scheme, and resolved to "approve of and sanction the conjoint scheme of examination submitted by the Royal College of Physicians of London and the Royal College of Surgeons of England, to which the Universities of Oxford, Cambridge, and Durham have given their adhesion," at the same time, however, expressing "its desire that means may be found by which the University of London and the Apothecaries' Society may be enabled to join in the scheme, so as to render it a complete scheme for a conjoint board for England." Communications were received from the Scottish and Irish licensing bodies holding out rather vague hopes that, some day, conjoint examining boards would be formed for those divisions of the kingdom; and hints were given that when the schemes for them did come forth they would be much better than the English scheme; but the combative representative of the Queen's University in Ireland openly defied the Council, and Dr. Parkes expressed his conviction that "Scotland was as far from forming a conjoint board as Ireland, and that was going as far as any human event could be." Long and rather stormy discussions were held as to the best mode of dealing with the licensing bodies in these divisions, but in the end the Council was content to express its regret at the absence of schemes from them, and sent to each a resolution stating its hope "that a scheme for a conjoint examination which the Council will be able to sanction may be submitted to the Council by July 1, 1872." Since then the prospect that any real success will ever attend the efforts of the Medical Council for the formation of a "joint examining board in each of the three divisions of the kingdom" has by no means improved; so blank is it, indeed, that the Council has not even met since February, notwithstanding its expression of its hopes of having schemes to discuss by July 1. We are not aware that any news whatever on the subject has come from Ireland, but in Scotland all hope of the formation of such a board, voluntarily, seems to have faded away. In June the senators of the University of Edinburgh resolved to have nothing to do with the proposed scheme for Scotland; and the Branch Medical Council for Scotland, we believe, soon after declared the whole thing at an end as far as Scotland is concerned. Even in England things are worse than when the Medical Council separated after their labours in February. The Apothecaries' Society and the University of London, loyal to their professions, tried to obtain legal power to combine with the rest of the English licensing bodies, but the only mode of doing so is by an Enabling Act, and no such Act was introduced into Parliament; probably because, according to report, the price of such an Act would have been the submission of the whole matter to the supervision and approval of the Privy Council. The scheme remains therefore imperfect; and while but little progress appears to be made towards getting it into work, signs are not wanting of growing dissatisfaction with its complicated and cumbersome machinery, and of misgiving as to its probable effects when fairly launched, should that ever happen. Some at least of the Council of the College of Surgeons have come to see that the establishment of a conjoint board (even if a perfect one) in England only must, or at least most probably would, have a disastrous effect on the status and revenues of the College, starving the Hunterian museum and library, while enriching the coffers of licensing bodies out of England; while the Fellows of the Royal College of Physicians have been taught to look with great suspicion and distrust on the machinery of the scheme. A voluminous body of "recommendations" for the guidance of the committee of reference, which is to be the great creating, guiding, and motive power of the new board, was drawn up by a conjoint committee of the two Colleges, was printed, and presented to the Fellows of the College of Physicians,—but *why* seems a mystery, for the Fellows were told that it was not within the power of the College to discuss them; this was opposed by Dr. Quain, himself we think a member of the conjoint committee, and he moved a formal resolution that the "recommendations" should be "submitted for consideration and approval by the College, prior to their being transmitted to the committee of reference." This motion was, however, rejected, in a large Comitia, by two votes. This committee of reference is in reality to exercise, *quâ* examinations and the appointment of the examining board, all the legal powers of the Colleges (whether it can do so legally is a disputed and very important point); and yet the Fellows of the College were not allowed any opportunity of expressing an opinion on the duties to be entrusted to it, or the rules which are to regulate it!

The many and weighty reasons for entire disapproval of this conjoint board, and for doubting the wisdom and expediency of the whole divisional conjoint board plan have been fully and repeatedly pointed out in our pages; and we may be content now to refer our readers, for information on the subject, to pages 712, vol. i., and 8, 70, and 125, vol. ii.

As regards the General Medical Council itself, we need only to add that it gave Dr. Acland a committee "to consider and report" whether the Council has power to do, and how it should do, certain things; which, according to Dr. Acland's explanations, seemed to mean the Council's starting a register of duly educated female nurses, dispensers, midwives, and hospital managers. Further, in July, the President of the Council, the Treasurer, and Dr. Acland had an interview with the Chancellor of the Exchequer on the subject of a habitation for the Council; and it was intimated to them that the Government will either provide apartments in one of the public buildings or grant the Council a site for a building of its own.

The Royal College of Physicians, following the example of the College of Surgeons, has advised that an abstract of the proceedings of the College shall be suspended in their hall on the day after each meeting of the Fellows; and Dr. Williams, now on the Council, has drawn the attention of the College to the anomalous status of its members, and the fact that a large number of the physicians practising in England have no connexion with the College. The matter was referred to the Council. Dr. Burrows has been again elected President.

Mr. Hancock has succeeded to the Presidency of the Royal College of Surgeons, and Messrs. Hancock and Curling were re-elected on the Council, and Mr. Holt elected to the vacancy caused by the death of Mr. Solly.

The British Medical Association held its fortieth annual meeting in Birmingham. The gathering was a very large one, and the meeting highly successful and satisfactory. The addresses were singularly good, especially those by Dr. Wilks on Medicine, Mr. Pemberton on Surgery, Dr. Maudsley as President of the Psychological Section, and of Professor Haughton as President of the Section of Public Medicine. Warned by the effects of the recreation-temptations at the meeting held in Plymouth the previous year, some changes were made in the management of the meeting; the addresses were given in the mornings, the sectional business was carried on in the after-

noons, and all excursions were postponed to the end of the week. Distinguished among the distinguished visitors of the Association were M. Ricord, and Professor Gross of Philadelphia. Next year the meeting of the Association is to be held in London.

The triennial meeting of the International Ophthalmological Congress was held in London on August 1, 2, and 3, the Royal College of Physicians having hospitably placed their rooms at the disposal of the Congress. There was a large attendance of members, the ophthalmological talent of France, Germany, Italy, England, and other European countries, America, and the colonies being well represented. Mr. Critchett, as president of the committee of organisation, opened the proceedings on the evening of July 31, and Professor Donders was elected president of the Congress. At the close an enthusiastic vote of thanks was, on the motion of Dr. De Wecker (Paris), passed to the English Committee for the very admirable arrangements they had made, and for the cordial reception they had insured for the foreign members of the Congress. The next meeting is to be held in New York in 1876.

The sixth anniversary session of the St. Andrews Medical Graduates' Association was held in London on July 6, when an admirable and interesting discourse, on "The Army Surgeon, his Work and Works," was delivered by the President, Inspector-General Gordon, M.D., C.B.; and the Medico-Psychological Association held its twenty-seventh annual meeting in Edinburgh, the President, Sir James Coxe, M.D., Commissioner in Lunacy, opening the meeting with an able address on "The Causes of Insanity," on "How to check the growth of Insanity," and on "Moral and Physical Training," and other subjects.

The British Association for the Advancement of Science had their annual meeting at Brighton. Of course it was very largely attended and very successful, for, besides the great convenience of the locality to London men, and its repute and pleasantness for a short time as a seaside recreation-ground, the Livingstone lion, Mr. Stanley, was expected, and attended. He received, of course, hearty welcome and praise, and was the object of greatest interest; for though he cannot be said exactly to be a *savant*, or a man of science, still he had done boldly and right well a great work in aid of science by going in search of, finding, and bringing us news from, Dr. Livingstone. The president of the year was Dr. Carpenter, who, in his highly able and interesting address, took his hearers into a field of observation and inquiry very different from that generally occupied by his predecessors in the president's chair. Remarking that they had generally spoken on some aspect of Nature in her relation to man, he said that he proposed to take up the subject of "Man as the Interpreter of Nature," and "to consider the mental processes by which are formed those fundamental conceptions of matter and force, of cause and effect, of law and order, which furnish the basis of all scientific reasoning, and constitute the *philosophia prima* of Bacon." We gave, at the time, as full an analysis of the address as our space would allow, but we hope, and indeed do not doubt, that our readers have eagerly seized some opportunity of studying the whole discourse.

The last association meeting we shall mention—and we can only mention it—was the annual meeting of the Social Science Association, which was held in Plymouth, under the presidency of Lord Napier. The Department of Public Health, in which a great amount of paper-reading and discussion was got through, was presided over by Dr. H. W. Acland, who delivered an address "On Public Health."

The various medical societies of the metropolis have been active and flourishing, and have done good work. The Royal Medical and Chirurgical Society had two exceptionally brilliant and interesting meetings—on the occasions when the paper by Sir William Gull and Dr. Sutton, "On the Pathology of the Morbid State commonly called Bright's Disease, with Contracted Kidney (Arterio-capillary Fibrosis)," was read, in May; and when that by Dr. George Johnson, "On the Pathology of Chronic Bright's Disease, with Contracted Kidney, with special reference to the theory of Arterio-capillary Fibrosis," was read, in December. This Society also, following out a suggestion made by the Fellows to the Council at their annual meeting, held, for the first time in its existence, a *conversazione* at its rooms in Berners-street, when the new reading-room was opened. By the alterations in, and addition to, its premises the Society has gained a very considerable increase of library space—sufficient probably to hold some 30,000 additional volumes; and its extensive suite of rooms, redecorated in excellent taste, now appears really worthy of the dignity and status of the Society.

The Medical Society of London has taken new premises in Chandos-street, Cavendish-square,—a convenient and central position; and it is expected that the new rooms will be ready for the Society early next year, so that it may in them open its centenary session.

The numerous and important changes in the *personnel* of the metropolitan hospitals and schools were, according to our custom, mentioned in our Students' Number; and a few additional changes have occurred since. At Guy's Hospital Mr. E. A. Durham has been promoted to the Surgeoncy left vacant by the lamented death of Mr. A. Poland. At St. Bartholomew's the increasing illness of Mr. Holmes Coote has made it impossible for him to fulfil his duties as Surgeon, and Mr. Thomas Smith has been appointed to act for him. At the West London Hospital Dr. J. C. Thorowgood has become full Physician, in place of Dr. Maudsley, who has resigned; Dr. F. Simms has been compelled by ill-health to give up the post of Junior Physician; and Drs. D. Farrier and J. C. Fish have been appointed Junior Physicians.

The war between the senators of the University of Edinburgh, and the managers of the Edinburgh Royal Infirmary and lady students still goes on—merrily, we should think, as far as the lawyers are concerned, and with true feminine pertinacity on the part of the ladies. The various moves made and the gains and losses on either side have been duly noticed in our pages, and been watched, we doubt not, with great and general interest. The most remarkable outcome of the contest, so far, has been the "interlocutor" or decision of the Lord Ordinary of the Scotch Court of Session—Mr. Adam Giffard. If his decision is confirmed he has settled the whole question of "woman's rights." He rules that there is nothing in the University charters to exclude "females," even when the masculine form of noun or pronoun is made use of in speaking of students. He cannot doubt that this is done, not to exclude females, but merely in conformity with ordinary brevity of expression." Of course we suppose this ruling must apply elsewhere; and then every profession, the rules of which run, as regards nouns and pronouns, in the masculine, is open to both sexes alike. But the career of the Edinburgh female medical students must remain pretty nearly arrested till the Scotch and English courts have finally decided on various important points in the constitution of the University. The only other matter to be mentioned here, "in this connexion," is the fact that the committee of the Birmingham and Midland Hospital for Women have elected Mrs. Louisa Atkins, M.D. (Zurich), to the double office of Secretary and Resident Medical Officer.

We have again had the satisfaction of recording various (but not very many) distinctions, honours, and rewards that have been bestowed on members of the Profession. In January her Majesty was graciously pleased to give orders for the appointment of Sir William Jenner, Bart., M.D., etc. (one of her Physicians-in-Ordinary), to be an Ordinary Member of the Civil Division of the Second Class, or Knight-Commanders, of the Most Honourable Order of the Bath—a distinction very rarely gained by a physician in civil practice; and at the

same time her Majesty conferred the dignity of a baronetcy on Dr. William Withey Gull. This acknowledgment of the eminent services rendered by these physicians in their management of the Prince of Wales's illness was gratifying to the Profession at large, though it must be allowed that a very large number felt that the reward could not be considered a very adequate one. Sir William Gull was afterwards appointed one of her Majesty's Physicians Extraordinary, and Physician-in-Ordinary to his Royal Highness the Prince of Wales. Dr. John Rose Cormack's well-known services in Paris during the siege of that city were rewarded by the honour of knighthood; and Dr. Vivian Poore, for his having successfully guided the Princess Thyra of Denmark through an attack of typhoid fever, received from the King of Denmark the Commandership of the Order of the Danebrog, which decoration her Majesty has been pleased to allow Dr. Poore to wear. Dr. Paget has been appointed Regius Professor of Physic in the University of Cambridge; and the sister University of Oxford has conferred its D.C.L. degree on Dr. Burrows of London, and Professor S. D. Gross, M.D., of Philadelphia. Not a few of our hard-working brethren have had the gratification of finding their labours publicly acknowledged by the presentation of addresses and valuable testimonials; among them we may mention Mr. F. F. Lallemand, of Macclesfield; Mr. J. W. Kay, of the City of London; and Dr. Turnbull, of Huddersfield.

When we look at the death harvest of the year, we find that it would be easy to draw out a long list of those of our brethren who died at advanced, and in not a few instances very advanced, ages. Mr. Bacon Vaux reached the age of 90, and Dr. Miller, of Exeter, had reached his 90th year; Dr. Robert Venables died at the age of 88, Dr. A. B. Granville at the same age, Mr. George Jepson at 87, Dr. Robert Buchanan at 86, Dr. R. McDowall at 85, Mr. R. Wade and Dr. T. H. Blundell at 84, Mr. R. Strong Eyles and Dr. John Gardner at 82, and Messrs. C. Harris and J. Coleman at 81; while Dr. James Baker, Messrs. W. F. Morgan, George Skinner, W. S. Cumming, W. Rayner, and Mr. F. C. Skey, with Drs. T. B. Procter, W. Macturdy, Thomas Barnes, George Angus, Thos. E. Beatty, Alexander Brown, Robert Wright, James Heygate, Sir Andrew Smith, M. T. Sadler, John Davies, William Gibney, and Mr. T. Hewlett, of Harrow, were all between 70 and 80 years of age when taken to their rest; and it would be easy to add considerably to this enumeration of those who had passed the age of three score years and ten. But, on the other hand, it would be much more easy to give a still longer list of medical men who have in the past year died in the maturity of life, or, at least, while still actively engaged in and fully equal to their work. Mr. Alfred Poland was lost to us at the age of 51, Drs. Edward Falloon and F. Da Cruz McCowan at the age of 53, Mr. T. Martindale Ward at 52, Mr. Weedon Cooke at 56, Dr. A. W. Walker at 59, Dr. M. Elliot at 60, Dr. C. J. B. Aldis at 64, Dr. R. T. Thompson at 49, Dr. Barnabas Barrett, Dr. A. W. Straker, and Mr. Thomas Bickerton at 45, and Dr. J. T. Frith at 46. And, alas! death claimed many in the very prime of life, and not a few who had hardly well commenced their professional career. Mr. John Humphreys, of Cheltenham, and Mr. R. A. Elliot died at the age of 40; Mr. J. F. Mullinger at 39, Dr. Masfen at 41, Dr. John Blaydon at 31, Dr. J. A. Walsh, by a fall from his horse, at 30; Dr. E. L. H. Fox and E. F. Turner also at the age of 30; Mr. C. H. H. Smith, Dr. William Carless, and Mr. N. Heckford, founder of the East London Hospital for Children, at 29; Dr. James Chatterton, of the Guards, and Dr. T. P. Hughes at 28; and some might, could we spare the space, be mentioned who at still younger ages have died by accident or from disease. We must not close this sad list, which does not pretend to be anything like perfect or full, without mentioning the deaths of Mr. H. M. Graee, the father of the great cricketer, and a well-known cricketer himself; Dr. G. E. Day, Mr. T. C. Jordan, so distinguished for his works on the birds of India, and Mr. Adoniah Wallack, known as a naturalist and scientific explorer.

We will now notice the results of our own labours through the year, as seen in the contents of the two volumes we have issued. Among the "Original Lectures" in these volumes we have had the satisfaction of giving to our readers Dr. C. J. B. Williams's "Sketches of Success and Failure in Medicine," Mr. Hancock's lectures on "Excision of the Hip-joint," Mr. Thomas Bryant's lectures on "Tumours of the External Ear," on "Intestinal Obstruction," and on "The Treatment of Aneurism"; Dr. Lionel Beale's lectures on "The Principles of the Treatment of Fever," and a lecture "Concerning the propriety of Prescribing Alcohol for the Sick"; lectures delivered by Mr. Haynes Walton in the course of ophthalmic instruction at St. Mary's Hospital, by Mr. Spencer Wells "On the Varieties of Fever which follow Surgical Operations," by Professor Dolbeau on "Fissure of the Anus," by Dr. Robert Jordan on "Croup," and Dr. Edgar Sheppard on "Psychological Medicine." We have been enabled to give also Clinical Lectures by Dr. J. S. Bristowe on "A Case of Substernal Bronchocele," and by Mr. J. W. Hulke on "A Case of Internal Intestinal Obstruction," the Lumleian lectures of Dr. R. Quain, and the very able course of lectures by Professor W. H. Flower on "The Comparative Anatomy of the Organs of Digestion in the Mammalia." Under the heading "Original Communications," we have had the honour of being able to give papers on important and interesting subjects by many of the best known workers and highest authorities of the day. Among these papers we may mention the continuation of Mr. Henry Arnott's "Notes on the Pathology of Malignant New Growths"; Dr. C. J. Fayrer's papers on "The Radical Cure of Inguinal Hernia," on "Shark-Bite," on "Iliac Abscess," on "Amputation of the Thigh in Calcutta," and on "Surgery in Rome"; Dr. C. Handfield Jones on "Cases of Intestinal Obstruction," and his "Observations respecting the production of Head Symptoms"; papers by Dr. Hughlings-Jackson on "Partial Convulsive Seizures with Plugging of Cerebral Veins," and on "Auditory Vertigo"; Dr. George Johnson on "The Pathology and Treatment of Cholera"; Mr. F. A. Mahomed on "The Physiology and Clinical Use of the Sphygmograph"; Dr. J. Chapman on "Dr. C. B. Radcliffe's Theory of the Genesis of Pain"; and by Dr. C. B. Radcliffe, "A Few Words in Explanation of the Meaning of Pain"; by Dr. R. Druitt on "A Case of Perforating Ulcer of the Stomach"; Dr. J. Matthews Duncan on "The Mode of Progress of the Science of Parturition," and on "The Curves of the Developed Genital Passages"; and by Mr. J. Alfred Wanklyn on "The Chemical Examination of the Urine"; papers also on "Amaurosis successfully treated by Hypodermic Injections of Strychnia," by Mr. A. S. G. Jayakar; on "Puerperal Disease treated with Turpentine," by Dr. J. Copeman; on "The Influence of Epidemics of Fever in checking the Advance of Cholera," by Inspector-General M. Lawson; on "Lienteric Disease in Children," by Dr. Eustace Smith; on "Mitral Stenosis," by Dr. Silver; on "Lithotomy in Smyrna," by Mr. James M'Craith; "Ophthalmic Practice at Wiesbaden," by Mr. W. Paul Swain; "The Pathology and Treatment of Small-pox," by Dr. R. H. Bakewell; and "Notes on Small-pox in Plymouth," by Dr. Pearse; on "Inflammation of the Lungs as a Cause of Consumption," by Dr. A. E. Sansom; and "Notes on the Pathology of Pulmonary Phthisis," by Dr. T. H. Green; Mr. R. Quain's "Clinical Observations on some forms of Enlargement of the Prostate Gland in connexion with Diseases of the Urinary Organs"; Dr. Emmerich Navratil (Pesth), "Experiments on Animals to ascertain the Functions of the Laryngeal Nerves"; Mr. C. J. Egan's "Midwifery Notes from British Kaffraria"; Dr. W. H. Broadbent's "Cases of Disease of the Nervous System, with Clinical Observations"; Dr. James Johnstone's "Sixteen Cases showing the Effects of Atropine as

an Antidote to Opium"; Dr. J. W. Ogle and Mr. Henry Lee's "Case of Croup," &c.; Dr. W. Strange's "Cases of Acute Spinal "Meningitis complicated with Myelitis"; and Professor J. Spence's "Case of Fusiform Aneurism of the Femoral Artery cured by Compression," and "Case of False Aneurism, with Remarks"; Dr. John Cockle's paper on "The Connexion between Occlusion of the Left Common Carotid Artery and the Existence of Laminated Clot in the Sac of Aortic Aneurism"; Dr. Scrivener's paper on "Yellow Fever"; Dr. A. M. Ballot's "Remarks on the Influence of a Pure Supply of Water"; papers on "The Thermal Waters of Ems," by Dr. N. Gierra; on "Methyline Ether," by Dr. B. W. Richardson; on "A Case of Acute Glanders in the Human Subject," by Mr. Sydney Coupland; on "Some Cases of Direct Injection of Ammonia into the Circulation," by Dr. R. W. Tibbits; on "A Case of Acute Pleurisy—Paracentesis Thoracis—Recovery," by Dr. George Scott; on "A Case of Diffused Gangrene of the Lung in a Young Child," by Dr. McNalty; on "The Influence of Ergot of Rye in a Case of Epilepsy with Mania," by Dr. W. Yeats; on "Antiseptic Dressings after Amputation of the Breast —cases under Mr. Spencer Wells and Mr. Couper"; on "The Use of the Tracheal Tampon," by Dr. Junker; and on "A Case of Medullary Tumour of the Femur," and other subjects, by Mr. Francis A. Bulley; "Clinical Remarks on the Several Forms of Pulmonary Phthisis," by Dr. R. Douglas Powell; and other valuable communications for which we are indebted to Drs. J. Patterson, J. C. Gooding, Bezeth (of Rotterdam), W. Newman, C. C. Ritchie, H. A. Liddiard, and M. C. B. Jordan; Messrs. J. B. Perrin, Charles Orton, T. Sutton Townsend, Metcalfe Johnson, Talfourd Jones, Alex. M. Fiddian, Charles Roberts, F. B. Hogg, Bevan Lewis, V. Richards, F. W. Lowndes, Assistant-Surgeon N. Alcock; and other valued contributors.

Through our "Hospital Reports" we have given brief but practically sufficiently full notes of interesting and remarkable cases occurring in the metropolitan and provincial hospitals, taking care to prefer the cases which illustrated the most approved and the most novel modes of medical and surgical treatment. So far as the space at our command would allow, we have given reviews or short critiques of the best and most noteworthy new works, English and foreign, and have recorded the proceedings of the various societies, as most vividly showing what progress is being made, and in what direction men are working in the different departments of medical science. We have furnished our pages with abstracts of the lectures delivered at the two Royal Colleges, and of the orations given to various societies, and our notes "from abroad" and at home have supplied information on professional topics in a pleasant and light-reading shape; while in our "Topics of the Day" our readers must have found a clear if brief *résumé* of all the most important and the most talked-of events of each passing week.

In our editorial articles we have anxiously endeavoured to impartially encourage, counsel, criticise, or warn whenever the honour of the Profession, or its interests, or those of the public, seemed to call for special comment; and we have also noticed or criticised many of the most prominent theories or vagaries of the day. For these purposes we have published articles on "Family Secrets," on "Nature Worship," on "Corpse Worship," on "The Stockwell Murder," and "The Brighton Poisoning Case," on "A Jury of Matrons," on "Medical Evidence," on "The Forester and Provident Dispensaries," on "Criminal Responsibility in cases of Delirium Tremens," on "Free Love in America," on "Dwellings of the Working Classes," on "Cookery Books," on "Women Midwives," on "Punishment," on "School Diseases," on "The Lord Ordinary and the Edinburgh Lady-Students," on "The Thanksgiving," on "The Tichborne Case," on "The London Water Companies," on "The Coroner's Court and the Cause of Death," on "Strikes," on "The Teaching of Physiology in Common Schools," on "Slaughter-houses in the Metropolis," on "Sea-sickness and its Management," on "Suicide and Overwork," on "Mind and Body," on "Rational Therapeutics," and on "Gratuitous Medical Advice"; and on "American Medicine," on "Practical Histology," on "Comparative Anatomy as a Mode of Force," on "The Army Medical Officers and Sick Leave," and "The Army Estimates," on "Hartnack's Microscopes," on "The Antiseptic Treatment of Small-pox," on "Annals of Cholera," "A Glimpse at Italian Midwives," "Pyæmia," "Büchnerism and Science," and "Dr. Gairdner on Preventive *versus* Curative Medicine," on "Co-operative Teaching," on "Chemical Climatology," on "The Doctor in the Witness-box," on "The Vaccination Laws of Europe," on "Heat-stroke and Sun-stroke," on "Lunacy in England and Wales," on "Medicine and Physiology," on "The Sewage Question," on "The Qualifications and Duties of Medical Officers of Health," on "Examinations," "The Real Duties of the Medical Student," and "Medical Teaching," on "The Origin of Species," on "The Practising Chemist," on "Hospital Sunday," on "Medical Thermometry," and on various other subjects.

And our pages have contained many interesting and instructive articles which cannot well be classed under any of the heads of which we have spoken. Among these we will recall to our readers' notice papers on "The Health of the Navy," on "The Opening of the Physiological Laboratory at St. Thomas's Hospital," on "The Report of the Local Government Board on the Hampstead Hospital Inquiry," on "The Medical Reports of the Small-pox and Vaccination Hospital," on "The Contagious Diseases Act," on "The Brighton Review," and "The Autumn Manœuvres," on "The A B C Process," on "Medicine at Pekin," on "The Relative Power of various Substances in preventing Putrefaction and the Development of Protoplasmic and Fungus Life," and on "Disease and Mortality at Home and Abroad"; Mr. Dixon's "Contribution towards a Memoir of Richard Wiseman," Sir Henry Holland's "Recollections of a Life," Dr. Stokes' "Discourse on State Medicine," Dr. Letheby's "Annual Retrospect," Dr. Stromeyer's "Address on the English Recollections of a German Surgeon," Dr. Laycock's "Lecture on Ears," the "Report on the Teaching of Practical Physiology in the London Schools"; the "Chapter in the History of Cholera," by Mr. B. G. Jenkins, communicated to the Historical Society; the paper on "The M.D.'s of Edinburgh and their Power to Recover for Medicines supplied to their Patients," Dr. John Dougall's paper "On the Relative Power of various Substances in Preventing the appearance of Animalcules in Organic Fluids," the "Notes on Wine," and the papers on "Heat and Thirst, and some of their Popular Remedies"; papers entitled "Hints on Epilepsy" and "Hints on Hydatids," and papers on the various Bills affecting the Profession or public health.

Looking through the volumes for the year, and noting all these contributions and productions, we feel indeed that we have not been able to do nearly all we wished, nor to speak so clearly and forcibly as we desired; but at the same time we venture to think that, thanks to our many able and valued coadjutors, we have done good work, and that the *Medical Times and Gazette* has continued worthy of the favour so long accorded to it by the Profession. We most gratefully acknowledge the confidence reposed in us, and, as is our wont, we close our summary of the medical year by heartily wishing our brethren in all countries, on land and on sea, a Happy, Peaceful, and Prosperous New Year.

THE WEEK.

TOPICS OF THE DAY.

At the ordinary meeting of the managers of the Edinburgh Royal Infirmary, on Monday last, the question regarding the admission of female medical students was the subject of a long

discussion. In accordance with the reports to which we referred in our last issue, three resolutions were submitted to the managers. One motion to the effect that ladies should not be admitted was lost by a minority of four. In terms of the report handed in by Sir Robert Christison, a motion was submitted advising the managers to admit those ladies who had already commenced the study of Medicine, after the adoption of suitable arrangements for their reception. This motion was also lost by a minority of two; and a resolution brought forward by Professor Masson was adopted as the policy of the Board. Professor Masson's motion runs as follows:—

"That the managers of the Royal Infirmary resolve to admit females already enrolled in the 'Students' Register' for Scotland, to receive clinical instruction at a separate hour from that at which male students are admitted into the hospital, and in a stated number of wards containing not less than eighty beds, to which the female students must confine their visits; instruct the clerk to issue tickets on these conditions, and remit to the following sub-committee to make arrangements—viz., Professor Sir Robert Christison, Bart., Dr. Gillespie, Mr. G. Harrison, and Professor Masson, convened."

This is the first step taken by the new body of managers towards the general admission of women, and we have no doubt that it will afford great gratification to certain rival schools who have long been envious of the marked success and general prosperity of the medical department of Edinburgh University.

The Executive Committee of the Great Northern Hospital, having purchased the lease of the house adjoining the Hospital in which the "out-patient department" has hitherto been conducted, have determined to pull down the present buildings and erect a new hospital on the same site in the Caledonian-road. There is room for a good well-arranged hospital in that part of London, close as it is to the New Cattle Market, the Great Northern Railway, and in the centre of a great industrial population.

The Committee of the Royal Colleges of Physicians and Surgeons on the Conjoint Scheme having resumed their discussions, will continue them on Monday next. We believe that the mode of conducting the examinations will be considered. There are the gravest doubts about the legality of any scheme—to say nothing of its policy—which would compel candidates for the Membership of the Royal College of Surgeons already holding diplomas in Medicine to undergo and pay for an examination in Medicine conducted by examiners nominated by another medical authority.

MICROSCOPIC SOIRÉE AT ST. THOMAS'S HOSPITAL.

INVITED by the President and Secretary of the Physical Society of St. Thomas's, we were glad to avail ourselves of the opportunity of seeing the progress made in microscopic research at this influential school of medicine. At the same time we were pleased to have an opportunity of inspecting the building set apart for the instruction of students, which is admirably adapted for educational purposes. The President (Mr. Wagstaffe) had succeeded in mustering together a large number of students and friends of the institution. Several members of the staff were also present, some of them as exhibitors; in fact, most of those to whom a table was appropriated are on the staff of the Hospital. The tables were arranged as follows:—Mr. Wagstaffe showed some tinted specimens of simple tumours prepared by himself; Mr. Churchill exhibited for himself and for Mr. Liebreich ophthalmic preparations, more especially with reference to structure and arterial supply of the tissues of the eye. Mr. Williams showed human parasites, both vegetable and animal. Dr. Evans did not confine himself entirely to microscopic specimens; for besides showing injected preparations of the kidney and urinary deposits he showed a new steam-inhaler and a saccharometer. Mr. Smee brought some ingenious instruments to show the coagulating power and properties of the blood; also a new method of distilling air. Mr. Ord showed some well-selected slides of urinary crystals, especially the colloidal forms described by him in the Hospital Reports of last year. Mr. Anderson had taken the trouble to prepare several frogs with a properly regulated dose of woorara, for the purpose of showing the diapedesis of leucocytes in transparent tissues and the migration of blood corpuscles through capillary walls. Mr. Croft showed some beautifully prepared sections of brain and spinal cord. Dr. Harley, remaining true to physiology, on which he is the lecturer at St. Thomas's, showed specimens illustrative of the progressive development of the human ovum. Mr. Stewart was very successful with his sections, mostly prepared by himself, to illustrate the comparative anatomy of the eye. Dr. Payne confined himself to pathology, illustrating various morbid processes, such as inflammation, tubercle, sarcoma, and cancer. Dr. Saunders showed the structural anatomy of the intestinal canal, especially of the glandular system. Mr. Rainey, as usual, carried off the palm, surrounded by a group of admirers, while he explained his views on the structure of shells, teeth, etc., and also his discovery of continued currents in fluids. Later on in the evening Dr. Stone was the chief attraction. He showed various philosophical instruments—the spectroscope, oxyhydrogen lime-light, and some ingenious polarising instruments. The opportunities for social intercourse between staff and students are so few that we think it would only tend to harmonise existing relationships, and also promote the interests of the students, if they were more frequently brought together in this way. We should probably hear less of rowdyism on October 1 at our metropolitan hospitals if the governing body, staff, and students were more frequently brought together. If the Society should contemplate a *soirée* next year, we hope it will obtain the patronage and presence of all interested in the Hospital, as this year's entertainment well deserved such support.

DEATH OF MR. HOLMES COOTE, F.R.C.S.

THE numerous friends of this gentleman will regret to hear that he expired on Sunday last. Mr. Coote, who was an articled student of the Royal College of Surgeons to the late Mr. Lawrence, was admitted a Member of the College on July 4, 1838, and a Fellow by examination on December 24, 1844. In the previous year he obtained the Collegial Triennial Prize for his essay on the "Anatomy of the Fibres of the Cerebrum, Cerebellum, and Spinal Cord in the Human Subject, together with the Origins of the Cerebral, Spinal, and Sympathetic Nerves, specially illustrated by the Anatomy of the same parts in the Lower Vertebrate Animals." To Holmes's "System of Surgery" and the medical journals he has been a valuable contributor. A career of great early promise has ended prematurely; Mr. Coote at the time of his death was only 54 years of age. The state of his health obliged him some months ago to retire from his duties as Senior Surgeon to St. Bartholomew's Hospital. We regret to hear that he leaves a widow and family but slenderly provided for. One of his sons is a candidate, we believe, for admission into the Medical College at Epsom.

CHAIR OF SURGERY, ROYAL COLLEGE OF SURGEONS, IRELAND.

ON Christmas-eve the election to this chair (vacant through the resignation of Mr. Hargrave) took place at the College. Mr. William Stokes, Surgeon to the Richmond Hospital and Lecturer on Surgery in the Carmichael School of Medicine, was elected. Mr. Stokes may well be proud of this recognition of his worth as a surgeon on the part of his professional brethren in Dublin. An indefatigable worker, an earnest teacher, and a skilful operator, we have little doubt that he will prove a worthy successor to Mr. Hargrave, the late distinguished Professor of Surgery, who carries with him into his retirement the best wishes of the Profession.

INDECENT BOOKS AND HANDBILLS.

We seem to be in a fair way to effectually put a stop to the publication of indecent books and the distribution of filthy handbills in the streets. The law, even in its present somewhat crude state, appears to be sufficiently stringent to meet most cases of the kind. In London last week Mr. J. Davidson, Mr. J. Romiley, and Mr. John Dennison, of Dr. Kahn's Museum, were committed for trial for unlawfully selling publicly a lewd book entitled "The Philosophy of Marriage," and other obscene books and pamphlets; and in Liverpool "Dr." A. Lewis, who describes himself as "the celebrated medical practitioner from Glasgow," was fined at the police-court on Saturday 20s. and costs for unlawfully causing bills to be distributed in the streets.

PROPER DRAINAGE.

With a view of carrying out a proper and healthy state of drainage, the Rotherham Town Council have passed the following resolution, in consequence of the defective sanitary state of the borough:—"That all owners or occupiers of property within the borough of Rotherham do amend their system of drainage by having a gully placed outside their premises, thus preventing the sewer gases from escaping inside their houses, the object being to make a severance between the sinkstone and the sewer by means of such gully." The notice, which will be served on the property owners, calls upon them to carry the above resolution into effect within a month.

DUTIES OF MEDICAL OFFICERS OF HEALTH.

The *Builder* of last week, in some very practical observations on the new Public Health Act, under the heading of "A Sanitary Survey—What is it?" has the following:—

"In the discussions which have lately taken place in various parts of the country, at meetings of boards of guardians, since the regulations of the Local Government Board have been issued, there has been considerable difference of opinion as to what would be the respective duties of the medical officer of health and of the inspector of nuisances, some members of boards being of opinion that the medical officer would have little to do but to confirm the reports of the inspector of nuisances. Without going into the question of what the particular duties of the medical officer may be, we may yet say that we think he will have very much to do if he is a really efficient medical officer of health, and if his chief attention is turned to the prevention of disease, by bringing those sciences which relate to the subject, physical and chemical, to bear upon this great question of the public health; for it is not so much to the reduction of mortality that he is to attend as to the prevention of sickness, and the contraction of those diseases which lead to deterioration of race; and on the other hand, to insure that those who live shall live healthily. This is the responsibility laid upon him. The one thing above all others of importance is a thorough agreement between the two officers to promote the health of the people. Neither can possibly in this case aggrandise himself at the expense of the other, and the only way in which either can possibly be useful is to sink minor personal questions in the great public one."

The *Times of India* announces the sudden death of Dr. Elmslie, medical missionary in Cashmere.

Professor Fick's Cholera Filter.—Professor Fick, of Würzburg, assuming the propagation of cholera by organic bodies contained in the atmosphere as an established fact, seriously and logically recommends to the medical world that its members, while the disease is prevailing, should adopt the practice of breathing through cotton-wool, which, he says, effectually intercepts these organisms. He states that perhaps respiration can be carried on effectually, if not agreeably, through the nostrils when these are defended by two small plugs of cotton-wool. If more complete defence be deemed necessary, the "filter" need only be applied when the practitioner finds himself in suspected spots. This is a good practical ride on a hobby at all events, and in the event of the arrival of the cholera, timid readers, if we have any such, may avail themselves of the learned Professor's suggestion.

ON THE

HISTORY OF THE STUDY OF ANATOMY.

BEING PART OF

AN INTRODUCTORY LECTURE

DELIVERED IN THE ANATOMICAL THEATRE OF ST. THOMAS'S HOSPITAL

October 2, 1872,

By W. W. WAGSTAFFE.

After addressing some words of advice and encouragement to those who were entering on their duties in the dissecting-room, and welcoming those who were attending for their second and third sessions, Mr. Wagstaffe proceeded to address the students with some remarks on the history of the study of anatomy.

Strange it seems to anyone who looks back into the history of the study of anatomy that it has only recently entered into the minds of men to see what their bodies are made of. It is difficult to imagine that the ancients possessed so limited a knowledge of, or gave so little careful attention to, this subject, as their writings might lead us to infer. Men died and were killed in old times (by old times I now mean the early historic times) as often as now. Killing one another seemed, if anything, to be a more favourite amusement than now; history, in fact, makes that the almost sole occupation of our ancestors. Their skeletons more often lay bleaching in the sun, and priests, and augurs, and wise men, no doubt, took notice of what they saw, and named and knew much of the anatomy of the body. They did not dissect the human body until a comparatively recent date, but they must have been led to compare the outward form and internal structure of man with those of the beasts which they were cutting up daily for their sustenance, or their auguries, or their amusement. Butchers, and diviners, and medicine-men are not modern inventions, and killing has been a sport from the beginning of the world's history, though it has remained to this century to culminate it in pigeon-shooting and battue-massacres.

Yet the earliest writers who touch upon the subject—and that only casually—are Plato, about 400 years B.C., and Hippocrates, who was nearly contemporary with him. Doubtless, the veneration in which the image of the Creator, as such, was held by the Jews, and the respect which they were commanded to pay to the dead, and especially the awe in which Death was held by all savage nations, will explain how it was that human anatomy, as a study essential to the cure of illness, was never prosecuted in early times.

Plato, however, shows a knowledge which is somewhat startling, and a passage from his writings which is quoted by Longinus is remarkable for its containing the rudiments of the circulation of the blood—a discovery which was reserved for our countryman, Harvey, to make not much more than 200 years ago. "The heart," Plato says, "is the centre or knot of the bloodvessels—the spring or fountain of the blood, which is carried impetuously round. The blood is the pabulum or food of the flesh; and for the purpose of nourishment the body is laid out into canals, like those which are drawn through gardens, that the blood may be conveyed, as from a fountain, to every part of the pervious body."

Hippocrates was the first systematic writer on Medicine, but his anatomy is extremely faulty; and without the necessary basis which anatomy must give to Medicine and Surgery it is not to be wondered at that his writings, grand monuments as they are of a noble genius, are full of fallacies.

Anatomy is a limited science, and observation is the only requisite for it. Physiology, or the study of the use of parts and of the *modus operandi* of living processes, is a far deeper study, and it is no wonder that even we in this nineteenth century are babes in the knowledge of it.

The first anatomical dissection which has been recorded was made by Democritus of Abdera, a friend of Hippocrates; but the first systematic teaching of human anatomy was apparently carried out in Alexandria under the first Ptolemy, when the great teachers were Erasistratus (300-260) and Herophilus, 300 B.C. Herophilus, whose name is retained in the Torcular Herophili, is said to have anatomised 700 bodies (which may be a slight exaggeration); but whether this be true or not we know that both Erasistratus and Herophilus left behind them voluminous records of their work, and that these were used as the guide for teachers for centuries after. These works were lost in the greatest piece of Van-

dalism which even the middle ages were guilty of—the sacking of Alexandria (651 A.D.) by Amrou, the lieutenant of Caliph Omar, and the burning of the noblest library in the world. Out of evil comes some good; and the good which indireetly followed this ealamity was, that the Alexandrians being scattered abroad over the faee of the earth, learning of all kinds spread, and what is more than learning itself, a spirit for learning, and for seeing how Nature works by means not altogether hidden and diabolieal, and which it is impious to look into, but by means which he who runs may read, if only he has sense to use his eyes, and humility not to over-esteem the reasoning powers which God has given him.

Galen (Claudius Gallenus Pergamus), whose name is retained to us in the vena Galeni, lived about 200 A.D.; and such was his learning, and so apparently accurate were his observations, that until the fifteenth century his works were almost the sole authorities on anatomy, and all other writings were based upon his, or simply aeeepted them. But it is certain that he was at a loss for human subjects, and contented himself sometimes with describing what he found in that nearest relative of man—the ape. So Vesalius said and showed about the year 1540; and for saying and showing this the learned physicians of the age showed their own close relationship to that noble animal, and their firm belief in Mr. Darwin's hypothesis of a common origin, by unanimously joining in a howl against Vesalius. They accused him of blaspheming their idol, and, worse than that in those dark times of religious superstition and tyranny, they attainted him of heresy and desecration of the dead.

We who can dissect bodies by Act of Parliament, and can have what we euphemistically call "parts" by putting down our names and paying for them, ean scarcely appreeiate what intense love for his study, what moral eourage—yes, and what personal eourage too—were necessary in those ugly times for Vesalius to prosecute his work. I will quote from Charles Kingsley's memoir on the life of Vesalius—a paper which will well repay your perusal, as all his writings do—"To have gone through all the toils, dangers, and disgusts which Vesalius faced, argued in a superstitious and cruel age like his, no common physical and moral courage, and a deep conscienee that he was doing right, and must do it at all risks, in the face of a generation which, peculiarly reckless of human life and human agony, allowed that frame which it called the image of God to be tortured, maimed, deseerated in every way while alive—and yet, straining at the gnat after having swallowed the camel, forbade it to be examined when dead, though for the purpose of alleviating the miseries of mankind."

Vesalius worked as an anatomist ought to work, using his eyes and his other senses. He gave names to the museles, and these havo mostly been retained. Before this they had been numbered. He published a system of anatomy illustrated by a great number of aecurate and artistie illustrations—in those days they combined art with aecuraey in anatomical drawings; they did not diagrammatise as is the fashion now—and he correeted the errors which Galen had promulgated for more than a thousand years. Is it not almost a parody upon human greatness that we should select an insignificant little foramen in the sphenoid bone to perpetuate the name of Vesalius?

Leonardo da Vinei, before Vesalius's time, had been known as an anatomist, and it is somewhat surprising that men who could depict the surface of the human frame with the aecuraey which modern art has not excelled, and were daily studying man's figure, were not the real teachers and students of anatomy. It is surprising that, combined with some of the wonderful productions of figure-painting, are some of the worst exhibitions of anatomy. Witness, for instanee, the supposed human bones at the foot of the eross in Albert Durer's "Crucifixion." Da Vinci adopted a plan which you will find very useful at times in learning anatomy. He "made," says Vassare, in his "Lives of the Painters," "a book of studies, drawn with red ehalk and touehed with a pen, with great diligenee, of such subjeets as he had himself dissected. Where he made all the bones, and to those he joined in their order all the nerves, and eovered them with the museles." (In the same way artists tell us to draw trees in winter and fill in the foliage in summer.) These plates wero prepared especially for illustrating a work of Mareo Antonio della Torre, a professor in Pavia.

Fallopius—whose name remains connected with anatomy in the hiatus Fallopii, aqueductus Fallopii (in the ear), and ligamentum Fallopii (or Poupart's ligament)—was a pupil of Vesalius, and beeame Professor of Anatomy at Padua, where he published his "Observationes Anatomicæ." *Humanum est errare;* but Vesalius forgot this, for he took it ill that Fallopius should correct him, and lost his temper. But by that time Vesalius was high in Court favour, and had given up honest work for the smiles of prinees, and he had not time or opportunity to meet Fallopius upon equal terms. He could not appeal to facts, but to memory, and there is no doubt Fallopius had the best of it in the disputes between them.

Eustachius (Bartholemæus Eustachius) is kept in our memory by the Eustaehian valve and Eustachian tube. He flourished about 1570, and published his "Opuscula Anatomica" at Venice, which contained many new diseoveries; but his great work was never published, though the plates for it were found 150 years after by Lancisi (you will recognise the name in the nerves of Lancisi), the then Pope's physician, and edited, with notes, by Lancisi.

It was reserved for our eountryman, Harvey, to make (in 1616) the greatest diseovery which has ever been made in anatomy or physiology—the circulation of the blood,—but this discovery was not published until 1628. The ideas entertained before Harvey's time about arteries and veins and the heart were very vague. Arteries were generally found empty after death, so they were said to eontain air and vital spirits, which were eoncocted in the lungs; and if any blood did get into the left side of the heart, as some insisted on, it was strained through a number of small perforations, which the eyes of faith could see in the septum, but which our less believing eyes cannot. Still some anatomists had had an inkling of what must be the truth, and one in particular, who rejoiced in the name of the discoverer of the great western world, and who wrote many volumes of anatomy (what would he have done if he had lived in this publishing age?), propounded as a theory what Harvey proved by observation and experiment. For some time Harvey's discovery was not well received. But in about twenty years the importance of it was so universally acknowledged that, as with microseopes in modern times, everything in physic was expected to be explained by it. I am afraid that unreasonable expectations, both of that time and this, are likely to be disappointed. Harvey also worked at the study of generation; but in this he was surpassed, a few years later, by De Graaf, whose name you will reeognise in the Graafian vesicles of the ovary.

A few years after Harvey had discovered the circulation of the blood, the lacteals were seen by Asellius, an Italian physician, while Pecquet, in France, traced these on to the thoracic duct in 1651. The lymphatics were, of course, found about the same time, for men's observation had been attracted to the vascular system by the discoveries of Harvey and Asellius; consequently we find that Bartholine, a Danish anatomist, in 1653, was the first to publish an account of them, though they had been seen, and perhaps imperfectly understood, by an Englishman named Highmore previously. You will reeognise the names of these anatomists in the glands and duets of Bartholine and the antrum of Highmore.

Malpighi shortly after this, in 1661, attracted attention in Italy by his discoveries made by means of an agency at that time still looked upon with doubtful eyes by the priests—I mean lenses. But by these he made out some of the minutiæ of anatomy, and we find his name still attached to these in the Malpighian tufts and bodies of the kidneys, the Malpighian layer of the skin, and the Malpighian eorpuscles of the spleen.

And what Malpighi began has indeed been well carried on; perhaps it may be said that it has been carried on without suffieient eaution, for it is so easy for those who have lenses and microseopes and an abundance of faith to see things which no one else can see, and rush into print forthwith. Some of these ehimeras you will perhaps have to learn, but you will find them more in your other studies and more in your text-books than in oraeular teaching. These are some of the things you will have to unlearn a few years hence, as both you and the rest of the world grow wiser.

Leuwenhook of Delft followed Malpighi, and made great advanees in the knowledge of minute structure.

Glisson flourished in 1654, and his name is attached to the subjeet he investigated—the liver—where Glisson's eapsule is the name given to the tissues enveloping the vessels which enter it. It is curious that Glisson's attention was chiefly given to the lymphatic system; and now we are inclined to associate the fibrous tissues everywhere, Glisson's capsule included, with that system, though probably he never dreamed of that connexion.

Monro, whose name is retained in the foramen of Monro, flourished about the same time.

Havers, an Englishman, published in 1681 his "Osteologia Nova," and we retain his name in the structure to which he

gave especial attention. We speak of the Haversian canals and systems in bone.

In the eighteenth century, among a large number of stars, including our own Cheselden (whose presence in the entrance-hall of this Hospital should make every St. Thomas's man work to do credit to his school), Albinus, Meckel (of Meckel's ganglion notoriety), Weitbrecht, Sömmering, Zinn (whose name is retained in the ligament and zone of Zinn), Cotunnius (after whom the nerve of Cotunnius is named) Morgagni (sinus of Morgagni), Ruysch (whose name is to be recognised in the tunica Ruyschiana of the choroid), Scarpa (after whom Scarpa's triangle is named), Valsalva (who is perpetuated in the sinuses of Valsalva of the aorta). Among all these we have again a countryman standing pre-eminent. As an honest worker and teacher, and as one who has devoted his life to science and whom science has fully rewarded by success in his pursuit of her, John Hunter is an example we may all attempt to follow, but cannot expect to approach near to. His work remains to us especially in the noble collection at the College of Surgeons, and it is to his labour that we owe the museum of that institution.

John Hunter brings us up to modern days; and as I have remarked before that human anatomy—such as we have to consider it here and in the dissecting-room—is a limitable science, we cannot expect any great strides to be made in it in modern times. It is left to that branch of it which treats of minuter details to press forward in the rapid race of knowledge for which this century may perhaps be held famous by future generations.

In this nineteenth century the workers in anatomy have been more numerous than ever, and it would be a task too great, and beyond the limits of this rough sketch, to attempt to name all who have become famous as anatomists in modern times. When I tell you that the records of one year alone show between five and six hundred contributors to anatomy and its ally physiology, you can see how impossible it would be to particularise their work.

I will try, however, to show you what has been done in some branches of the study we have in hand, and will keep as nearly as possible to the subject proper of these lectures. Perhaps it will be simplest to take the different structures in some order, and begin first with the bones and joints. It is rather in the study of the mechanism of these parts that progress has been made, and I may mention the names of Meyer and the brothers Weber and Professor Goodsir, whose loss we have had to deplore only recently, as having shown us a little more of the wonderful mechanism of which we are composed, and rather startled us by its intricacies. Ward, whose manual of osteology should be your text-book, has taught us much in the same direction; and Professor Struthers has among his contributions to anatomy shown us some of its peculiarities. Professors Huxley and Owen, whom we claim as the pioneers of comparative anatomy in the present day, have added largely to our knowledge of development and homology, though their researches embrace all subjects, and are more comparative and physiological than relating to our coarser anatomy.

There are two features of muscular anatomy which have received especial attention in our times, and these are the action of muscles and the variations to which they are liable. Dr. Duchenne, of Boulogne, has adopted a very ingenious expedient for demonstrating the action of muscles, which some of you had the opportunity of seeing practised by him in an address which he delivered in the old hospital, and he has shown the incorrectness of many of the accepted views about the uses of certain muscles. And bearing upon the same subject, I may call your attention to the recently published investigations of my esteemed master and friend, Mr. Le Gros Clark, which will require you to modify the descriptions given in your text-books of the function of the muscles of respiration.

On muscular variations I must especially refer to Wood, Humphry, Turner, and Macalister, the latter of whom has done good service to other workers in this subject by collecting the immense amount of scattered information which was so difficult to arrive at previously.

The anatomy of the circulatory system has been contributed to chiefly by Professor Richard Quain, whose magnificent work on the arteries you will do well to look into, if only to see what patient and careful work will do. Anatomy in England is particularly indebted to the name of Quain. Your best text-book is only a recent edition of one published years ago by Jones Quain, and you will see in it the evidences of how you must all work to become good anatomists—must use your own eyes and senses honestly. Professor Marshall has added to our knowledge in the same subject, and you will have to hear something of his observations when you come to study the heart, and more still when its development is under notice. On the anatomy of the heart itself the observations of Dr. Pettigrew have been the most important during the present century. These go to explain the curious arrangement of the muscular fibres; and Dr. Pettigrew has also added to our knowledge of the arrangement of muscular fibres in other organs, and shown certain peculiarities in the mechanical arrangement of the valves of the heart and of the venous system. Dr. J. Reid and your Senior Physician, Dr. Peacock, have given us the means of determining the dimensions of certain viscera, and particularly of the heart and brain; and recently Dr. Herbert Davies has submitted the relative capacities of the valve openings of the heart to examination.

The lymphatic system has been made the subject of careful study, but more particularly in its histological and pathological bearings. You will find what importance is attached to this system when you have progressed further, but I may refer to a discovery in connexion with this subject which has been made during the last few years by Professor His, of Basle. He has demonstrated the existence of a curious system of canals in the brain, termed peri-vascular canals, which are so many sheaths around the vessels, apparently containing fluid in which the vessels float; and these are probably continuous with the lymph-spaces of the pia mater and the lymphatic system generally.

The nervous system has been studied by Sir Charles Bell early in this century, and he has the honour of clearing up something of the much that was perplexing in the anatomy and physiology of the system. Majendie's countrymen claim for their physiologist some of this honour, but it appears plain that, much as we admire Majendie as a careful, honest observer, Sir Charles Bell was fortunate in discovering the function of the roots of the spinal nerves—one of the greatest advances in nerve-physiology—a short time before Majendie. We have two other countrymen who have made a mark in the progress of our knowledge of this deeply interesting but difficult subject—Dr. Marshall Hall, a former teacher, I believe, in this school, who was the first to explain reflex action; and Dr. Lockhart Clarke, of whom St. Thomas's is proud, for no one in this century has added so much to our knowledge of the minute anatomy of the spinal cord. Dr. Robert Lee, within a comparatively few years, has shown what careful dissection can demonstrate, and his preparations of the nerves of the heart and uterus are some of the most wonderful dissections ever completed. Some of these you may see in the museum of St. George's Hospital, and they may perhaps incite you to try what you also can do with care, and patience, and skill.

Among other anatomists who have worked at this subject and made themselves illustrious may be named Valentin, Vulpian, Sappey, Hirschfield, Leveillé, Schwan (whose name you will recognise in the white substance of Schwan), Rémak (whose name is retained sometimes in the band of Rémak), Schlem, and Bendz, who has made some curious but interesting observations upon the anatomy of the motor branches of the vagus, confirmatory of Waller's views of their origin from the spinal accessory. But their names are too numerous for me to trouble you with more than these. Cruveilhier in the beginning of this century, and Henle more recently, have become famous both as anatomists and physiologists, and both have published large works, which you may find it desirable to consult.

Of the anatomy of special organs more progress has naturally been made in their minute than in their general anatomy.

You will hear the names of Helmholtz, Hulke, Müller, and Max Schultze in your lectures on the eye; of Corti, and Bowman, and Toynbee on the ear; of De Morgan, and Goodsir, and your own teacher Mr. Rainey on the teeth. You will hear Mr. Rainey mentioned often in connexion with other subjects too. You will hear the names of these, most of them living men, and a host of others—all of them earnest workers in the noblest study of mankind—man himself.

Surely these names of men, many of whom you may come to know more intimately by-and-by, are evidences of work done and of work being done—aye, and of work remaining yet to be done—surely these will move you to do your duty, and learn, as far as you have the power and the means to learn, something of the wonders which the study of man's body can show.

THE following gentlemen have obtained the Bengal Medical Annuities for 1873:—Surgeon-Majors J. Squire, F. Turnbull, A. Fleming, T. Maxwell, J. K. Walter, and H. Baillie.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 19, 1872:—

Banham, Henry French, Cambridge.
Bryan, Clement Frederick, Humberstone, Leicester.
Davison, William John, Upper Bedford-place, W.
Dixon, John Francis, Bournemouth.
Hall, Frank Algernon, Newmarket.
Kennedy, Thomas Augustus, Cavan, Ireland.
Needham, Walter, Manchester.
Pink, Thomas, Greenwich.
Shaw, Walter, Hereford.

As Assistants in Compounding and Dispensing Medicines:—

Cox, Edwin Joseph, Redhill, Surrey.
Gardner, James Richard, Plymouth.
Griffiths, Evan, Truro.
Hopkinson, Stephen, Ashover, Derbyshire.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Carter, Albert, Guy's Hospital.
Cumming, William Richard, St. Mary's Hospital.
Grindrod, Charles Frederick, St. Mary's Hospital.
Haslam, Thomas Henry, St. Thomas's Hospital.
Hooper, Alfred, Guy's Hospital.
Paley, James Hewitt, Guy's Hospital.
Pocock, Walter, St. Thomas's Hospital.
Rogers, Edward Coulton, Guy's Hospital.
Steavenson, William Edward, St. Bartholomew's Hospital.

BIRTHS.

ALLSHORN.—On December 21, at White House, Dalston, the wife of Adolph Hahnemann Allshorn, M.D., of a son.

ROBSON.—On December 19, at Iver, Bucks, the wife of F. Hope Robson, M.D., F.R.C.S., of a daughter.

MARRIAGES.

CHAWNER—KAYE.—On December 18, at St. George's Church, Bloomsbury, the Rev. Darwin Frank Chawner, son of the late Darwin Chawner, M.D., to Emily Lucy, daughter of the late T. Waterhouse Kaye Kaye, Esq., barrister-at-law, Gainsborough, Lincolnshire.

HILL—PYKE.—On December 19, at St. Matthew's Church, Bayswater, Henry William Joseph Hill, second son of James Matthew Hill, Esq., of 23, Pembridge-square, Bayswater, W., to Bessie, daughter of the late William Pyke, M.R.C.S.

HORSBRUGH—DORWARD.—On December 18, at Trinity Church, Haddington, Boyd Horsbrugh, Esq., Madras Civil Service, eldest son of Bethune Horsbrugh, Esq., of Lochmalony, Fifeshire, to Helen Rosa, youngest daughter of J. Dorward, Inspector-General of Hospitals, Madras Army.

JULIAN—CLIPPINGDALE.—On December 21, at the parish church, Stepney, Thomas Ennor Julian, son of Capt. Thomas Julian, of Mold, Flintshire, to Rachel, eldest daughter of S. D. Clippingdale, M.R.C.S.E., L.S.A., of Commercial-road East.

LEMON—FOGARTY.—On December 18, at St. Stephen's Church, Shepherd's-bush, Campbell Sweeney Lemon, Esq., of New Brighton, Cheshire, to Emily Jane, widow of Frederick William Fogarty, M.D., of Elmbank, St. Marychurch, Devonshire.

NELSON—LOVE.—On December 18, at H.M.'s Legation, Teheran, Persia, Frederick D. Nelson, Esq., to Alice Hannah, youngest surviving daughter of the late John Love, M.R.C.S., L.S.A., of Brook-street, Grosvenor-square, W.

DEATHS.

COOTE, HOLMES, F.R.C.S., Senior Surgeon to St. Bartholomew's Hospital, second son of the late Richard Holmes Coote, Esq., barrister-at-law, on December 22, aged 54.

DEMPSY, MARY ELIZABETH, widow of Charles Dempsy, Surgeon-Major Royal Artillery, and daughter of the late Major-General Cornelius Mann, Royal Engineers, at Firle, Sussex, on December 18.

ERSKINE, WILLIAM, late Surgeon H.E.I.C.S., at his residence, 33, Cravenhill-gardens, on December 23, in his 75th year.

OZANNE, JOSEPH, M.D., at Guernsey, on November 23, aged 50 years.

PYKE, HENRY, only son of the late William Pyke, M.R.C.S.L., and of Mrs. John Gray, of 42, Princes's-square, Bayswater, London, at Melbourne, Australia, on October 28.

SPARKE, JOHN GUYES, M.D., R.N., late of Finsbury, London, at Huyton, near Liverpool, on December 23, in his 86th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—House-Physician. Candidates must be duly qualified. Applications, with testimonials, to Frederick Barlow, Secretary, on or before December 30.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, PARK-PLACE, CHEETHAM-HILL-ROAD, MANCHESTER.—House-Surgeon. Candidates must be duly qualified. Applications, with testimonials, to the Chairman of the Medical Board, on or before December 28.

DORSET LUNATIC ASYLUMS, NEAR DORCHESTER.—Assistant Medical Officer for Forston Asylum. Candidates must be duly qualified and registered. Applications, with testimonials, to the Committee of Visitors (under cover to Mr. J. Brown, Dorchester, Clerk to the Visitors), on or before January 6, 1873.

GENERAL LYING-IN HOSPITAL, YORK-ROAD, LAMBETH, S.E.—Physician-Accoucheur, and Physician-Accoucheur to the out-patients. For information apply to the Secretary, 1A, Frederick's-place, Old Jewry, E.C., before January 1, 1873.

GERMAN HOSPITAL, DALSTON.—Honorary Assistant-Physician. Candidates must be natives of Germany or prove themselves thoroughly conversant with the German Language, and possess a Diploma from a foreign or British University. Applications, with testimonials, to A. Walbaum, D.D., Honorary Secretary, on or before January 6, 1873.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician. Candidates must be Members of the Royal College of Physicians, London. Applications, with testimonials, to the Secretary, on or before January 9, 1873.

KILDALTON, ISLAY.—Medical Officer for the Parochial Board. Applications, with testimonials, to Colin Hay, Esq., Chairman of the Board, Ardbeg, Port Ellen, Islay.

LEXDEN AND WINSTREE UNION.—Medical Officer for the Ninth District. Candidates must be duly qualified. Applications, with testimonials, to W. Howard, Clerk to the Board, on or before December 31.

METROPOLITAN FREE HOSPITAL, DEVONSHIRE-SQUARE, CITY.—Honorary Assistant-Physician. Candidates must be Members of the Royal College of Physicians of London, or pledged to become such within twelve months if elected. Applications, with testimonials, to Committee of Management, on or before January 6, 1873.

NEWPORT INFIRMARY, MONMOUTHSHIRE.—Resident Medical Officer. Candidates must be duly qualified. Also a Dispenser. Applications, with testimonials, to Mr. E. W. Willey, Secretary, on or before December 31.

NEWPORT ODDFELLOWS' MEDICAL AID ASSOCIATION.—Assistant-Surgeon. Applications, with testimonials, to Mr. R. H. Hudson, Loughton House, Newport, Monmouthshire, on or before January 1, 1873.

OLDHAM, BOROUGH OF.—Medical Officer of Health. Candidates must be duly qualified. Applications, with testimonials, to John Ponsonby, Town Clerk, Town Hall, Oldham, on or before December 31.

ROYAL PORTSMOUTH HOSPITAL.—Superintendent of the Lock Wards. Applications, with testimonials, to E. Madeley, Esq., House-Surgeon and Secretary, on or before January 2.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Honorary Surgeon. Candidates must be Fellows of the Royal College of Surgeons. Applications, with testimonials, to the Secretary, at the Hospital, St. George's-circus, S.E., on or before January 13, 1873.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Candidates must be legally qualified and duly registered. Applications, with testimonials, to the Assistant-Secretary, on or before January 6, 1873.

VICTORIA HOSPITAL FOR SICK CHILDREN, GOUGH HOUSE, QUEEN'S-ROAD CHELSEA.—Registrar and Pathologist. Applications, with testimonials to the Secretary, on or before January 4, 1873.

WALLASEY DISPENSARY.—House-Surgeon. Candidates must be duly registered. Applications, with testimonials, to the Honorary Secretary, W. D. Broome, Esq., Wirtenfield-terrace, Liscard, Birkenhead, on or before January 4.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Applications, with testimonials, to the Secretary, 50, Foregate-street, Worcester, on or before January 1, 1873.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1861.

RESIGNATIONS.

Belper Union.—Mr. Hoskins has resigned the Markeaton District; area 5880; population 1702; salary £11 per annum.

Honiton Union.—Dr. C. W. Whitby has resigned the Fourth District; area 14,040; population 5121; salary £112 per annum.

New Winchester Union.—Mr. John Wilde has resigned the First A District; salary £70 per annum.

APPOINTMENTS.

Alston-with-Garrigill Parish.—Thomas G. Horder, M.R.C.S. Eng., to the Second District.

Axbridge Union.—Henry W. Collins, M.R.C.S. Eng., L.S.A., to the Fifth District.

Bowm Union.—John K. Kenyon, M.R.C.S. Eng., L.S.A., to the Billingborough District.

THE Munich Verein der Arzte has sent its honorary diploma to Dr. John Macpherson, in recognition of his scientific labours and writings.

THE Finance Committee of the Sunderland Board of Guardians have recommended that the salaries of the medical officers shall be increased as follows:—Dr. Evans from £100 to £150, Mr. Taylor from £60 to £75, Mr. Shaw from £40 to £50, and Dr. Blumer from £60 to £75.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Scipio.—It entirely depends on the length of time lactation is prolonged over nine months.

Veritas.—Your statement is too vague; you must be more precise.

Query.—We cannot answer such questions.

Devon.—Delayed till now from press of matter.

Date.—December 27, 1838.

W. V.—The Medical Microscopical Society of London has just been inaugurated.

Sceptic.—The inquiries commenced in 1784, the Commissioners being Members of the Royal Academics of Medicine in Paris.

Reader.—The *Medical Times and Gazette*, February 4, 1871.

A Student.—The number of matriculated students at this session of the University of Glasgow in the several faculties is about 1237.

Kent.—Samuel Wesley published, on the death of Dr. John Friend, the following lines:—

"When Radcliffe fell afflicted, Physic cried
'How vain my power!' and languished at his side;
When Friend expired, deep struck, her hair she tore,
And, speechless, fainted, and revived no more.
Her flowing grief no farther could extend:
She mourns with Radcliffe, but she dies with Friend."

Dr. Friend, the son of a clergyman, was born at Caston, in Northamptonshire, in 1675.

Dr. R. Lee's Patent Inhaler.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am surprised Dr. Robert Lee has patented an inhaler when he was informed I had for many years used the very same inhaler, only different in shape. Dr. Lee asked why I had not patented the inhaler. My answer was that I did not consider medical men were justified in doing so. I now inform Dr. Lee (for the second time), as regards this inhaler, and my other inhalers, that I shall continue to use them as hitherto.

I am, &c.,

Lismore House, New Barnet, Dec. 15. John Livingston, M.D.

Burial and Death Certificates.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reading Mr. Lowndes's paper on the registration of stillborn infants three questions suggest themselves to me—Is it compulsory for stillborn infants, or any bodies, to be buried in a cemetery or burial-ground of any kind? May not a person be buried where they please, or not buried at all, so long as the body is not a nuisance to the neighbourhood? Why should medical men be called on to give these or any other certificates without proper remuneration for them? The Government, in my opinion, in treating of the former subject should not forget the latter. We receive no favour from Government, and I cannot see why we should give any. *Esprit de corps* is all very well, but you cannot eat it.

December. I am, &c., Querist.

COMMUNICATIONS have been received from—

Dr. J. Livingston; Scipio; Dr. Stanistreet; Medicus; Dr. Eustace Smith; Dr. John Macpherson; Mr. Gibney; Mr. Nott; Querist; Dr. Brakenridge; Mr. W. W. Reeves; Mr. Clippingdale; Mr. Maunder; Dr. Handfield Jones.

BOOKS RECEIVED—

MacCormack on Cholera—Eighth Annual Report of the Sanitary Commissioner with the Government of India, 1871—Half-Yearly Abstract of Medical Sciences, vol. 56—On the Kombé Arrow-Poison of Africa, by Thomas Fraser, M.D.

PERIODICALS AND NEWSPAPERS RECEIVED—

Old and New London, by Walter Thornbury, part i.—Pharmaceutical Journal—Anti-Game-Law Circular—Canada Medical Record—Newcastle Daily Chronicle—Medical Press—Nature.

APPOINTMENTS FOR THE WEEK.

December 28. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 2 p.m.; Charing-cross, 2 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 9½ a.m.

Royal Institution, 3 p.m. Professor Odling, "On Air and Water."

30. *Monday*.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

31. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

January 1, 1873. *Wednesday*.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.

Royal Microscopical Society, 8 p.m. Meeting.

2. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

3. *Friday*.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Meeting of Council.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 21, 1872.

BIRTHS.

Births of Boys, 1169; Girls, 1127; Total, 2296.
Average of 10 corresponding weeks, 1862-71, 2049·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	647	641	1288
Average of the ten years 1862-71	756·6	743·0	1499·6
Average corrected to increased population	...	...	1650
Deaths of people aged 80 and upwards	...	...	55

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561189	...	1	...	...	4	1	2	...	...
North ...	751668	3	1	1	4	7	...	3	3	1
Central ...	333887	...	...	...	...	2	...	1	...	1
East	638928	2	7	7	...	8	...	2	...	1
South	966132	...	8	3	1	5	...	4	...	6
Total	3251804	5	17	11	5	26	1	12	3	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·459 in.
Mean temperature	41·5°
Highest point of thermometer	50·5°
Lowest point of thermometer	33·3°
Mean dew-point temperature	39·9°
General direction of wind	Variable
Whole amount of rain in the week	1·61 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 21, 1872, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1872.*	Persons to an Acre. (1872.)	Births Registered during the week ending Dec. 21.	Deaths Registered during the week ending Dec. 21.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3311293	42·4	2296	1288	50·5	33·3	41·5	5·28	1·61	4·09
Portsmouth ...	115455	12·1	70	30	54·2	31·6	42·1	5·62	1·59	4·04
Norwich	81105	10·9	57	50	47·2	31·0	38·9	3·83	1·63	4·14
Bristol	186428	39·8	128	80	...	...	...	...	...	...
Wolverhampton ...	69268	20·5	52	26	46·7	32·0	39·0	3·89	1·82	4·62
Birmingham ...	350164	44·7	274	177	47·2	32·0	39·1	3·95	2·58	6·55
Leicester	99143	31·0	64	54	48·0	31·7	39·7	4·28	1·71	4·34
Nottingham ...	88225	44·2	81	41	42·5	30·6	37·6	3·11	1·37	3·48
Liverpool	499897	97·9	363	307	45·0	34·3	39·2	4·00	1·34	3·40
Manchester ...	352759	78·6	265	230	46·3	31·8	39·1	3·95	0·86	2·18
Salford	127923	24·7	109	67	44·4	31·2	38·7	3·72	0·88	2·24
Oldham	84004	20·2	61	58	48·0	...	...	...	0·51	1·30
Bradford	151720	23·0	110	72	43·8	32·2	38·8	3·77	2·00	5·08
Leeds	266564	12·4	243	143	44·0	33·0	38·7	3·72	1·53	3·89
Sheffield	247847	10·9	197	111	45·0	31·7	37·9	3·28	1·69	4·29
Hull	124976	35·1	84	71	45·0	32·0	39·4	4·11	1·51	3·84
Sunderland ...	100665	30·4	72	44	...	...	...	...	...	...
Newcastle-on-Tyne	130764	24·5	98	78	42·0	34·0	38·1	3·39	2·99	7·59
Edinburgh	205146	46·3	107	89	41·0	29·7	36·2	2·33	0·70	1·78
Glasgow	489136	94·8	404	296	41·7	28·2	36·7	2·61	0·80	2·03
Dublin	310565	31·9	184	182	49·0	26·0	39·9	4·39	2·14	5·44
Total of 21 Towns in United Kingd'm	7393052	34·0	5319	3494	54·2	26·0	38·9	3·83	1·54	3·91

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29·46 in. The highest was 29·73 in. on Monday at noon, and the lowest 29·18 in. on Tuesday at noon.

* The figures in this column, excepting those for London and Dublin, are the unrevised numbers enumerated in April, 1871, raised to the middle of 1872 by the addition of a year and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. The London population is now based upon the number enumerated in April, 1871, as revised at the Census Office. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

INDEX.

A

Aberdeen, question of an epidemic hospital at, 13
University, regulations of the, for medical degrees, 294
pass-lists of the, 214
Abscess, iliac, Dr. Fayrer on, 193
Academical candidates, the troubles of, 605
Académie des Sciences, awards of prizes by the, 632
during the siege, 658
Acne, the internal use of glycerine in, 106
Adams, Dr. W. cases of subcutaneous division of the neck of the femur, 206
charge of, against Mr. Brodhurst, decision on the, 232
Addison's disease, Dr. Ball on, 363
specimens from a case of, 473
Adulteration of Food and Drugs Act, 210
suggestions for the working of the, 497
vide Analysts
Advertisements in breach of professional ethics, 570, 604
Agassiz, Professor, views of the origin of species, 352
Agnew, Dr. John Noble, obituary notice of, 476
Air, disinfection of, Dr. Sansom on the, 208
Aitken, Dr. Science and Practice of Medicine, review, 239
Alcohol, action of, in febrile and inflammatory diseases, Dr. Beale on the, 29, 88
consumption of, at St. Thomas's, Mr. F. Churchill on the, 465
effects of, on the traders in, Dr. Dickinson on the, 500
Aldis, Dr. Charles James Berridge, biographical sketch of, 134
Alkaloids, fallacies regarding, 262
Allingham, Mr. Fistula, Hæmorrhoids, etc. review, 50
Althaus, Dr. on the galvanic current in gout, 205
Amaurosis, subcutaneous injection of strychnia in cases of, 68
Ammonia, injection of, into the circulation, Dr. Tibbits' cases of, 486
Amputation of the thigh at Calcutta, Dr. Fayrer on, 595
Amputation of the leg, Dr. Fayrer on, 698
Anæsthesia, muscular, Dr. A. Carpenter's cases of, 264
Anæsthetic, methylene ether as an, Dr. Richardson on, 564
Analysts, public, query concerning, 500
suggestions as to charges of, 615
action of the Pharmaceutical Society respecting, 681
Anasarca, milk diet in, Mr. Richards on, 540
Anatomy, history of the study of, Mr. W. W. Wagstaffe on the, 707
Anderson, Dr. McCall, Treatment of Diseases of the Skin, review, 524
Andrews (St.), University of, regulations for medical degrees, 294
Medical Graduates' Association, annual meeting of the, 46
Aneurism, Professor Holmes's lectures on, 19, 129, 236
treatment of, Mr. Bryant's lectures on, 31, 87
Mr. Pemberton on the, 170
Wardrop's operation for, case of, 87
compression in, Mr. Pemberton on, 172
of the arteria centralis retinæ, case of, 162
of the aorta, *vide* Aorta
common femoral, case of, 599
iliac, Mr. Holmes on operations for, 236
popliteal, compression and ligature in, case of, 488
subclavian, Mr. Bickersteth's case of, 639
Ankle, compound dislocation of, cases of, 586
Annus medicus 1872, 699
Ant-eaters, digestive organs of the, Professor Flower on the, 591
Aorta, extreme stenosis of the, specimen of, 665
incompetency and obstruction of the, Mr. Mahomed on the pulse in, 143
tracings in disease of the, Mr. Mahomed on, 324
Aorta, aneurism of the, with laminated clot, Dr. Cockle on a case of, 484, 511
specimen from an, 535
Apothecaries' Society, pass-lists of the, 25, 54, 82, 109, 138, 166, 189, 214, 244, 273, 339, 367, 395, 450, 476, 504, 530, 558, 587, 616, 642, 666, 692, 710
regulations for the examinations of the, 289
Hall of Ireland, regulations at the, for examinations, 301
pass-lists of the, 530
Arber, Mr. reprints of rare books by, 217
Armadillo, digestive organs of the, Professor Flower on the, 592
Army Regulation Bill, and the Irish militia surgeons, 96
question of the immorality of the, 102
Army Medical Department, regulations for candidates for the, 290
successful candidates for the, 160
report of the, for 1870, analysed, 199, 230, 260
in India, improved pay in the, 604
successful candidates for the, 209
Army, the French, defects of the medical service in, M. Lefort on the, 552
Army-surgeon and his works, Deputy Inpector-General Gordon on, 46
Arsenical colours, Dr. Hill on the use of, 208
poisoning, alleged wholesale, at West Auckland, 435
trial for, at Chelmsford, 490
Aspiration in strangulated hernia, M. Demarquay on, 683
Association, British, for the Advancement of Science, notice of meeting of the, 196
British Medical, reports of the fortieth meeting of the, 146, 161, 170, 180, 186, 204
Association of Medical Officers of Health, reports of proceedings of the, 72, 474, 614
suggestions of the, on the Adulteration Act, 497
Association of Poor-law Medical Officers, *vide* Poor-law
Asylum Districts (Metropolitan), note on the operations in the, 107
correspondence on the, 133
report of the, on small-pox, 125
Atrophy, muscular, electricity in, Dr. Fiddian's case of, 66
progressive, Dr. Lockhart Clarke on a case of, 614
Atropine, as an antidote to opium, Dr. Johnston on, 268
Mr. Burness on, 342
poisoning by, treatment by morphia, M. Abeille on, 342
Attfield, Professor, Chemistry, General, Medical, and Pharmaceutical, review, 524
Australian Medical Journal, action for libel against, 201
Aveling, Dr. on post-mortem parturition, 242

B

Baines, Mr. Edward May, death of, 450
Baker, Mr. Alfred, address of, to the British Medical Association, 146
Bakewell, Dr. pathology and treatment of small-pox, 251, 376, 513, 623, 675
on officers of health in the colonies, 472
Baldness, pomade for, 368
Ballard, Dr. report of, on hygienic condition of the Potteries, 681
Ballot, Dr. on the influence of a pure supply of water, 349
on the regulation of prostitution at Rotterdam, 131, 611
Barker, Dr. Fordyce, on hæmorrhoids in puerperal women, 15
Barnes, Mr. J. Wickham, on the Public Health Bill, 24
Dr. George, note on the Health Act, 668
Barracks in India, bad sanitary state of, 683
Barrett, Dr. Barnabas (of Shrewsbury), obituary notice of, 108
Baretta, M. the models of, 106
Bartholomew's (St.) Hospital Medical School, teaching of practical physiology at the, 187
Bartholomew's (St.) Hospital Medical School, scholarships and prizes awarded at the, 309
Basham, Dr., Diagnosis of Kidney Disease, review, 470
Bastian, Dr. Beginnings of Life, review, 660
Baths, hot-sand, 243
Dr. Druitt on, 447
Bats, digestive organs of the, Professor Flower on the, 59
Beale, Dr. lectures on the principles of the treatment of fever, 29, 88
Beck, Dr. Snow, on pelvic hæmatoma, 502
Bee, death from the sting of a, 99
Beef-tea, Dr. Wood's formula for, 216
Béhier, M. clinical teaching of, 687
Belcher, Rev. Dr. on Christ's Miracles of Healing, 79, 107
Bengal, Report of the Sanitary Commission on, 267
Medical Annuities for 1873, 709
Bennett, Mr. Henry (of Shaftesbury), death of, 166
Dr. J. Henry, on the orifices of the uterus, 206
Berlin, mortality of, during 1871, 356
Bernard, Deputy Inspector-General Dr. Robert, obituary notice of, 273
Bickersteth, Mr. on a case of subclavian aneurism, 639
Bierbaum, Dr. etiology of meningitis tuberculosa, 185
Birmingham, letter from, 79
circumstances influencing the sanitary condition of, Mr. Baker on the, 146
Canon Kingsley's address at, 413
Birmingham General Hospital, reports of cases treated at the, 6, 569
Medical schools of, session 1872-73, 312
Queen's College, Dr. Bracey's address at, 418
Bishop's Stortford and the Local Government Act, 491, 547
Black, Dr. J. W. introductory address at Charing-cross Medical School, 378
Dr. Glass, obituary notice of, 503
Bladder, prolapse of, impeding labour, case of, 225
rupture of, case of, 352
extroversion of the, cases of, 6
paracentesis of the, by the rectum, Mr. Pemberton on, 174
Blake (Jex) *v.* the Senatus Academicus of the Edinburgh University, 137
Bodington, Mr. William, death of, 477
Boerhaave, Hermann, erection of a statue to, at Leyden, 75
Books, reviews and notices of, 20, 50, 77, 105, 131, 239, 270, 361, 394, 420, 445, 470, 497, 524, 552, 579, 610, 634, 660, 685
Books and handbills, indecent, prosecutions for selling, 707
Bousquet, Monsieur, obituary notice of, 55
Bracey, Dr. address at Queen's College, Birmingham, 418
Brain, tumours of the, Dr. Hughlings-Jackson on cases of, 541, 568, 597, 625, 698
rupture of an abscess of the, Dr. Jones on a case of, 35
affection of the, from decayed teeth, case of, 195
peculiar affection of the, case of, 196
Breast, cancer of, Mr. Nunn's cases of, 663
cystic sarcoma of the, case of, 195
remenstruating by the, 667
Bright's disease, discussion on, at the Medico-Chirurgical Society, 654, 688
Briquet, M. on sulphate of cinchonine, 440
Bristowe, Dr. on substernal bronchocele, 60
Britton, Dr. on the contagiousness of small-pox, 208
Broadbent, Dr. clinical observations on diseases of the nervous system, 63
Mr. note on Balmforth *v.* Buckley, 211
Brodhurst, Mr. decision on Mr. Adams's charge against, 232
Bromide of potassium, M. Sée on the employment of, 240
Dr. Squibb on the doses of, 262
Bronchocele, Dr. Bristowe on substernal, 60
Dr. Brown on treatment of impending suffocation from, 134

Brown, Dr. F. J. on treatment of suffocation in bronchocele, 134
Bryan, Dr. Edward Langdon, death of, 367
Bryant, Mr. on the treatment of aneurism, 21, 87
Practice of Surgery, review, 685
Bubb, Dr. Horatio Warner, death of, 642
Buchanan, Dr. Robert, death of, 245
Buckley, Mr. action against, for malpraxis, 182, 545
note of Dr. Broadbent on, 211
correspondence concerning, 246, 275, 343
Bullets, electrical probe and forceps for extracting, 140
M. Legouest on the removal of, 334
Bulley, Mr. medical notes and observations, 252
Bullock, Mr. James Lawrence, death of, 82
Bulteel, Mr. note on the Public Health Act, 365
Dr. Dale in reply to, 473
Burials, reforms regarding, indicated, 56
Burness, Mr. on atropine as an antidote to opium, 342
Busk, Mr. note on the conjoint examination scheme, 82

C

Cabal, Dr. (of Alfort), death of, by drowning, 688
Calculi, urinary, Sir William Fergusson on his collection of, 153
Calculus from the neck, specimen of, 556
Calthrop, Mr. William Charles (of Withern), obituary notice of, 135
Calvert, Dr. on the prevention of putrefaction, 443
Cambridge University, regulations of, for medical degrees, 278
Camel, digestive organs of the, Professor Flower on the, 371
Cancer of the breast, Mr. Nunn's cases of, 663
scirrhous, of the skin of the, case of, 254
of the peritoneum, Dr. Duncan on a case of, 433
Canterbury, Archbishop of, speech of the, concerning doctors, 13
Carbolic acid as a local anæsthetic, Dr. Andrew Smith on, 128
as a disinfectant, 332
Carbonic acid as an antidote to thirst, 103
Caries of the knee, treated by sulphuric acid, 528
Carotid, occlusion of the left common, in relation to aortic aneurism, Dr. Cockle on the, 484, 511
Carpenter, Dr. address of, at the British Association, 196
Dr. Alfred, cases of muscular anæsthesia, 264
Cases, Mr. Dixon on reporting, 53
Catacombs of Paris, 421
Cataract, Dr. Taylor on extraction of, by peripheral section, 405, 528
new modes of extracting, 161
Dr. Pagenstecher's operations for, 119
traumatic, Dr. Wolfe on, 162
Cazalet, Rev. W. on stammering, 422
Cerebro-spinal meningitis, epidemic of, at Montreal, 330
Centenarians in 1870, 434
Cetacea, digestive organs of the, Professor Flower on the, 427
Chapman, Mr. Ernest T. obituary notice of, 25
Charing-cross Hospital, reports of cases treated at the, 228, 461
Medical School, scholarships and prizes at the, 309
Dr. Black's address at the, 378
Charlotte, the Princess, death of, "An Old Accoucheur" on the, 617
Professor Playfair on the, 637
Mr. Stokes on the, 668
Chatterton, Dr. James, obituary notice of, 395
Chauffard, Professor, on the etiology of typhus, 496
Chenu, Dr. statistics of the French campaigns, 105
Chevreul, Monsieur, presentation of a testimonial to, 271, 335
Chilblains, application for, 479
Children, artificial feeding of, 268
diarrhœa of, Dr. Dickinson on, 255
headache of, Dr. Day on the, 502
purulent ophthalmia of, Mr. Walton on the, 509
stillborn, registration of, Mr. Lowndes on, 503, 657
false registration of, 657
Chloral, eruption after taking, case of, 557
poisoning by, case of, 629
Chloroform combined with the injection of morphia, M. Demarquay on, 334
M. Diday's fanaticism respecting, 44, 75
Cholera, treatment of, by copious diluents, 392
influence of pure water-supply on, Dr. Ballot on the, 349
influence of epidemics of fever on the advance of, Inspector-General Lawson on the, 4
in hot climates, Dr. Fellarin on the, 97
progress of, in 1872, 127, 158, 233, 260, 332, 355, 415, 439, 468, 494, 521, 549, 573, 575
Cholera, progress of, M. Fauvel on the, 43
in Russia in 1872, 111, 201, 202, 355, 682
and quarantine at Odessa, 202
in Africa, Dr. Smart on, 242
filter, Professor Fick's, 707
Chorea with hysteria, case of, 569
Chronic disease as the precursor of acute, Dr. Wilks on, 150
in relation to syphilis, Mr. Johnson on, 223
Churchill, Mr. F. on the consumption of alcohol at St. Thomas's, 466
Cicatrix, contraction of, prevented by collodion, 55
secondary cancer of, operation for, 407
Ciniselli, Professor, on electro-puncture in aneurism, 19
Cinchonine, sulphate of, M. Briquet on, 440
Claret from Château Livran, 503
Clarke, Mr. J. F. autobiographical recollections of the profession, 17, 203, 263, 550, 606
Dr. Lockhart, on a case of progressive muscular atrophy, 614
Clavicle, dislocation of sternal end of the, case of, 489
Mr. Watkin's case of, 568
Clements, Mr. George, death of, 642
Clinical Society, reports of meetings of the, 418, 528, 583, 663
Clinical teaching at Edinburgh, defects of the, 572, 576
Mr. Ritchie on, 637
at Glasgow, "A Senior Student" on, 613
in Paris, 687
Cockle, Dr. on laminated clot in aortic aneurism, 484, 511
Cod-liver oil, Dr. Squibb on the purity of, 262
Cognac, the golden grape, 529
Colchester, Surgeon Thomas, obituary notice of, 54
Colotomy for epithelioma of the rectum, case of, 460
in intestinal obstruction, Mr. Steele on, 206
Conjunctivitis, Mr. Walton on, 249
granular, Mr. Walton on, 563, 697
Convulsive affections, hyoscyamine in, M. Oulmont on, 605
Cooke, Mr. William Robert, death of, 504
Cooper's Surgical Dictionary, review, 579, 610, 634
Coote, Mr. Holmes, obituary notice of, 706
Copemau, Dr. on puerperal diseases treated with turpentine, 2, 92, 194, 459
on phlegmasia dolens treated by turpentine, 593
Coppinger, Dr. introductory address of, 555
Corbet, Dr. William, death of, 25
Cornea, transplantatiou of the, Mr. Power on the, 164
ulceration of the, from podophyllin dust, case of, 516
suppuration of the vitreous after old ulceration of the, 516
Cornwall Royal Infirmary, reports of cases treated at the, 409
Coroner's court, need of reform of the, 492
Corpse-worship, 258
Corradi, Professor, on lithotomy, 429
Cotterell, Mr. case of ovariotomy, 211
Cotton, Mary Anne, alleged wholesale poisoning by, 435
Cotton-wool as a surgical dressing, Dr. Greene on, 128
Cotylophora, digestive organs of the, Professor Flower ou the, 321
Coupland, Mr. on a case of glanders in the human subject, 373
Courtenay, Dr. Henry Bishop, death of, 214
Courtenaye, Mr. Edward D'Arcy, death of, 477
Cousins, Dr. on a case of polypus of the uterus, 516
Craniotomy, prosecution in a case of, 78
Croft, Mr. introductory address of, at Thomas's, 384
Croup, Dr. Jordan's lecture on, 221, 322
Cryan, Mr. address of, at St. Vincent's Hospital School, 527
Crystalline lens, extraction of, containing a foreign body, 569
Cumming, Mr. William Spink, death of, 110
Curran, Mr. Henry (of Dublin), obituary notice of, 136
Customs officers, Dr. Dickson's report on the health of the, 469

D

Dalby, Mr. on non-purulent catarrh of the middle ear, 447
Dale, Dr. on the Poor-Law Medical Officers, 473
Daremberg, Professor, obituary notice of, 505
Davaine, M. on septicæmic poisoning, 356, 440
Davies, Dr. John (of Hertford), obituary notice of, 528
Day, Dr. on headaches in children, 503
Deer, digestive organs of, Professor Flower on the, 321
Degrees, foreign, rules of the Medical Directory as to, 338
Delirium tremens, murder under, acquittal for, 529
Demarquay, M. on aspiration in strangulated hernia, 683
Dementia, Dr. Sheppard on, 672
Denonvilliers, Professor Charles Pierre, obituary notice of, 52
Deschanel, A. Privat, Natural Philosophy, review, 553
Diabetes, odour of the breath in, 101
lactic acid in, Drs. Foster and Ogle on, 205
Diarrhœa of hot weather, treatment of the, 229
infantile, Dr. Dickinson on, 255
Dickinson, Dr. on infantile diarrhœa, 255
on the effects of alcohol on the traders in it, 500
Dickson, Dr. report on the health of Customs officers, 469
Diday, M. fanaticism of, respecting chloroform, 44, 75
Digestion, organs of, of mammalia, Professor Flower on the, *vide* Flower
Diphtheria, pathological anatomy of, 185
influence of deranged soil-pipes on, 209
as observed at Naples, Dr. Menzies on, 265
disputes about, in Melbourne, *vide* Melbourne
Disease, chronic, in relation to acute, Dr. Wilks on, 150
and mortality at home and abroad, review of, 522, 550, 578, 606, 632, 659, 684
Disinfectant, carbolic acid as a, 331
Disinfection of air, Dr. Sansom on, 208
Disinfecting fluid, Westerton's, 243
Dislocation, compound, of the ankle, cases of, 586
of the knee, 488, 567
of the patella, case of, 208
of the clavicle, Mr. Wathen's case of, 568
at the sternal end, case of, 489
Dispensaries, Dr. Maunsell on Provident, 209
Diuretic wine, Trousseau's, 525
Divided parts, reunion of, 112
Messrs. Holman and Smith on the, 133
Dixon, Mr. on reports of cases, 53
note on, Mr. Skey, 241
contribution to a memoir on Wiseman, 441
Doses, Dr. Clarke on a new rule for, 496
Drainage, proper, 707
Drasche, Dr. on hypodermic injection of ergot in hæmorrhages, 549
Dropsy, milk diet in, Mr. Richards on, 540
Druitt, Dr. on the control of inebriates, 24
article "Inflammation" by, in Cooper's Dictionary, 579, 610, 634
testimonial to, meeting for a, 517, 524
Drunkards, habitual, observations ou the, report on, 11
control of, Dr. Druitt on the, 24
Dry, Dr. Thomas, death of, 423
Drysdale and Hayward, Drs. Health and Comfort in House-building, review, 525
Dublin, letters from, 23, 163, 333, 365, 526, 554
opening of the medical schools of, 527, 554
bad sanitary state of, 355
projected sanitary association in, 40
exhibition of arts, etc. at, 164
University, regulations of, for medical degrees, 299
pass-lists, 692
Duffin, Dr. on a case of perinephric abscess, 556
on hydatids of the liver, 583
Dugong, digestive organs of the, Professor Flower on the, 372
Duguid, Dr. Alexander R. obituary notice of, 475
Duncan, Dr. Matthews, on malignant disease of the uterus simulating cauliflower excrescence, 122
on a case of malignant peritonitis, 432
on the rupture and cure of an ovarian cyst, 653
Durham University, regulations of the, for medical degrees, 282
Dyes, fugitive furniture, M. Chevreul on, 424
Dyke, Dr. ou filtration of sewage at Merthyr Tydfil, 297

E

Ear, non-purulent catarrh of the middle, Mr. Dalby on, 447
disease of, abscess of the brain from, case of, 35
vertigo from affections of the, Dr. Hughlings-Jackson on, 169
vide Hearing
Eassie, Mr., Healthy Homes, notice, 21
Echidna, digestive organs of the, Professor Flower on the, 647
Edentata, digestive organs of the, Professor Flower on the, 591
Edinburgh, letters from, 132, 471, 526
opening of the medical schools in, 526
University, regulations of the, 292
pass-list of the, 214
decision of the Lord Ordinary on the women question in the, 122, 132, 137, 165, 703
position and progress of the women question in the, 437, 471, 547, 604, 632, 653, 681
Edinburgh Royal Infirmary, reports of cases treated at the, 7, 69, 121, 462, 653
in relation to women pupils, 653, 681, 705

Edinburgh Royal Infirmary, clinical teaching in, observations on the deficiencies of the, 572, 576, 637
Edmunds, Mr. Edmund, death of, 423
Education, medical, the school course in relation to, 112
Egan, Mr. midwifery notes in British Kaffraria, 225, 406
Elberfeld, system of poor relief at, Mr. Doyle on the, 238
Elephant, digestive organs of the, Professor Flower on the, 372
Elephantiasis Arabum, milk diet in, Mr. Richards on, 540, 643
Elliott, Robert, Staff Assistant-Surgeon, obituary notice of, 53, 587, 615
Elmslie, Dr. (of Cashmere), death of, 707
Elwes, Dr. Charles Walter, death of, 587
Ems, thermal waters of, Dr. Geirre on the, 253
Enema apparatus, Allen's, 558
Enemata, nutrient, observations on, 544
Epidemiological Society, reports of meetings of the, 242, 573
Epidemics of 1871-72, Inspector-General Lawson on the, 573
Epilepsy, hints on, 464, 518
with mania, Dr. Yeats on ergot of rye in, 36
from a foreign body, Dr. Johnson on a case of, 584
Epithelioma of the vulva, specimen of, 664
of the rectum, case of, 460
Ergot, hypodermic injection of, in uterine fibroma, 101
in hæmorrhage, 549
Erichsen, Professor, Science and Art of Surgery, review, 470
Erskine, Mr. William, death of, 710
Erysipelas, treatment of, in Paris, 51
Ether in combination with methylene, Dr. Richardson on, 564
Ethics, professional, a breach of, 570, 604
Eucalyptus globulus, therapeutical properties of, 106
Evans, Mr. Ernest Thomson Raimbach, death of, 693
Everest, Dr. George James, death of, 26
Examinations of medical candidates, observations on the, 543
"Past Participle" on, 662
Professor Adams on, in relation to physics, 572
of the College of Surgeons, "Senex" on the rejections at the, 582
Examination scheme, the conjoint, for England, observations on the progress and defects of the, 9, 125, 702, 706
Mr. Busk on the College of Surgeons in relation to the, 82
Examining medical bodies, regulations of the, 277
Excisions, M. Tillaux on, 580
in gunshot wounds, M. Ollier on, 469
Experts, medical, in America, 426
Expiration, bending the ribs in forced, Dr. Ransome on, 205
Extra-uterine pregnancy, case of, 69
Dr. Meadows on, 584
Eyles, Mr. Richard Strong, obituary notice of, 691

F

Falloon, Dr. Edward Leslie, obituary notice of, 449
Fayrer, Dr. on iliac abscess, 193
The Thanatophidia of India, review, 231
notes on surgery in Rome, 428
on amputation of the thigh at Calcutta, 595
on amputation of the leg, 698
Fees, unjust practice of consultants as to, 668
of the doctor and lawyer contrasted, 617
vide Medical remuneration
Femur, subcutaneous division of the cervix of, Mr. Adams's cases of, 206
amputation of the, Dr. Fayrer on, 595
Fergus, Dr. on the effects of deranged soil-pipes, 209
Fergusson, Sir William, address on surgery at the British Medical Association, 152
Fever, principles of treatment of, Dr. Beale on the, 29, 88
action of stimulants in, 29
epidemics of, in relation to cholera, Inspector-General Lawson on, 4
Fiddian, Dr. case of muscular atrophy, 66
Fistula in ano, operation for, case of, 431
Fitzpatrick, Surgeon-Major Dr. John, death of, 54
Fletcher, Dr. Bell, address at the British Medical Association, 175
Flower, Professor, Lectures on Anatomy of the Organs of Digestion of Mammalia, 1, 59, 115, 219, 321, 371, 427, 591, 645
Foods, farinaceous, Mr. Ross's analyses of, 259
Forster, Dr. Thomas Balle, obituary notice of, 273
Foster, Dr. B. on lactic acid treatment of diabetes, 205
Fox, Dr. Tilbury, on a case of prurigo, 327
on the treatment of psoriasis, 559
Fracture, ununited, of the forearm, case of, 557
compound, of the leg, case of, 145
of the spine, cases of, 95, 120
France, academic elections in, 14
the proposed new medical faculties in, 44
the medical and scientific faculties of, 335
France, defective medical military service in, M. Lefort on the, 552
suicides in, in 1870, 235
insanity in, in 1870-71, 392
Furnell, Dr. Frederick, obituary notice of, 243

G

Galeopithecus, digestive organs of the, Professor Flower on the, 2
Gangrene of lying-in hospitals, Dr. Kennedy on, 178
of the toes in China, 505
Ganot's Natural Philosophy, by Atkinson, notice, 22
Gardner, Assistant-Surgeon John, obituary notice of, 475
Gastrotomy, successful case of, 329
for uterine tumours, M. Demarquay on, 549
Geirre, Dr. on the waters of Ems, 253
Generation, spontaneous, Dr. Bastian's views on, examined, 660
George's (St.) Hospital, reports of cases treated at, 195, 254
Medical School, teaching of practical physiology at, 187
exhibitions and prizes at the, 309
Gibney, Mr. William, obituary notice of, 666
Gibbs, Mr. William, death of, 214
Giles, St. report on the condition of the parish of, 259
Gillem, Dr. Isaac John, death of, 396
Glanders in the human subject, Mr. Coupland on a case of, 373
Glasgow University, regulations of the, for medical degrees, 295
Faculty of Physicians and Surgeons of, regulations for examinations at the, 298
clinical teaching at, "A Senior Student" on, 613
Glycerine, M. Gubler on the internal use of, 106
Goddard, Mr. Leonard Morse, obituary notice of, 449
Godfrey, Dr. Benjamin, obituary notice of, 663
Gordon, Deputy Inspector-General, on the army-surgeon and his work, 46
Gout, rheumatic, Dr. Althaus on the galvanic current in, 205
Gratuitous medical advice, observations on, 680
services, opposition to, at Shoreditch, 603
Great Northern Hospital, new site for the, 706
Green, Dr. on the pathology of phthisis, 408, 457
Griffiths, Dr. Griffith Hooper, obituary notice of, 615
Groves, Mr. on the Medical Microscopical Society, 365
Guthrie, Mr., Mr. Clarke's recollections of, 607
Guy's Hospital, reports of cases treated at, 39, 94, 120, 195, 351, 460, 487
Medical School, teaching of practical physiology at the, 238
Dr. Pye-Smith's address at the, 417

H

Hackney, Dr. Tripe's report on the sanitary state of, 123
Hæmatocele, retro-uterine, Dr. Beck on, 502
Hæmoptysis, expectoration of moulded coagula in, 473
Hæmorrhages, internal, hypodermic injection of ergot in, 549
Hæmorrhoids in pregnancy, Dr. Barker on, 15
Hall, Mr. Frederick, death of, 367
Harris, Dr. Principles and Practice of Dentistry, review, 239
Harveian Society, report of meeting of the, 403
Harwood, Mr. Alfred, death of, 616
Hastings Sanitary Aid Society, Mrs. Blomfield on the, 615
Haughton, Rev. Professor, address on public medicine, 175
Haviland, Mr. on medical maps, 394
Haward, Mr. on sulphuric acid in caries, 528
Head, injuries of the, cases of, 120
Headaches in children, Dr. Day on, 502
Healing, miracles of, Rev. Dr. Belcher on, 79, 106
Health (public), Professor Haughton's address on, 175
Health (Public) Act, progress and provisions of the, 10, 96, 156, 701
circular of the Local Government Board on the, 209
observations on the working of the, 434, 464
Dr. Rogers on the, 472
Dr. Letheby on the, 474
Mr. Stansfeld on the, 599, 688
in relation to poor-law medical officers, *vide* Poor-law
Health officers, qualifications and duties of, 489, 519, 546, 571, 600, 707
circular of the Local Government Board respecting, 577
analytical testing by, Mr. Power on, 582
in the colonies, Dr. Bakewell on, 472
Hearing, affections of the, in diseases of the nervous system, Dr. Hughlings-Jackson on, 37, 84, 169
Heart, work done by the, 479
action of the pneumogastrics on the, 101
Heart, disease of the, therapeutics of, M. Sée on the, 688
size of the, in scrofulous subjects, Mr. Bulley on the, 253
suppuration of the, in pyæmia, Dr. Moxon on, 351
hydatid cyst of the, specimen of, 473
fibro-cartilaginous tumour of the, specimen of, 474
Heat and thirst and their antidotes, 43, 103, 263
Heat-stroke and sun-stroke, 98
Dr. H. C. Wood on, 445
Heath, Mr. introductory address at University College, 386
Hedgehog, digestive organs of the, Professor Flower on the, 1
Hemiplegia, Dr. Broadbent's clinical observations on, 63
Hereford General Infirmary, reports of cases treated at the, 410
Hernia, strangulated, treatment of, by puncture of the intestine, 120
aspiration in, M. Demarquay on, 683
ease of, with sloughing of the sac, 145
Herpes zoster, Dean Swift's attack of, 266
Hertford British Hospital at Paris, account of the, 391, 525
Hervieux, M. on the elimination of puerperal poison, 575
Heterogenesis, Dr. Bastian's views of, examined, 661
Heygate, Dr. James, obituary notice of, 243
Hickman, Mr. R. Marshall, death of, 530
Hicks, Mr. Robert Denbigh, death of, 693
Hill, Dr. A. on analysis of drinking-water, 208
on arsenical colours, 208
Hingston, Dr. Charles (of Plymouth), obituary notice of, 339
Hip-joint disease, subcutaneous division of the neck of the femur in, Mr. Adams on, 206
Hippopotamus, digestive organs of the, Professor Flower on the, 320
Hire, Dr. George Frederick, death of, 82
Hogg, Assistant-Surgeon, on puerperal mortality, 430
Mr. Jabez, on a class or demonstrating ophthalmoscope, 485
Holman, Mr. ease of reunion of divided parts, 132
Holmes, Professor, Lectures on Aneurism at the College of Surgeons, 19, 129, 237
Homicidal impulse, plea of insanity in case of, 108, 272
Hooper, Dr. on pneumonia of the apex, 695
Horse, digestive organs of the, Professor Flower on the, 219
Horteloup, Dr. obituary notice of, 363
Hospital Practice in Medicine and Surgery, reports of, 6, 37, 68, 94, 120, 145, 195, 227, 254, 327, 351, 407, 431, 461, 487, 515, 541, 568, 597, 625, 652, 678, 698
Hospital Sunday in London, the movement for, 655
Hospital, Birmingham General, notes of cases at the, 6, 569
Charing-cross, notes of cases at the, 228, 461
Cornwall (Infirmary), notes of cases at the, 409
Edinburgh (Royal Infirmary), notes of cases at the, 7, 69, 121, 432, 653
Guy's, notes of cases treated at, 39, 94, 120, 195, 351, 460, 487
Hereford (General Infirmary), notes of cases at the, 410
Hertford, at Paris, account of the, 391, 525
King's College, notes of cases at, 145, 227, 431
Leeds (General Infirmary), notes of cases at the, 488
Leicester (Infirmary), notes of cases at the, 352
Liverpool Southern, notes of cases at the, 543
London, notes of cases at the, 37, 432, 515, 541, 597, 625, 652, 698
Middlesex, notes of cases at the, 407
Nottingham General, notes of cases at the, 599
Ophthalmic (Central), notes of cases at the, 68
(Royal London), notes of cases at the, 516, 569
Pekin, notes of cases at the, 8
Portsmouth and Portsea, notes of cases at the, 516
St. George's, notes of cases at, 195, 254
St. Peter's, notes of cases at, 69, 256, 678
St. Thomas's, notes of cases at, 6, 326, 351
for Throat Diseases, account of the, 228
University College, notes of cases at, 121, 254, 325
Vienna, the *Leichenhof* of the, 605
West London, notes of cases at the, 95
Westminster, notes of cases at the, 319
Wolverhampton, notes of cases at the, 646
Hospitals, "hospitable," and "sick homes," "G. P." on, 365
Lying-in, Dr. Kennedy on the mischief of, 178
Mr. Hogg on the mortality in, 430
Howell, Mr. Thomas Lewis, death of, 273
Hughes, Dr. John Pearson, obituary notice of, 449
Hulke, Mr. on a case of internal intestinal obstruction, 482
on a case of œsophagismus, 662
Humphreys, Mr. John, obituary notice of, 557

Humphry, Professor, Lectures on Human Myology, 49, 131
Hunter, John, views of, on inflammation, Dr. Druitt on the, 580
Hunter, Mr. Thomas Davis, death of, 504
Hutchinson, Mr. on non-venereal syphilis, 515
Hydatid cyst of the heart, specimen of, 473
Hydatids, hints on, 436
of the liver, Dr. Duffin on, 583
case of, 410
uterine, observations on, 628
Dr. Wiltshire on, 557
Hydrocele, treatment of, in Paris, 51
Hydrophobia, Alisma plantago in, 140
in British Guiana, Mr. Pollard on, 582
Hyoscyamine in convulsive affections, M. Oulmont on, 605
Hysteria, pathology of, Mr. Metcalfe Johnson on the, 612

I

Iliac abscess, Dr. Fayrer on, 193
India, bad condition of barracks in, 683
vide Army
Inebriates, control of, Dr. Druitt on the, 24
observation on the report on, 11
Infants, *vide* Children
Inflammation, action of alcohol on, Dr. Beale on the, 29, 88
Dr. Druitt's article on, in Cooper's Dictionary, 579, 610, 634
Inhaler, Dr. Robert J. Lee's, 612
Dr. Livingstone's note on, 71
Inman, Dr. Preservation and Restoration of Health, review, 394
Innominata, aneurism of the, Wardrop's operation for the cure of, 87
Insanity, Dr. Sheppard's lectures on, 117, 346, 399, 481, 535, 619, 671
question of legal liability in, 12
early treatment of, Dr. Sheppard on the, 118
plea of, in homicide, case of the, 108
impulsive, case of, 272
physical causes of, Dr. Sheppard on the, 117
pathology of, Dr. Sheppard on the, 345
classification of, Dr. Sheppard on, 346
effects of the events of 1870-71 on, in France, 392
puerperal, Professor Leidesdorf on, 234
moral, Dr. Sheppard on, 619, 671
vide Lunatics
Insectivora, digestive organs of the, Professor Flower on the, 1
Intestinal obstruction, Mr. Hulke's lecture on, 482
colotomy in, Mr. Steele on, 206
Intra-cranial tumours, Dr. Hughlings-Jackson on cases of, 541, 568, 597, 625, 698
Introductories of the session 1872-73, observations on the, 387, 419
Iron in the blood and aliments, M. Boussaingault on the, 56
oxalate of, the protoxide of, advantages of the, 589
Isherwood, Dr. Felix William, obituary notice of, 81
Itch, treatment of, by carbolic acid, 52

J

Jackson, Dr. Hughlings, on affections of the hearing in disease of the nervous system, 37, 84
on auditory vertigo, 169
on cases of intra-cranial tumour, 541, 568, 597, 625, 698
Jago, Dr. on movable kidney, 328
case of hour-glass contraction of the stomach, 409, 453
Japanese plants, 479
Jaw, epitheliomatous tumour of the, Mr. Lawson's case of, 583
necrosis of the, following cancrum oris, case of, 145
Jepson, Mr. George, obituary notice of, 243
Jeyes, Dr. S. death of, 215
Johnson, Dr. George, on trismus and epilepsy from a foreign body, 584
pathology of Bright's disease of the kidney, 655, 688
Mr. Metcalfe, on the relation of syphilis to chronic disease, 223
on the pathology of hysteria, 612
Johnston, Dr. James, on atropine as an antidote to opium, 268
Mr. Charles (of Barnstaple), obituary notice of, 189
Jones, Dr. Hermann, on sea-voyages in phthisis, 555, 637
Dr. Talfourd, case of cerebral abscess, 35
Dr. Richard (of Newtown), obituary notice of, 108
Jordan, Dr. Robert, lecture on croup, 221, 323

K

Kaffraria, midwifery notes in British, Mr. Egan's, 225, 406
Kangaroo, digestive organs of the, Professor Flower on the, 646
Kemp, Assistant-Surgeon Robert, obituary notice of, 25
Kennedy, Dr. address on midwifery, 178
Kidge, Mr. Alfred, obituary notice of, 665
Kidneys, abscess of the, Dr. Duffin's case of, 556
movable, Dr. Jago on, 329
suppuration of, in pyæmia, Dr. Moxon on, 351
discussion on Bright's disease of the, 655, 688
Kilray, Staff Surgeon Alexander, death of, 606
King's College Hospital, reports of cases treated at, 145, 227, 431
Medical School, teaching of practical physiology in, 103
scholarships and prizes at the, 310
Dr. Playfair's introductory address at, 383
Kingsley, Canon, on physical development, 413
Knee, dislocation of the, case of, 488
Mr. Wathen's cases of, 567

L

Labour impeded by prolapse of the bladder, case of, 225
post-mortem, Dr. Aveling on, 242
Laboratories, the scientific, of Paris, 523
Lachrymal obstruction, Dr. Pagenstecher's treatment of, 119
Lactation, milk as an aid to, 140
Lakin, Dr. death of, from lightning, 117
Lawson, Inspector-General, on epidemics of fever and cholera, 4
Mr. case of extraction of the lens containing a foreign body, 569
Lead (white) manufactories, employment of women in, Dr. Lewis on the, 539
Lee, Mr. Henry, case of tracheotomy, 324
Dr. Robert J. improved inhaler of, 612
query concerning, 643
Leeds General Infirmary, notes of cases at the, 488
School of Medicine, session 1872-73, 313
Lees, Dr. Henry, death of, 423
Leeson, Dr. Henry Beaumont, death of, 559
Lefort, Dr. Leon, *Chirurgie Militaire*, review, 559
Leicester Infirmary, report of cases treated at the, 352
Leidesdorf, Professor, on puerperal psychoses, 234
Leslie, Dr. David, death of, 477
Letheby, Dr. on the sanitary legislation of 1872, 474
Lewin, Dr. Subcutaneous Injection in Syphilis, review, 553
Lewis, Dr. B. on women in white-lead manufactories, 539
Liebig, Baron, criticism of, on Dr. E. Smith, and reply, 388, 437
Life assurance policy, Wigens *v.* Gresham Society, 181
Lightning-stroke, Mr. Richards on a case of, 37
Lincoln, sanitarian opposition at, 603
Lithotomy, results of, in Smyrna, Dr. McCraith on the, 33
Professor Corradi on the operation of, 429
fatal case of, Mr. Teevan on a, 257
mediau, Mr. Pemberton on, 173
Lithotrity, Mr. Teevan on cases of, 69, 678
Liver, hydatids of, Dr. Duffin on, 583
case of, 410
abscess of, Dr. Moxon on a specimen of, 640
sarcoma of, specimen of, 641
Liverpool, letters from, 241, 471, 662
Southern Hospital, cases treated at the, 543
Royal Infirmary School of Medicine, session 1872-73, 313
distribution of prizes at the, 452
Livingstone, Dr. R. Hamilton, death of, 396
London, vital statistics of, 28, 57, 85, 113, 141, 168, 192, 218, 247, 276, 345, 371, 398, 425, 453, 480, 507, 530, 560, 590, 618, 644, 669, 695, 711
sanitary authorities of the port of, 330
London Hospital, reports of cases treated at the, 37, 432, 515, 541, 597, 625, 652, 698
Medical School, scholarships and prizes at the, 311
teaching of practical physiology at the, 336
address of Archbishop Manning at the, 390
Medical Society, Mr. Clarke's recollections concerning the, 203, 263, 557
University, pass-lists of the, 25, 138, 189, 213, 558, 641, 666
regulations of the, for examinations, 279
Louis, Dr. P. C. A. (of Paris), obituary notice of, 240
Lovegrove, Mr. Joseph (of Leyton), death of, 139
Lowndes, Mr. note on women-midwives, 53
on the registration of still-births, 503, 673
Lozenges, Cooper's effervescing, 586
Lunacy, prosecutions for false certificates in, 272, 354, 366, 657
vide Insanity
Lunatics in England and Wales, twenty-sixth report on the, 157
pauper, the law concerning, 608
in France in 1870-71, 392
Lunatic asylums of Paris, M. Du Camp on the, 550
Lung, gangrene of the, in a child, Dr. McNalty's case of, 67
Lying-in hospitals, mischief resulting from, Dr. Kennedy on the, 178
mortality of, Mr. Hogg on, 430
Lyons, Medical Congress of, in 1872, 323

M

McCowan, Dr. Francis Da Cruz, obituary notice of, 449
McCraith, Dr. on lithotomy in Smyrna, 33
McDowall, Dr. Robert, death of, 26
Mackenzie, Dr. Morell, Pharmacopœia of Hospital for Diseases of the Throat, notice, 22
McKenzie, Dr. John M. death of, 477
McNalty, Dr. case of gangrene of the lung in a child, 67
Macrae, Mr. John, obituary notice of, 449
Macroscelidæ, digestive organs of the, Professor Flower on the, 2
Mahomed, Mr. on the sphygmograph, 143, 324
Malchus's ear, 142
Malpraxis, action against Mr. Buckley and Dr. Fletcher for, 182, 211, 246, 275, 343, 545
action against Dr. Meeres for, 260
Mammalia, organs of digestion of the, Professor Flower on the, *vide* Flower
Manatus, digestive organs of the, Professor Flower on the, 372
Manchester Royal School of Medicine, session 1872-73, 313
Manœuvres, the autumn military, 335, 359
ambulance, in Russia, 424
Mania, Dr. Sheppard's lecture on, 481, 535
Manning, Archbishop, address of, at the London Hospital, 391
Maps, medical, Mr. Haviland on, 394
Marezzo Marble Company, 476
Markoe, Dr. Treatise on Diseases of the Bones, review, 361
Marsh, Dr. Lory, note on the Medical Club, 24
Marsupialia, digestive organs of the, Professor Flower on the, 645
Mason, Mr. case of ununited fracture, 557
Mary's (St.) Hospital Medical School, scholarships and prizes at the, 310
Mr. Norton's introductory address at, 381
Massy, Dr. Practical Notes on New Remedies, review, 50
Masters, Dr. Botany for Beginners, review, 50
Maudsley, Dr. address of, on Medical Psychology, 153
Maunder *versus* Wakley, 136
Mr. Rivington's note on the action of, 188
Maunsell, Dr. on Provident Dispensaries, 209
Mauriac, M. on precocious syphilis of the bones, 416
Meadows, Dr. on extra-uterine pregnancy, 584
Mediastinum, malignant growth in the, case of, 599
tumour of the, specimen of, 662
Medical Act, the penal clauses of the, 158
conviction under the, 452
Medical and Chirurgical Society, early history of the, Mr. Clarke on the, 17
reports of meetings of the, 447, 500, 613, 638, 656, 688
Medical Council, state of business at the, 70, 701
regulations of the, for preliminary examinations, 277
"black list" of the, 601
Medical education, in relation to the school course, 112
examinations, *vide* Examinations
remuneration, suggestions for adjusting, 656
"Rectus" on, 668
vide Fees
societies, *vide* Societies
students, *vide* Students
teaching, observations on, 627
"Past Participle" on the, 662
Medicine, physiology in relation to practical, Dr. Sanderson on, 257
Medicine (public), Professor Haughton's address on, 175
Meeres, Dr. action for malpraxis against, 200
Melancholia, Dr. Sheppard on, 346, 399
Melbourne, doings of the Diphtheria Commission at, 22, 78, 364, 439
letters from, 78, 364, 439, 554
Menière's disease, Dr. Hughlings-Jackson on, 169
Meningitis tuberculosa, etiology of, Dr. Bierbaum on the, 185
cerebro-spinal, epidemic of, at Montreal, 330
spinal, with myelitis, Dr. Strange on, 403
Menstruation, recurrence of, in the breasts, 667
Menzies, Dr. on diphtheria at Naples, 265
Meryon, Dr. views of, on rational therapeutics, 463
note of, in explanation, 500
Meteoric stones, organic matter in, 111
Methylene ether, Dr. Richardson on, 564
Microscopical preparations, oil of cloves for, 245
Society (Medical), Mr. White on the proposed, 337
Mr. Groves on, 365
formation of the, 549
Middlesex Hospital, reports of cases treated at the, 407
Medical School, teaching of practical physiology at the, 237
scholarships and prizes at the, 311
Dr. Thorowgood's introductory address at the, 383

Midwifery, Dr. Kennedy's address on, 178
in Kaffraria, Dr. Egan on, 225, 406
Midwives, note on women as, by Mr. Lowndes, 53
Milan, small-pox and vaccination at, in 1871, 531
Militia surgeons of Ireland, resolutions of the, 97
Mr. H. Wilson on the, 132
Milk, increasing the solubility of, for infants, 268
what is adulteration of? 662
diet of, in dropsy and anasarca, Mr. Richards on, 540
Miller, Dr. Elements of Chemistry, review, 553
Mind, Influence of, on the Body, Dr. Tuke on the, review, 462
Mineral waters as antidotes to thirst, 265
Miracles of healing, Rev. Dr. Belcher on the, 79, 106
Meinet, Dr., Causes of Heart Disease, review, 470
Mole, digestive organs of the, Professor Flower on the, 1
Monotremata, digestive organs of the, Professor Flower on the, 647
Monster, anatomy of a double, Mr. Watson on the, 90, 100
Monte Video, yellow fever at, Dr. Scrivener on the, 511, 537
Morgan, Mr. William Francis, death of, 666
Morris, Mr. Matthew, death of, 139
Mortality in the learned professions in the United States, 128
Morton, Mr. address at the Sheffield Medical School, 419
Mouat, Dr. on cholera in Prussia, 682
Moxon, Dr. on suppuration of the heart and kidneys in pyæmia, 351
on specimens of abscess of the liver and interstitial pneumonia, 640
Mullinger, Mr. Frederick John, obituary notice of, 273
Murder under delirium tremens, acquittal for, 529
Murray, Dr. J., Treatment of Carbuncle, notice, 78
Muscles, irregular, Mr. Perrin's record of, 622, 649
Muscular atrophy, Dr. Fiddian's case of, 66
progressive, Dr. Lockhart Clarke on a case of, 614
Myology, human, Professor Humphry's lectures on, 49, 131
Myopia, intra-ocular myotomy in, Mr. Solomon on, 162
Nancy, Medical Faculty of, M. Jules Simon's letter to the, 633
Nathan, Mr. Charles, obituary notice of, 665
Navy Medical Department, regulations for candidates for the, 291
successful candidates for the, 160
statistical report on the, for 1870, 602
Necrosis, cases of, 408, 431
Nervous system, diseases of the, affections of hearing in, Dr. Hughlings-Jackson on, 37, 84
Dr. Broadbent's clinical observations on the, 63
Netter, Dr. on copious diluents in cholera, 392
Newcastle-upon-Tyne College of Medicine, session 1872-73, 314
New York, great mortality at, in July, 1872, 262
population of, 479
Niell, Dr. John, death of, 396
Northumberland and Durham Medical Society, report of meeting of the, 585
Norton, Mr. A. T. introductory address of, at St. Mary's, 381
Nottingham General Hospital, notes of cases at the, 599
Nunn, Mr. cases of cancer of the breast, 663

O

Obituary Notices :—
Agnew, Dr. John Noble, 476
Aldis, Dr. Charles James Berridge, 134
Barrett, Dr. Barnabas, 104
Bernard, Deputy Inspector-General Dr. Robert, 273
Black, Dr. Glass, 503
Bousquet, Monsieur, 55
Calthrop, Mr. William Charles, 135
Chapman, Mr. Ernest, 25
Chatterton, Dr. James, 395
Colchester, Surgeon Thomas, 54
Coote, Mr. Holmes, 706
Curran, Mr. Henry, 136
Daremberg, Professor, 505
Davies, Dr. John, 528
Denonvilliers, Professor Charles Pierre, 52
Elliott, Staff Assistant-Surgeon Robert, 53, 587, 615
Eyles, Mr. Richard Strong, 691
Falloon, Dr. Edward Leslie, 449
Forster, Dr. Thomas Baillie, 273
Furnell, Dr. Frederick, 243
Gardner, Assistant-Surgeon John, 475
Gibney, Mr. William, 175
Goddard, Mr. Leonard Morse, 449
Godfrey, Dr. Benjamin, 663
Griffiths, Dr. Griffith Hooper, 615
Heygate, Dr. James, 243
Hingston, Dr. Charles, 339
Horteloup (of Paris), Dr. 363
Hughes, Dr. John Pearson, 449
Humphreys, Mr. John, 557
Obituary Notices :—
Isherwood, Dr. Felix William, 81
Jepson, Mr. George, 243
Johnston, Mr. Charles, 189
Jones, Dr. Richard, 108
Kemp, Assistant-Surgeon Robert, 25
Kidge, Mr. Alfred, 665
Louis, Dr. P. C. A. (of Paris), 240
McCowan, Dr. Francis Da Cruz, 449
Macrae, Dr. John, 449
Mullinger, Dr. Frederick John, 273
Nathan, Mr. Charles, 665
Pincoffs, Dr. Peter (of Naples), 165
Poland, Mr. Alfred, 201, 338
Rimington, Surgeon-Major Joseph S. 53
Roscow, Dr. Thomas Tattersall, 395
Sadler, Dr. Michael Thomas, 422
Simpson, Dr. Archibald, 586
Skey, Mr. Frederick Carpenter, 211
Skinner, Mr. George, 665
Smith, Sir Andrew, 243
Smith, Dr. J. Gordon, 25
Taylor, Mr. William, 189
Trustram, Mr. Charles, 25
Upton, Mr. Robert Brotherton, 413
Vigla, Dr. Eugène Napoleon, 239
Voisin, Dr. Félix, 688
Obstetrical Society, reports of meetings of the, 241, 502, 384
palpation in Germany, 479
Œsophagismus, Mr. Hulke on a case of, 664
Ogilvie, Mr. prosecution of, by the Commissioners in Lunacy, 272, 366
Ogle, Dr. on lactic acid in diabetes, 205
and Mr. Lee, case of tracheotomy, 324
Ollier, M. *occlusion inamovible* of, 127
on excisions in gunshot wounds, 469
Onychia, treatment of, at St. Louis, 106
Ophthalmia, Granular, Assistant-Surgeon Welch on, review, 77
Dr. Pagenstecher's treatment of, 119
Dr. Bader on, 161
sympathetic, M. Tillaux's case of, 106
M. Warlomont on, 129
discussion on, 161
purulent, in adults, Mr. Walton on, 400, 455
catarrhal, Mr. Walton on, 249
purulent, of infants, Mr. Walton on, 509
granular, Mr. Walton on, 563, 697
gonorrhœal, Mr. Walton on, 455
Ophthalmic (Central) Hospital, cases treated at the, 68
Royal London, cases treated at the, 516, 569
practice at Wiesbaden, Mr. Swain on, 119
Ophthalmological Congress, report of the meeting of the, in London, 129, 161
Ophthalmoscope, class or demonstrating, Mr. Hogg on the, 485
Opium, superiority of, to its alkaloids, 262
poisoning by, atropine as an antidote in, Dr. Johnston on, 268
Opossum, digestive organs of the, Professor Flower on the, 645
Optic neuritis in nervous diseases, Dr. Schmidt on, 163
Orchitis, treatment of, by absolute rest, 416
Ornithorhynchus, digestive organs of the, Professor Flower on the, 647
Osteo-myelitis in relation to purulent infection, 478
Ovarian cyst, rupture of a, Dr. Duncan on a case of, 653
Ovaries, diseases of the, Mr. Spencer Wells on, 497
Ovariotomy, Mr. Spencer Wells' fifth series of cases of, 638
in Sweden, note of Mr. Spencer Wells on, 527
in New Zealand, Mr. Cotterell's case of, 211
fatal case of, 515
Mr. Tait's new trocar for, 638
Oxford, University of, regulations of for medical degrees, 278
Ozanne, Dr. Joseph, death of, 710

P

Pagenstecher, ophthalmic practice of, Mr. Swain on the, 119
Palpation in obstetrics, 479
Paracentesis, extraordinary case of frequent, 269
Paralysis, Dr. Broadbent's clinical observations on, 64
Dr. Pollock's case of, 228
general, Dr. Silver on a case of, 461
local, from pressure, cases of, 479
Paraplegia, puerperal, Dr. Ball on, 363
after small-pox, Dr. Westphal on, 659
Paris, letters from, 51, 105, 188, 239, 271, 337, 363, 420, 525, 580, 686
the Académie des Sciences of, during the siege, 658
mortality of during the siege, 260
regulations and expenses of the medical schools of, 337
scientific laboratories in, 523
Parliamentary intelligence, 16, 44, 75, 101, 128
Parotid tumour, case of, 255
Parturition, post-mortem, Dr. Aveling on, 242
Patella, dislocation of the, Mr. Southam's case of, 206
Pathological Society, reports of meetings of the, 473, 556, 640, 662
Pathology in relation to morbid anatomy, Dr. Wilks on, 149
Pearse, Mr. letter of, to board of guardians, 233
Dr. on small-pox at Plymouth, 347
Mr. Legge, address of, at the Westminster Hospital, 418
Peccary, digestive organs of the, Professor Flower on the, 320
Pekin Hospital, report of cases treated at the, S Medicine in, in 1871, 444
Pellarin, Dr. A. Hygiène des Pays Chauds, notice of, 97
Pelvic hæmatoma, Dr. Beck on, 502
Pemberton, Mr. address in surgery, 174
note of Mr. Tecvan on the address of, 211
Pepper, manslaughter of a child by, 390
Perimeter, Mr. Carter's, discussion on the, 162
Perineum, fistula of, in a child, case of, 588
laceration of the, case of, 678
Perinephric abscess, Dr. Duffin's case of, 556
Periosteoma, Sir W. Fergusson's case of, 227
Peritonitis, malignant, Dr. Duncan on a case of, 432
Perityphlitis, case of, 543
Perrin, Mr. record of irregular muscles, 622, 649
Peter's (St.) Hospital, cases treated at, 69, 256, 678
Phantom tumour, case of, 543
Pharmaceutical profession, Mr. Brady on the satisfactory state of the, 183
Pharmaceutical Society, action of, as regards public analysts, 681
Pharmacopœia Norvegica, review, 270
Pharmacy, question of Scotch physicians practising, in England, 49, 56, 104
Philadelphia, letter from, 52
Phlegmasia dolens treated by turpentine, Dr. Copeman on, 593
Phthisis, pathology of, Dr. Green on the, 402, 456
sea-voyages in, Dr. H. Jones on, 555, 637
Dr. Thorowgood on, 581
Mr. Scobell on, 613
pneumonia as a cause of, Dr. Sansom on, 565, 620, 648
vide Tuberculosis
Physicians, Royal College of, of London, regulations of the, for examinations, 283
pass-lists of the, 476, 529, 692
question of election of Fellows of the, 572
Physicians, Royal College of, Edinburgh, regulations of, for examinations, 295
Physicians and Surgeons, Royal College of, Edinburgh, regulations for examinations of the, 296
pass-lists of the, 138, 503
Physicians and Surgeons, Faculty of, Glasgow, regulations of the, for examinations, 298
Physicians, King and Queen's College of, in Ireland, regulations of the, for examinations, 300
pass-lists of the, 81, 214, 449, 586, 692
Physicians, Scotch, question of their right to practice pharmacy in England, 49, 56, 104
Physics, Molecular, Professor Tyndall's, review, 105
Physiology in relation to practical medicine, Dr. Sanderson's views on, 257
the teaching of practical, in the London Schools, 76, 103, 187, 237, 336
Pig, digestive organs of the, Professor Flower on the, 319
Pincoffs, Dr. Peter (of Naples), obituary notice of, 165
Playfair, Professor, introductory address of, at King's College, 381
on the death of the Princess Charlotte, 637
Pleurisy, paracentesis thoracis in, case of, 650
Pleuro-pneumonia, administration of brandy in, Dr. Winn on a case of, 271
Pneumogastric nerves, action of the, on the heart, 101
Pneumonia as a cause of consumption, Dr. Sansom on, 565, 620, 648
Dr. Hooper on, 695
acute interstitial, specimens of, 640
Poisoning, infinitesimal, 560
by arsenic, alleged wholesale, 435
trial for, at Chelmsford, 490
by atropine, treatment of, by morphine, M. Abeille on the, 342
by chloral, case of, 629
by opium, atropine as an antidote to, 268
Poland, Mr. Alfred, obituary notice of, 201, 338
Politzer, Professor, on rupture of the membrana tympani, 468
Pollard, Mr. on hydrophobia in British Guiana, 582
Poor-relief, system of, in Saxony, 238
Poor-law medical officers and sanitary duties, observations on, 329
Association of, meeting of the, on the Public Health Bill, 393, 609, 613
in relation to the Health Act, 434, 464
Mr. Barnes on the, 24
Drs. Rogers and Dale on the, 472, 613
Porpoise, digestive organs of the, Professor Flower on the, 427

Portsmouth and Portsea Hospital, cases treated at the, 516
Potatoes, procuring starch from diseased, 233
prevention of disease in the, Dr. A. Carpenter on, 354
Potteries, hygienic condition of the, Dr. Ballard's report on the 679
Pouchet, M. (of Rouen), death of, 693
Power, Dr. R. E. case of fracture of base of skull, 459
on analytical testing by medical officers of health, 582
Practitioner, prosecution of an unregistered, 574
Pregnancy, hæmorrhoids in, Dr. Barker on, 15
extra-uterine, case of, 69
Dr. Meadows on, 585
Prizes, award of, at the Académie des Sciences, 632
Professions, mortality of the learned, in the United States, 128
Prostitution, regulations for, at Rotterdam, Dr. Ballot on the, 131, 611
Psychology, medical, Dr. Sheppard's introductory lecture on, 117, 345, 481
Dr. Maudsley's address on, 153
Dr. Tuke's, in aid of law, 587
Publicans, organic effects of alcoholics on, 500
Puerperal diseases, Dr. Quinquaud on, 240
treated by turpentine, Dr. Copeman on, 2, 92, 194, 459
eclampsia, Mr. Steele on the treatment of, 206
case of, 225
gangrene, Dr. Kennedy on, 179
mortality, Mr. Hogg on, 430
paraplegia, Dr. Ball on, 363
poison, M. Hervieux on the elimination of, 575
psychoses, Professor Leidesdorf on, 234
Punishment of criminals, observations on the, 71
Putrefaction, prevention of, Dr. Calvert on the, 443
Pyæmia, suppuration in the heart and kidneys in, Dr. Moxon on, 351
osteo-myelitis in relation to, 478
Pye-Smith, Dr. introductory address at Guy's Hospital, 416
Pyle, Mr. John, death of, 82

Q

Queen's University in Ireland, regulations for medical degrees at the, 300
anniversary and pass-list of, 449
Quinquaud, Dr. on infectious puerperism, 240

R

Rabbit, organs of digestion of the, Professor Flower on the, 116
Ransome, Dr. on bending the ribs in expiration, 205
on an instrument for measuring respiration, 613
Raspail, the "camphor doctor," 688
Rat, digestive organs of the, Professor Flower on the, 115
Rayner, Staff-Surgeon Frederick Matthew, death of, 587
Rectum, epithelioma of the, colotomy in a case of, 460
Registration of stillborn children, Mr. Lowndes on the, 503, 673
Remuneration, medical, suggestions for adjusting, 656
"Rectus" on, 668
Respiration, instrument for measuring, Dr. Ransome on an, 613
Rheumatic gout, galvanic current in, Dr. Althaus on the, 205
Rheumatism, acute, with failure of affusion in, Dr. Sutton on a case of, 448
liniment in muscular, 111
Rhinoceros, digestive organs of the, Professor Flower on the, 220
Riccard, Dr. Edward Jackson (Mauritius), death of, 139
Richards, Mr. on milk diet in dropsy, 541
Richardson, Dr. on methylene ether, 564
Rimington, Surgeon-Major Joseph S. obituary notice of, 53
Ritchie, Mr. on clinical teaching in Edinburgh, 637
Rivington, Mr. on the action Maunder *v.* Wakley, 188
Roberts, Mr. Charles, on yachting for invalids, 226
Rodentia, digestive organs of the, Professor Flower on the, 115
Rogers, Dr. on the Metropolitan Poor-law Act, 133
on the Health Act and Poor-law Medical Officers, 472, 613
Rokitausky, Professor, the *Leichenhof* of, at Vienna, 605
Rome, notes on surgery in, Dr. Fayrer's, 4 8
Roscow, Dr. Thomas Tattersall, obituary notice of, 395
Ross, Dr. report on the condition of St. Giles's, 259
Ruminants, digestive organs of the, Professor Flower on the, 321, 371
Rundle, Dr. William John, death of, 245
Russell, Dr. cases of organic diseases of the stomach, 6

S

Sadler, Dr. Michael Thomas, obituary notice of, 422
Sailor, the neglected, 574
Sanderson, Dr. address of, on physiology, 199
views of, in relation to physiology and medicine criticised, 257
Sanitary Aid Society at Hastings, Mrs. Blomfield on the, 615
Sanitary authorities (urban), circular of Local Government Board to the, 577
Sansom, Dr. on disinfection of air, 208
on pneumonia as a cause of consumption, 565, 620, 648
Saxony, system of poor-relief in, 238
Scarlet fever, action at law for communicating the infection of, 41
Schweitzer, Dr. W. J. death of, 166
Scotch physicians, the practice of pharmacy by, in England questioned, 49, 56, 104
Scotland, registration returns for, 112, 341, 452
Scott, Dr. case of paracentesis thoracis in pleurisy, 650
Scrivener, Dr. on yellow fever, 511, 537
Scrofula, condition of the heart in, Mr. Bulley on the, 252
Sea-sickness and its management, 352
Sea-voyages in phthisis, Dr. H. Jones on, 555, 637
Dr. Thorowgood on, 581
Mr. Scobell on, 613
Sée, M. clinical teaching of, 688
Septicæmic poisoning, M. Davaine on, 356, 440
Sewage, observations on the question of, 229
filtration of, at Merthyr Tydfil, Mr. Dyke on, 207
the A B C process of, 357
nuisances from, in the New World, 52
Sewell, Dr. Allen, death of, 616
Sex, prediction of, by auscultation, 216
Sheffield, opposition to vaccination at, 604
School of Medicine, session 1872-73, 314
address of Mr. Morton at the, 419
Sheppard, Dr. introductory lecture on psychology, 117, 345, 481
lectures on insanity, 346, 399, 535, 619, 673
Shrew, digestive organs of the, Professor Flower on the, 2
Silver, Dr. on a case of general paralysis, 461
Simpson, Dr. Archibald, obituary notice of, 586
Sims, Dr. letter on the death of the Princess Charlotte, 637
Sirenia, digestive organs of the, Professor Flower on the, 372
Skey, Mr. Frederick Carpenter, biographical sketch of, 211
Mr. Dixon's note on, 241
Skin-grafting, M. Marduel's appreciation of, 368
Skinner, Mr. George, obituary notice of, 665
Sköldberg, Dr. Sven, note of Mr. Wells on the death of, 527
Skull, fracture of the base of, Dr. R. E. Power on a case of, 459
Slaughter-houses, the question of permitting, 10
Dr. Liddle on the, 506
Sleep, prolonged, M. Marduel on a case of, 522
Sloth, digestive organs of the, Professor Flower on the, 593
Small-pox, contagiousness of the forms of, Dr. Britton on the, 208
pathology and treatment of, Dr. Bakewell on the, 251, 376, 513, 623, 675
hæmorrhagic, Dr. Ponfick on the condition of internal organs in, 522
paraplegia after, Dr. Westphal on the, 659
hospitals for, Dr. Tripe on the question of, 124
report of the Metropolitan Asylum District on, 125
epidemic of, at Devonport, 343
at Plymouth, Mr. Pearse on the, 347
at Berlin in 1871, 357
at Milan in 1871, 531
at Leipzig in 1870-71, 74
at Vienna, 617
among the coloured people of New York, 401
in Victoria, 364
in New Zealand, 334
vide Vaccination
Smart, Dr. on the cholera in Africa, 242
Smith, Sir Andrew, obituary notice of, 243
Dr. Andrew, on carbolic acid as a local anæsthetic, 128
Dr. J. Gordon, obituary notice of, 25
Dr. Edward, criticism on, by Baron Liebig, 388, 437
Mr. John, on reunion of divided parts, 132
Smyly, Dr. introductory address of, 554
Snakes, the venomous, of India, Dr. Fayrer's work on the, 231
fatal accidents from, in India, 476
Societies, the medical, thirty years since, Mr. Clarke on the, 17
Society, the Clinical, reports of meetings of the, 448, 528, 583, 663
Society, the Epidemiological, reports of meetings of the, 242, 573
Harveian, report of meeting of the, 402
London Medical, Mr. Clarke's recollections concerning the, 203, 263, 557
Medical and Chirurgical, *vide* Medical
Northumberland and Durham, report of meeting of the, 585
Obstetrical, reports of meetings of the, 241, 502, 584
Pathological, reports of meetings of the, 473, 556, 640, 662
Southam, Mr. on dislocation of the patella, 206
Sparke, Dr. John, death of, 710
Species, origin of, Professor Agassiz's views on the, 352
Sphygmograph, physiology and clinical uses of the, Mr. Mahomed on the, 143, 324
Spinal meningitis with myelitis, Dr. Strange on, 403
Spine, fracture of, retention of urine in, case of, 95
of the dorsal, case of, 120
Sponge tents, Salt's, 586
Squibb, Dr. on modern articles of the Materia Medica, 262
Stammering, cause and cure of, Rev. W. Cazalet on the, 322
Stansfeld, Mr. on the working of the Public Health Act, 599, 688
Steele, Dr. on colotomy in intestinal obstruction, 206
on the treatment of puerperal eclampsia, 206
Stillbirths, registration of, Mr. Lowndes on, 505, 673
false certificates for, 657
note concerning, 707
Stokes, Mr. on the new Sanitary Act, 342
on the death of the Princess Charlotte, 668
Stomach, hour-glass contraction of the, Dr. Jago on a case of, 409, 453
malignant diseases of the, cases of, 6
dilatation of the, Dr. Weber on, 663
Strabismus, Dr. Pagenstecher's operations for, 120
Strange, Dr. on spinal meningitis, 403
Strasburg, transport of the Faculty of, to Nancy, 416
Students, medical, address to, 302
the real duties of, 389
registered in 1872, 478, 521
Subclavian aneurism, Mr. Bickersteth's case of, 632
Suicides in France during 1870, 235
from overwork, observations on, 412
Sun-stroke and heat-stroke, 98
Dr. H. C. Wood on, 445
Surgeons, Royal College of, of England, pass-lists of the, 81, 109, 138, 244, 529, 558, 586
regulations of the, for examinations, 285
admission of Fellows, 189, 477, 666
licentiates in midwifery, 643
"Senex" on the rejections at the, 582
examination questions of the, 83, 95, 531, 560
minutes of council meetings of the, 477, 682
finances of the, 83
additions to the museum of the, 16
annual dinner of the Fellows of the, 48
Surgeons, Royal College of, Edinburgh, regulations of the, for examinations, 297
pass-list of the, 138, 403
Surgeons, Royal College of, in Ireland, regulations of the, for examinations, 300
election to the chair of surgery at the, 706
Surgical instruments at the International Exhibition, resolutions relating to, 634, 699
Sutton, Dr. on a case of failure of affusion in acute rheumatism, 448
Swain, Mr. on ophthalmic practice at Wiesbaden, 119
Swift, Dean, attack of shingles, 266
Syngamus trachealis, Dr. Crisp on the, 474
Syphilis, precocious, of the osseous system, M. Mauriac on, 416
relation of, to chronic disease, Mr. M. Johnson on the, 223
hereditary, with arrest of development, case of, 432
congenital, cases of, 39
transferred to the mother through a diseased ovum, case of, 94
constitutional, Sédillot's pills in, 45
prevalence of, in China, 56
clinical remarks on non-venereal, Mr. Hutchinson's, 515

T

Tait, Mr. Lawson, trocar for ovariotomy of, 628
Tapir, digestive organs of the, Professor Flower on the, 220
Taylor, Dr. Charles Bell, on extraction of cataract, 405, 528
Mr. Robert Stopford, death of, 504
Mr. William, obituary notice of, 189
Teaching, medical, observations on, 627
"Past Participle" on, 662
Teeth, decayed, cerebral symptoms from, case of, 195
Teevan, Mr. on a case of lithotrity, 69
note of, on Mr. Pemberton's address, 211
on a fatal case of lithotomy, 256

Therapeutics, scientific, Dr. Wilks' criticism on, 151
rational, Dr. Meryon's views on, 463
note of Dr. Meryon on, 500
Thirst, popular antidotes to, 45, 103
mineral waters as, 263
Thomas's (St.) Hospital, reports on cases treated at, 6, 326, 351
clinical capabilities of, 235
consumption of alcohol at, Mr. F. Churchill on the, 465
microscopic soirée at, 706
Medical School, distribution of prizes at the, 18
prizes and appointments offered at the, 311
Mr. Croft's introductory address at, 384
Thomson, Mr. Hale, Mr. Clarke's recollections of, 551, 607
Thorowgood, Dr. introductory address at the Middlesex Hospital School, 383
on sea-voyages in phthisis, 581
Throat, Hospital for Diseases of the, account of, 228
Thudichum, Dr., Manual of Chemical Physiology, review, 20
Tibbits, Dr. on the injection of ammonia into the circulation, 486
Tongue, nævus of the, case of, 8
Tracheotomy, case of double, 324
employment of Trendelberg's canula in, 557
performed by galvano-caustic, 560
Treitz, Professor, suicide of, 451
Trenholme, Dr. on irregular contractions of the uterus, 241
Trichinosis, epidemic of, account of an, 356
Trinidad, letter from, 188
Tripe, Dr. report on the public health in Hackney, 123
Trismus from a foreign body, Dr. Johnson on a case of, 584
Trocar for ovariotomy, Mr. Tait's, 638
Trusses, irritation of the skin by, 141
Trustram, Mr. Charles, obituary notice of, 25
Tuberculosis, condition of the heart in, Mr. Bulley on the, 253
acute, Dr. Green on, 402, 457
vide Phthisis
Tuke, Dr. Daniel, Influence of the Mind on the Body, review, 462
Tumour, phantom, case of, 543
Tumours, intra-cranial, Dr. Hughlings-Jackson on, 541, 568, 597, 625. 698
Tumours, recurrent, specimen of, 635
Tupaidæ, digestive organs of the, Professor Flower on the, 2
Turner, Dr. E. Fulham, death of, 215
Turpentine, employment of, in puerperal diseases, Dr. Copeman on the, 2, 92, 194, 459
in phlegmasia dolens, Dr. Copeman on, 593
Tyerman, Mr. Daniel Fletcher, death of, 340
Tympani (membrana), rupture of, Professor Politzer on the, 468
Tyndall, Professor, Molecular Physics, review, 105
Typhoid fever, Dr. Peter on the treatment of, 420
Typhus, Professor Chauffard on the etiology of, 496

U

Ungulates, digestive organs of the, Professor Flower on the, 219, 319
University College Hospital, reports of cases treated at, 121, 254, 325
Medical School, teaching of physiology at the, 76
scholarships and prizes at the, 311
Mr. Heath's introductory address at, 386
Upton, Mr. Robert Brotherton, obituary notice of, 413
Urethra, stricture of the, case of, 328
treatment of, Mr. Pemberton on the, 173
Urethrotomy, external, M. Bron on the results of, 517
Urine, ammonia in the, 412
Uterus, orifices of, Dr. Bennett on the, 206
irregular contractions of the, Dr. Trenholme on, 241
rupture of the, with successful gastrotomy, case of, 320
polypus of the, case of, 678
fibrous polypus of, Dr. Cousins on a case of, 516
retroversion of the gravid, case of, 351
hydatids of, observation on, 628
Dr. Wiltshire's case of, 557
fibroid tumour of the, spontaneous separation of a, 7
fibro-cystic tumours of the, discussion on, 584
fibroma of the, subcutaneous injection of ergot in, 101
gastrotomy for tumours of the, M. Demarquay on, 549
malignant diseases of the, simulating cauliflower excrescence, 121

V

Vaccination, lists of educational stations for, 304
evidence of the Vienna epidemic in favour of, 617
influence of, on the mortality of small-pox, 125
Professor Haughton on the, 176
laws relating to, in Prussia, 39
in France, Spain, Belgium, and Holland, 77
in Denmark, Sweden, Austria, and Hungary, 361
Vertigo, auditory, Dr. Hughlings-Jackson on, 169
paroxysmal, Dr. Russell on a case of, 570
Vienna, registration returns for 1871, 216
General Hospital, the *Leichenhof* of, 605
Vigla, Dr. Eugène Napoleon, obituary notice of, 239
Voisin, Dr. Felix, obituary notice of, 688

W

Wagstaffe, Mr. W. W. on the history of the study of anatomy, 707
Wall, Dr. Cavendish Lister, death of, 245
Walker, Dr. Alexander Macnamara, death of, 273
Walton, Mr. Lectures on Diseases of the Eye, 249, 400, 455, 509, 563, 697
Ward, Dr. Stephen, Affections of the Liver, review, 420
Waring, Dr. The Hospital Prayer-book, review, 499
Water, influence of a pure supply of, Dr. Ballot on the, 349
development of plants and germs in filtered, 13
analysis of drinking, Dr. Hill on the, 208
fallacy regarding filtered, 603
Water-closets, Dr. Corfield on imperfect, 73
Pawson's, described, 81
Waters, metropolitan, composition and quality of the, 27, 191, 274, 397, 532
Wathen, Mr. notes on dislocations, 567
Watson, Mr. Wasdale, on a double monster, 90, 100
Webber, Mr. on protecting sportsmen from hæmorrhage, 84
Weber, Dr. cases of dilatation of the stomach, 663
Welch, Assistant-Surgeon, Granular Ophthalmia, review, 77
Wells, Mr. Spencer, Diseases of the Ovaries, review, 497
note of, on Dr. Skoldberg's death, 527
West London Hospital, notes of cases treated at the, 95
Westphal, Dr. on paraplegia after small-pox, 659
Westminster Hospital, report of cases treated at the, 319
Mr. Clarke's recollections of the medical officers of the, 551, 606
Medical School, prizes at the, 312
instruction in practical physiology at the, 337
address of Mr. Pearse at the, 418
Whitaker, Mr. James Samms, death of, 642
White, Mr. on the new Microscopic Society, 337
Mr. Anthony, Mr. Clarke's recollections of, 606
Wilks, Dr. address of, to the British Medical Association, 148
Willes, Mr. Justice, suicide of, 412
Williams, Mr. J. T. cases of local paralysis, 479
Wilson, Mr. H. note on militia surgeons, 132
Wiltshire, Dr. on a case of uterine hydatids, 557
Wimbledon camp, sanitary state of the, 99
Wines, Hudson and Collins' Hungarian, 263
Winn, Dr. on brandy in pleuro-pneumonia, 271
Winstanley, Mr. Robert, death of, 245
Wiseman, Richard, Mr. Dixon's contribution to a memoir of, 441
Wolverhampton Hospital, cases treated at the, 678
Wombat, digestive organs of the, Professor Flower on the, 646
Women, employment of, in white-lead factories, Dr. Lewis on the, 539
results of the Cambridge examinations of, in 1872, 546
medical students at Edinburgh, *vide* Edinburgh
medical students at Zurich, 261
Professor Bischoff on the, 368
Wood, Dr. H. C., Thermic Fever or Sunstroke, review, 445
A Year-Book of Therapeutics, review, 553
Wounds, M. Ollier's *occlusion inamovible* in, 126
Dr. Greene on cotton-wool dressing in, 128
gunshot, excisions in, M. Ollier on, 469
the electrical bullet-forceps in, 140

X

Xanthelasma, cases of, 473

Y

Yachting for invalids, Mr. Roberts on, 227
Yeats, Dr. on ergot of rye in a case of epilepsy, 36
Yellow fever at Monte Video, Dr. Scrivener on, 511, 537

Z

Zurich, lady medical students at, 261

LIST OF ILLUSTRATIONS.

1. Oxalate of Lime Calculus, with Urate Nucleus, 35
2. Stomach of Pteropus Edwardsii, 59
3. Digestive Organs of Desmodus Rufus, 60
4. Pawson's Water-closet, 81
5. Arrest of Hæmorrhage for Sportsmen, 84
7. Double Monster, 91, 92
8. Alimentary Canal of the Rat, 115
9. Under Surface of the Liver of the Rat, 116
10. Sphygmographic Tracings in Aortic Obstruction and Disease, 143
11. Liver of the Horse, 220
12. Alimentary Canal of the Hyrax, 221
13. Liver of the Hippopotamus, 320
14. Stomach of the African Chevrotain, 321
15. Liver of a Tambur Deer, 321
16. Diagramatic Section of a Camel's Stomach, 371
17. Microscopical Appearances in Glanders, 374
18. Microscopical Appearance in Acute Tuberculosis, 403
19. Hour-glass Contraction of the Stomach, 409
20. Section of the Stomach of the Porpoise, 427
21. Professor Corradi's Lithotomy Instruments, 429
22. Microscopical Appearances of the Lung in Acute Tuberculosis, 457
23. Mr. Hogg's Class or Demonstrating Ophthalmoscope, 486
24. Dr. Taylor's Operation for Cataract, 528
25. Allen's Eucma and Douche, with Bidet, 558
26. Inhaler for Methylene Ether, 564
27. Cæca of the Two-toed Anteater, 592
28. Cæca of the Armadillo, 592
29. Dr. Robert J. Lee's Improved Inhaler, 612
30. Mr. Lawson Tait's Trocar for Ovariotomy, 638
31. Stomach of the Great Kangaroo, 646
32. Intestinal Canal of the Wombat, 647

END OF VOLUME II. 1872.

LONDON:
PRINTED BY PARDON AND SON, LOVELL'S-COURT, PATERNOSTER-ROW.